ERASMUS UNIVERSITEIT ROTTERDAM
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Managerial vision and long-term incentives:

Exploring the differences in the effect of bonus compensation designs on the managerial horizon across different decisional aspects

In partial fulfilment of the requirement for the Master Accounting, Audit and Control

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Acknowledgements

I am grateful to present my master thesis, finding the origin of its existence roughly 6 months earlier. Resulting from a genuine interest to conduct an experiment by myself, I came up with the idea for this thesis. Along the way of writing this proposal, the scope of this research was narrowed and shaped into its presented form.

With this MSc thesis, I complete my academic education that started in September 2012 and ended in October 2017 with an MSc title in Accounting and Control. It has been a beautiful experience, with new friends, great adventures and memories that will stay in my mind forever.

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- And last but not at least my thesis coach, dr. Sander Renes, and co-reader, drs. Ted Welten, for their refined comments and superb guidance towards a more complete thesis.

Hereby, I present to you my master thesis 'Managerial vision and long-term incentives', and I hope that you will enjoy reading it!

William Kastelein Bodegraven, 01/09/2017

Abstract

This study examines the differences between different business decision aspects, in the causal association between managerial incentives and the length of the managerial vision. As the result of a misalignment of the preferences and objectives of managers and company owners, the owners face the situation where the company's future value is less than optimal. This study investigates whether the effect of long-term incentives is consistently reflected over the strategic, investment and human resource decision aspects. Using multiple one- and two-way AN(C)OVA tests, the empirical results indicate that there is no significant difference between the decision areas, when a manager switches from fixed to variable, long-term incentives. Thus, long-term incentives create a consistent effect in the length of the managerial vision over the three decision aspects. In addition, there is evidence for differences between several decision aspects when a manager switches to short-term incentives. Overall, the consistency in the decisions made by a manager under a variable compensation is largest when receiving long-term incentives, in contrast to short-term incentives.

Keywords: Intertemporal orientation, (time-based) agency problem, (length of the) managerial vision, (non-)monetary incentives, decision aspects in business

List of theoretical constructs

- **Intertemporal orientation** - The relative emphasis between projects with a different timing of benefits and costs over a period of time.
- **Intertemporal choice problem** - An individual (the manager) expresses different preferences at various points in time. Resulting that the preferences of the manager are not always the same with those of the company.
- **Time-based agency problem** - The time preferences and objectives of the manager (agent) are misaligned with those of the company (principal).
- **Managerial Vision** - The course of action of what the manager believes is best for the company in the future.
- **Length of the managerial vision** - How far the manager places his time horizon into the future. A longer time horizon implies that the manager relates more value to longer-term projects. In that case, the manager does not any longer excludes longer-term projects in order to decide what the best course of action is for the company in the future.
- **Incentives** - Something to motivate an individual by reward in return for an action, by providing (non-)monetary supplements to the employee's salary.
- **Decisional business aspects** - Different aspects in a manager's job, where he faces decisions that influence the company, according to his vision.
    - **Strategic** - The decision area that determines what products to sell, how to spend your personal working time in order to set course for the company and what track of R&D track to follow.
    - **Investment** - The decision area influencing where and how to produce, for instance the distinction between a focus on short-term, maximizing production or a longer-term and sustainable production.
    - **Human Resources** - The decision area influencing the careers of subordinates, the education they receive and the hiring or firing of your employees.

CONTENTS

1. INTRODUCTION

1.1 - The problem statement

Do you prefer to receive a payment of € 100 now or € 200 in a year? Even though the latter alternative represents the largest outcome, still most people tend to choose the smaller, but sooner alternative. This preference is a result of a correlation between time and uncertainty. When a payment is delayed, the outcome becomes (almost by definition) uncertain and less valuable in the eyes of the receiver (Loewenstein and Prelec, 1991). From a company's perspective, many of their managers receive a bonus based on that year's performance in order to increase the productivity and motivation. However, as an undesirable side effect, managers choose whatever is most profitable in the short-term in order to maximize their pay-out for that period. Graham et al. (2005) showed that 78% of the surveyed managers prefer to sacrifice a net profitable project in the long-term when accepting it would result in missing their quarterly target. Hence, they opportunistically seek to maximize their compensation, even if this results in ignoring additional profit and value for the company in future periods.

The vision of a manager is his strong belief of thought of what is the right course of action and best for the company in future periods (Van de Steen, 2005). The length of the managerial vision is associated with how far into the future the manager places his time horizon (e.g., 1 year or 5 years in to the future) when evaluating alternative options in business decisions. However, how far a manager is willing to look into the future is defined by his preferences and the type of the (monetary) incentives he receives. As shown by Graham et al. (2005), managers are willing to sacrifice net profitable projects in the long-term, while choosing it results in them missing their quarterly target. As a way to mitigate this opportunistic and myopic behavior, companies provide a bonus compensation to their managers, based on how well the company performs (financially) on the long-term. With this design, the vision of the same manager now reaches (for instance) 5 years ahead, instead of only one quarter. The extension of the vision results in a manager to relate more value to a longer-term project, in contrast with a manager with short-term targets. In other words, the manager uses a smaller discount rate for long-term projects. A manager that adopted a long-term orientation already shows to be positively contributing to the company's value (Campbell et al., 2016; Flammer and Bansal, 2017). Therefore, by proving to add value to the company, long-term incentives align the managerial preferences with the long-term objectives of company owners (Laverty, 1996).

However, prior studies found that there is still room for improvement on the use of (long-term) performance-based compensation. First, the design for extrinsic incentives is complex and often produces unanticipated side effects (Gneezy et al., 2011). For instance, the excessive focus by a manager on the long-term, an expression of myopic behavior, results in a lack of interest in short-term activities. This could have endangering consequences for the company's continuity. Apart from its effectiveness, both short- and long-term incentives are less efficient than previously was conceived by companies

(Pepper and Gore, 2014). Second, the manager's job is often complicated and difficult (Mintzberg and Reynolds, 2003). For instance, they have to make decisions that determines the careers of people or invest in research and development projects they have little knowledge of. Thus, even though incentives intend to equally affect the overall length of the managerial vision, the impact might not be the same on the different decisions. Hence, it is interesting to investigate whether the effect of long-term incentives is consistent over several aspects of the manager's job. In specific, is this effect consistent over strategic, investment and human resource decisions? This results in the following research question, which receives an answer at the end of this thesis:

Is the effect of long-term performance based compensation on the length of the vision of managers consistently reflected over strategic, investment and human resource decisions in their job?

1.2 - Scope of this research

Although studies like (Pepper and Gore, 2014) found that long-term incentives are not an efficient rewarding system, this study does not seek to improve the design of these incentives. Instead, the scope of this study is to investigate if there are any differences in the length of the vision between several decisions a manager faces in his job. For instance, when a manager shows a shorter vision than his average when making a decision in the aspect of human resources, the manager's long-term incentives are less effective for this part of the job. In that case, future research can give improvements in order to bring further alignment of the company objectives in the aspect of human resources in the compensation design.

1.3 - Relevance

It is interesting for both practitioners (i.e., company owners and compensation contract designers) and researchers to investigate this association. First, company owners seek to improve the alignment of their objectives with those of the manager. On the one hand, long-term incentives are rather effective tools to contribute value to the company's objectives, as shown by Campbell et al. (2016) and Flammer and Bansal (2017). On the other hand, incentives also come with undesirable side-effects to the achievement of the company's objectives, as shown by Gneezy et al. (2011) and Pepper and Gore (2014). Overall, there are still unanswered questions in this field of research as a result of complexity in the manager's job and undesirable, behavioral side effects of incentives. Second, with new gained knowledge from this research, researchers and compensation contract designers have a more solid foundation for further improvement of the incentives design. When it appears that the currently used long-term incentives result in a short-term focus in an investment decision, contract designers have to change the incentives structure. This study elaborates on prior studies that investigate the association between long-term incentives and (the length of) the managerial vision.

1.4 - Research methodology

This study uses two experimental surveys in order to investigate the association between the (long-term) incentives and its effect on the length of a manager's vision over several decisional aspects in the manager's job. The two surveys are conducted online, with the help of Amazon's Mechanical Turk (mTurk) and their pool of workers around the globe. The subjects receive a fixed reward for the first part and a variable compensation that is determined by their performance for the second part. The first experiment uses the short-term performance in the second part, while the second survey uses the long-term performance. In both surveys, the subjects receive twelve business-inspired cases with intertemporal choices, subdivided into the decision aspects of a manager's job. The aspects are subdivided into: strategic, investment and human resource decisions. For every aspect, there are two cases presented to the subjects with a shorter- and longer-term alternative choice. Combined, these aspects proxy for the variety and complexity of decisions the manager makes and are influenceable by him, following the reasoning by Abernethy et al. (2013). The change in the incentive structure exogenously influences the preferences of the manager when making the investment decisions for the company.

As described before, the length of the manager's vision is associated with how far the manager places his time horizon on the future timeline when evaluating the alternatives in a business decision. Clearly, we look for a limit, to approach the point where the manager's horizon ends. Therefore, the length of a manager's vision is proxied by the indifference point of the subject. This indifference point is approximated by a repeated series of four questions. Each case starts with an intertemporal choice offering a short- and long-term outcome. After the last question in a case, the point is determined at which the subject is indifferent between the two given alternatives. This value represents how far the manager looks into the future in order to decide what is the best course for the company. When the manager only prefers short-term outcomes, the length of his vision is relatively short and vice versa.

1.5 - Results and contribution

As an answer to the main question of this thesis, this study finds that long-term incentives consistently affect the length of the vision across the three decision aspects. However, when looking at (the difference between) specific incentive designs, this study does find inconsistent effects on the length of the managerial vision across the decision aspects. Moreover, this study shows a difference in the managerial vision length between the strategic and human resources decision aspect when a manager switches from fixed to short-term incentives. In the same situation, there is also weak evidence of a difference between the investment and human resources decision aspect. Next, the cumulative differences in the length of the vision of the decision aspects are larger when a manager receives short-term incentives, in contrast to long-term incentives. This implies that long-term incentives (implicitly) nudge the manager to make his decisions more consistently.

This study contributes to the existing literature in several ways. Firstly, this study is the first to investigate the differences between business decision aspects within the causal effect of managerial incentives and (the length of) the vision. Secondly, this study gives new insights on the (side-) effects of to the implementation of managerial or executive incentives in a company. Thirdly, this study compares short- and long-term incentive designs, in the consistency of the effect that incentives have on the (length of the) managerial vision. To conclude, the findings from this study potentially bring important implications for future research, and for the design and use of managerial incentives within a company.

1.6 - Structure

This thesis is organized as follows. In section 2, the review and summary of all relevant concepts and theories can be found, of which incentives and the intertemporal choice theory play an important role. Moreover, this chapter also covers the agency problem and alignment of the company's preferences and objectives with those of the manager. Section 3 presents the hypothetical construct of the research, that relates the concepts just mentioned. After that, section 4 describes the design of the experimental tasks, the measurement of the variables and the methods of analysis. Section 5 reports the descriptives and the results from the empirical analysis. Section 6 concludes with the overall findings and implications of this study and provides the suggestions for future research. The appendices can be found at the end of this thesis. Figure 1 provides a complete overview of the structure of this thesis research.

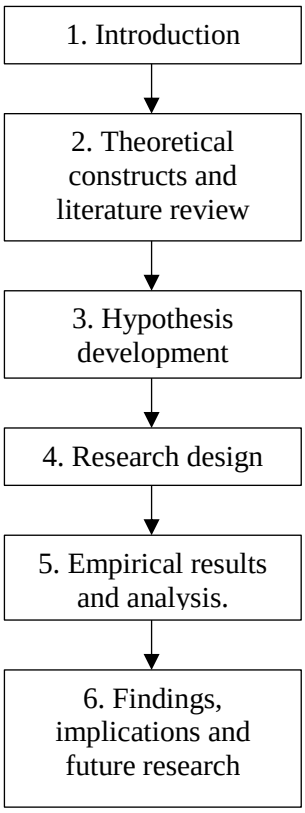


FIGURE 1 - AN OVERVIEW OF THE STRUCTURE OF THIS RESEARCH

2. THEORETICAL BACKGROUND

The theoretical background that is relevant for this thesis is given in this section. In short, this thesis investigates the association between the monetary incentives a manager receives and how this influences the length of his vision in different decision aspects. Eventually, the decisions made by the manager sends the company in a certain direction into the future. This section discusses what defines (the length of) the managerial vision, the impact of different incentives and the possible differences of this vision between several decision aspects. This section provides a combination of presenting the related literature and describing any opposing theories. Altogether, this section elaborates in more detail what this thesis is about and provides the theoretical framework of this research. A complete overview of all relevant theoretical constructs and its interrelationships is presented in Figure 2. The conceptual framework that is used for the analysis is given in section 4.4. Section 2.4 gives a summary and discussion of the theoretical concepts and literature.

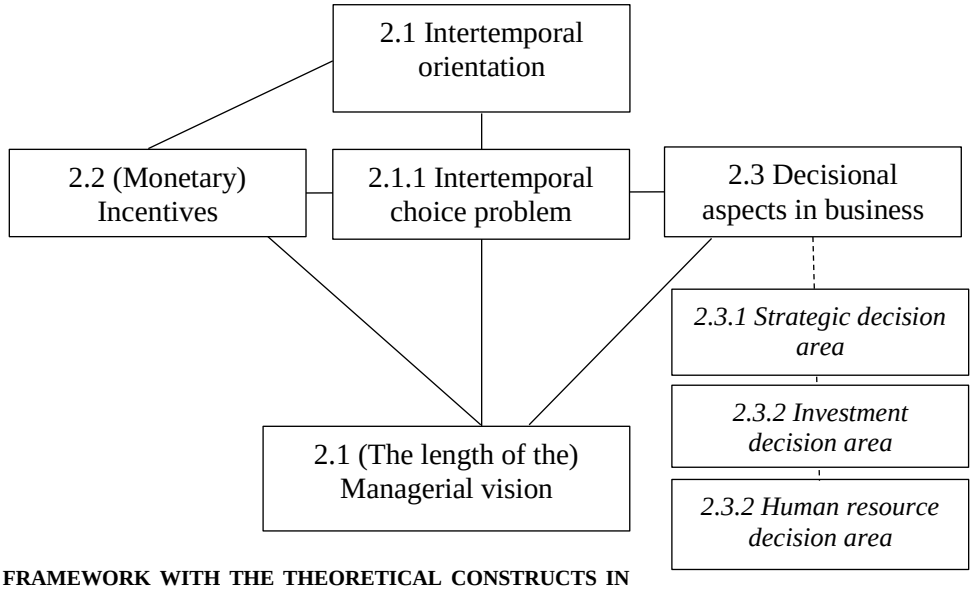


FIGURE 2 - FRAMEWORK WITH THE THEORETICAL CONSTRUCTS IN THIS THESIS, SHOWING THE INTERRELATIONSHIPS

2.1 - INTERTEMPORAL ORIENTATION / MANAGERIAL VISION

An intertemporal choice provides the decision between two (or more) alternatives with a different spread of costs and benefits, and eventually might pay itself back over a period of time. Intertemporal orientation is the relative emphasis placed by the manager between alternatives with different values in a different period of time (Loewenstein and Thaler, 1989). A simple, but typical choice situation involving intertemporal orientation is between receiving € 1.000 now or € 2.000 in a year. Most people prefer to receive their money now, even though they double their payout when (only) waiting for another year. This behavior is the result of a correlation between time and uncertainty. When the payment is delayed and out of the vision of the manager, the outcome becomes, almost by definition, uncertain and less valuable (Loewenstein and Prelec, 1991).

The intertemporal orientation is narrowly associated with the vision of the manager for the company. Without any restraining conditions, the managerial vision is what the manager believes that is the best course of action for the company (Laverty, 1996; Van den Steen, 2005). More specifically, the vision of a manager results in a framework that determines what he is most likely to choose in a certain situation. For instance, the period of time in which the investment pays itself back and the profitability are important factors that play a role in the decisions process of the manager. Hence, the managerial horizon is the combination of the preferences of the manager and the objectives of the company. In this research, the company's objectives are the long-term imperatives, like building your company and remaining competitive, and the short-term necessities, like the firm's survival. Abernethy et al. (2013) see the managerial horizon as an equilibrium outcome. This equilibrium is at the balance point on the time horizon of the manager between the company owners' objectives and the manager's incentives or preferences.

As the result, this thesis incorporates the reasoning on the equilibrium outcome by Abernethy et al. (2013) and uses it for the operationalization of approximating for the length of the managerial vision. This is described in section 4 of this research. Moreover, it is interesting to investigate how far a manager's vision reaches into the future and what the differences are across different decision areas, resulting from a change in the managerial compensation design. The length of this vision is not completely determined by the manager's biology (i.e., risk appetite or experience) (Irving, 2009), but by other factors as well. These factors are described later in this section. The most important choices the manager faces during his job, are those with a tradeoff between different amounts of money that pay out during different periods (Laverty, 1996). Moreover, the best option in the short-term, might not be the same for the longer-term.

2.1.1 PROBLEM WITH INTERTEMPORAL CHOICES

With every decision a manager makes, his vision becomes reality and therefore has an impact on the course and value of the company (Van den Steen, 2005). However, one problem arises in intertemporal choices. This problem is part of the agency theory, where the principal (in this case, the company) and the agent (in this case, the manager) do not always have the same objectives and preferences at the same time. Flammer and Bansal (2017) conceptualized the intertemporal choice problem as the time-based agency problem. This problem implies a misalignment of the time preferences of the company and their managers. In practice, when a manager has the objective to increase this year's volume of sales, his vision is merely limited from now until the end of this year. For the sake of clarity, the factors that cause the misalignment are described in the end of this section. Figure 3 is an illustration of how this problem in its basic form looks like.

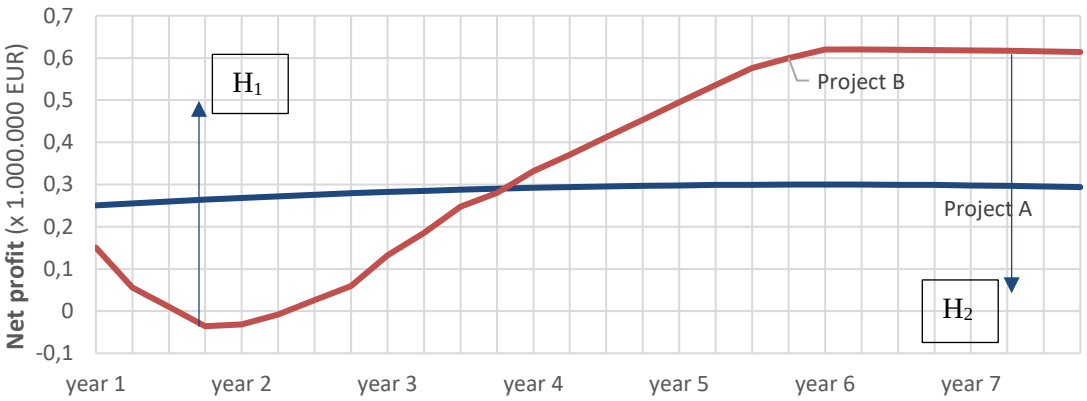


FIGURE 3 - GRAPHIC DISPLAY OF THE PROBLEM WITH INTERTEMPORAL CHOICES, INSPIRED BY DREW (2009); WHERE VISION H_1 REACHES APPROXIMATELY UNTIL 2 YEARS AND VISION H_2 UNTIL 7 YEARS

In an environment, similar to the one described in the earlier situation, a manager with short-term horizon H_1 is more willing to choose Project A. In contrast, Project B is less profitable, or even losing money up and until year 3, but the more profitable project when we analyze the projects in the full period. Hence, a manager with the vision that stops at H_2 is most likely choose Project B. The figure above is a representation of an interesting example given by Graham et al. (2005). In this study, a reasonable number of managers participated in a survey, where 78% of them preferred to sacrifice a net profitable project in the long term when choosing it would result in not achieving their quarterly target. As previously stated by Laverty (1996), this study shows that managers throughout their career face intertemporal choice problems, since the best course of action for the short-term might not have the same result in the long-term. This is also explained by short-termism, where a manager or individual takes too little action for long-term activities. When a manager continues this behaviour, it can be destructing in the long-term for the company's value. Since the manager receives his compensation based on the current performance, the manager implicitly uses higher discount rates for outcomes further into the future (Laverty, 1996).

2.1.2 THEORIES ON THE CAUSE OF THE MISALIGNMENT

In its essence, the problem that arises with intertemporal choices is the result of the differences in preference between the company owners and the individual they hire to run their company, a manager. Below are three views on what causes the misalignment, although they are not mutually exclusive in explaining the misalignment:

1. Weber and Chapman - Risk and delay

Weber and Chapman (2005) state that sometimes the alternative with an immediate pay-out is interesting to choose, since there is no uncertainty associated with the choice for the individual. With an outcome that is further delayed on the time horizon, risk and uncertainty increase as well (Prelec and Loewenstein, 1992). As a result, a manager is more likely to mitigate this uncertainty risk and chooses a project that is less profitable, though with sooner available returns. This is confirmed by Holmstrom

and Costa (1986) and Laverty (1996), who argue that investments with relatively shorter payback periods is more desirable by a manager to invest in. To conclude, even though a company wants their manager to work for the long-term objectives, risks and uncertainties nudge the manager towards short-term projects. Combined, this results in risk and uncertainty experienced by a manager and contributes to the misalignment of preferences and objectives between managers and company owners. In this research, however, the certainty of the outcomes between the given alternatives is equal and therefore not specifically investigated.

2. Mintzberg and Reynolds - The difficulty of the job

This view relates to the ability of a manager to choose the best course of action for the company. Especially for top level managers: launching new products, entering new markets, investing in high-technology projects require a very specific set of knowledge and skills (Laverty, 1996). The job of a manager can be versatile and challenging at all times, which makes it difficult for the manager to congruently evaluate the alternatives and choose what is best for the company (Mintzberg and Reynolds, 2003). Moreover, the difficulty and complexity of the job also results in a more challenging design for managerial compensation. This is also discussed in later sections of this thesis. Thus, a lack of ability or a sophisticated working environment causes a misalignment of preferences, despite the intrinsic motivation by the manager.

3. Gneezy, Meier and Rey-Biel - Incentives do not always work properly

This third and last view is also an introduction for the next section, which describes the use and design of incentives within companies. For now, however, this view serves as another perspective on what causes the misalignment of preferences between the company owners and managers. Gneezy et al. (2011) discuss that the use of incentives is often common in companies to motivate their workers to perform better. However, even though the use of extrinsic incentives is popular by companies in order to change behavior, it can also bring forward undesired behavior. As described before, managerial myopia (i.e., short-termism) can result in an excessive focus to decide what is best in the short term in order to receive a larger compensation (Laverty, 1996). Moreover, Healy (1985) concludes his paper with concerns about the side-effects of incentives, other than what the company intends to. At the same time, the myopic investments by the managers, as the result of incorrect incentive designs, create a misalignment between the preferences and objectives of managers and the company owners.

2.2 - INCENTIVES

This section continues with the view from the previous section where incentives may not work completely as companies want them to work. As previously described, incentives are popular and used by many companies in order to incentivize their managers. Incentives are something to motivate an individual by a monetary (and/or a non-monetary) reward, in return for an action (Gneezy et al., 2011).

The individual's incentives can be both intrinsic as well as extrinsic. Intrinsic incentives are internally produced motivations by the manager, such as: passion for the job or out of fun. Extrinsic motivation is often implemented by the company and consists of a salary, bonuses or non-monetary rewards, such as: a nice lunch or a lease car. Hence, the company motivates the employees to work harder, in exchange for a reward (afterwards). In this research design, intrinsic motivations are excluded, since that is more difficult to observe objectively. However, intrinsic and extrinsic motivations are not mutually exclusive in the explanation of what drives a manager in his decisions and are therefore not irrelevant for this research.

Hopwood (1974) finds that monetary incentives are one of the main tools a company uses in order to motivate managers to achieve the company's main objectives. Numerous studies suggested that monetary incentives are a way to improve the performance of a manager, as summarized by Bonner and Sprinkle (2002). As one out of many articles that find that incentives contribute to the value of a company, Campbell et al. (2016) found that countries with a relatively higher proportion of executives that are rewarded based on the long-term performance had higher growth rates of their national GDP[1].

Just as incentives are used by companies to motivate the subordinates to work harder and perform better, incentives are used to align the preferences of companies and managers. Irving (2009) stated that, despite an individual's biology, an individual (or: manager) can be nudged towards a long-term horizon, as long as prevailing conditions do exist. Thus, there might be a solution to the time-based agency problem that Flammer and Bansal (2017) conceptualized. It is a challenge for companies to have a compensation design that incentivizes the manager to choose the course of action that is best for the company. As a result of this course, the company's long-term objective of maximizing value is more approachable and it is in the favour of the manager's preferences as well. Hence, compensation based on the company's long-term performance is a common and growing used tool to align the preferences of the manager with those of the company. Schotter and Schweigelt (1992) showed in their experiment that, when using the right conditions in the contract of a manager, discount rates for more distant outcomes are lower. More specifically, they used long-term incentives to nudge the thinking of the manager, just like Irving (2009) explained. As a result of these long-term incentives, "the future" (or: projects with a more distant payback periods) is brought closer to now and gives these projects the attention they need (Dikolli, 2001). In contrast to the earlier example of Graham et al. (2005), a manager with long-term incentives do not choose the projects that perform well on the short-term, but the projects that are profitable over a longer period. By also incorporating the projects with later payback periods, the manager shows to have a longer (time) horizon, and implicitly aligns his preferences with those of the company.

[1] GDP - Gross Domestic Product

However, prior studies found that there is still room for improvement on the use of (long-term) performance-based compensation (Pepper and Gore, 2014). First, the design for extrinsic incentives is complex and produces unanticipated side effects (Gneezy et al., 2011). An example of such a side effect is the out-crowding of the intrinsic motivation as a result of monetary incentives. Gneezy et al. (2011) state that when a manager receives a bonus, determined by his performance, he simultaneously decreases his intrinsic motivation. Hence, monetary incentives lower the level total of motivation and effort a manager is willing to put in his job. Another side effect of incentives is the excessive focus of a manager on the long-term, an expression of myopic behavior. This behavior results in a lack of interest in short-term activities, with endangering consequences for the company's continuity. Both short- and long-term incentives are therefore less effective than previously was conceived by companies (Pepper and Gore, 2014).

Second, the manager's job is often complicated and difficult (Mintzberg and Reynolds, 2003). For instance, they have to make decisions that determine other people's careers or investing in research and development projects they have little knowledge of. For instance, some managers have to decide based on the information of experts and consultants. The manager's interpretation of what is best cannot always align with his own preferences and the objectives of the company.

Hence, even when long-term incentives intend to equally affect the overall length of the manager's vision, they might not have a similar effect on decisions. The following section elaborates on different aspects in which a manager makes decisions. When it is clear in which aspects long-term incentives are less effective, there is a start in order to develop more advanced incentive systems in further research.

2.3 - Aspects of a manager's job

In general, it is important to state why it is both interesting and relevant to study the effect of long-term incentives on different decision aspects a manager faces in his job. First, a manager has a large impact on the way the value of a company develops over the years. Moreover, the manager is subject to decisions that come with financial consequences for the company, both positively and negatively (Laverty, 1996). Second, although specific incentives should nudge a manager to make decisions congruent with the company's ideas, this may not always be the case. As a result of environmental factors, a manager can also choose differently due to his emotions or his intuition (Irving, 2009). For example, a manager has a redundant production facility, but there are still working two hundred employees. The manager can either close the facility, fire all those workers and save money or shut it down in a couple of years. Although the manager loses money with the latter alternative, he may choose to save the job of hundreds of workers. This example is rather extreme, but illustrates what can occur in the manager's company.

In this thesis, there are three aspects of a manager's job which can be influenced by a (business unit) manager, following Abernethy et al. (2013). Next to that, these are aspects most managers face at one point or even on a daily basis in their career. The aspects are in the aspect of: strategic, investment and human resource decisions.

2.3.1 STRATEGIC DECISIONS

The strategy of a company is the result of building models that map the competitors and place their own products in competitive markets after thorough research (Mintzberg and Reynolds, 2003). Strategic decisions include situations where a manager decides how he spends his personal working time He can focus on long-term activities and development, short-term activities by collecting money or a combination of these activities. Abernethy et al. (2013) measured the time horizon of managers by asking them how much of their time they would devote on several matters that all have impact on the profit- and loss statements in any following periods. Lastly, since the company needs development in order to remain competitive, the manager chooses what kind of research and development track to follow.

In general, this decision aspect incorporates some of the personal beliefs of the manager and therefore influence the actual decisions that are made. Therefore, managers may be likely to follow the best (i.e., most profitable) course for the company, but are still influenced by how the decisions affect their compensation for the same period.

2.3.2 INVESTMENT DECISIONS

This aspect includes decisions that are associated with investments, and influence where the manager chooses to produce his products. Moreover, the manager decides how his products are produced: either on a short-term and efficient character or in a more sustainable, but slower way. As a remark by Lumpkin and Brigham (2011), some investment opportunities require a quick and decisive act upon a situation. However, in the end, the (financial) consequences of this decision may not always be in line with the company's long-term objectives.

While some managers follow the best and most effective course for the company, for instance in the production of their products, there are also managers that choose what results in a higher compensation. Investment decisions do not directly affect the reputation by a company, like firing employees does. Therefore, the implications for the financial situation of the manager (on the short-term) play an important role in the actual decisions of the manager. Even though R&D projects are often related with a long-term vision (Reilly et al., 2016), and possibly more profits as well, the compensation of the manager for this period is more important. As an interesting, opposing view, Dikolli (2001) state that the inclusion of the stock price in the incentives of the agent (manager) encourages him not to follow

his basic instinct, the short-term. Instead, the manager is less inclined to defer research and development activities that mostly bring costs forward in early periods and (less certain) profits in later periods. However, this research does not include stock price elements in the incentives design for the managers.

2.3.3 HUMAN RESOURCE DECISIONS

This last aspect includes decisions in which the manager determines or influences the career of employees. Moreover, the manager can choose to allocate money on additional education or providing a training program for his employees. Lastly, just like the example in the beginning of this section, a manager also faces decisions where he hires or fires employees.

In contrast with the two previous decision aspects, the human resources decision aspect is most connected to the individual's empathy or beliefs. For instance, some managers are willing to do anything just to avoid the situation of firing a number of his employees. Moreover, the manager could have a close working relation with the employees that may get fired and intuitively feels how their situation would be after the firing (Mintzberg and Reynolds, 2003). In other cases, a manager believes that developing the skills of his employees results in higher sales in the future. Therefore, a manager is most likely to neglect the financial impact of the decisions on his (bonus) compensation. Instead, the manager also incorporates the social consequences for the well-being of his employees.

2.4 - SUMMARY AND DISCUSSION OF THE THEORY

In order to give an introduction on what this thesis is about, this section presented a discussion of several theoretical constructs that relate to this study. The theoretical framework, as presented in Figure 2 in section 2, already included all relevant theories. The theories on the intertemporal choices and the (length) of the managerial vision are explained. The misalignment in the preferences of companies and the manager create a time-based agency problem. The manager has to execute the (long-term) objectives for the company, but simultaneously aims to maximize his compensation.

In general, there are several reasons that suggest that there might be differences in the effect of an (long-term) incentives design on the length of the vision between the three decision aspects. The suspicion for a differential effect of incentives is the result of two theories, as previously described in this section. The first theory states that the complexity and diversity of a manager's job often entails decisions that carry large implications for employees, customers, the company and the manager himself. As a way to reflect the complexity of the job, this section specified three decision areas, namely: strategic, investment and human resources. All aspects are faced by a manager at least once in his career, for some managers even on a daily basis. The imperfections of managerial incentives form the second theory on the misalignment of the preferences and objectives by managers and their companies. By combining the premises of both theories, the difference in the effects of an incentive design can be explained more specifically. For instance, a manager might be less inclined to reject additional training

for employees or to fire employees. Hence, if the manager is sensitive to more than just financial information, human resource decisions are less sensitive to a change of the incentives. In contrast, the change of an incentives design might be stronger when it comes to strategic decisions. For instance, when a manager receives long-term incentives, he will spend relatively more working hours on activities that will provide new returns in the long term, and vice versa. This study therefore might find significant differences between these two decision aspects, since the differences in the incentives effect on the length of the vision could be stronger for strategic decisions than human resources decisions. In addition to that, the effect on investment decisions might be stronger when a manager receives short-term incentives, instead of long-term incentives. In general, investment decisions have a longer-term perspective, thus a change towards short-term incentives might cause a sharper decrease in the length of the managerial vision. The effect of the incentives on the investment decisions is expected to be moderate. As a result, the effect of incentives for investment decisions might show less differences with the other two aspects, since it is expected to be in middle of all decision aspects.

The method a company uses to motivate their employees is at the same time the cause for the misalignment as described earlier, namely: the monetary incentives. Even though monetary incentives intend to equally affect the motivation of a manager, they might have a different impact on different decision aspects in a manager's job. Section 3 elaborates on the differences in the length of the vision and how this is operationalized into hypotheses.

3. HYPOTHESIS DEVELOPMENT

In this section, the hypotheses are formulated as a way to translate the theoretical constructs into statements that can either be answered by true or false. Thus far, there is little empirical evidence available from prior studies on the possible differences in the managerial horizon between several decision aspects. Therefore, the reasoning of the hypotheses is based on a combination of what is stated by prior studies and my own logical reasoning.

The first hypothesis sets ground zero for all subsequent hypotheses. When, for instance, there already exists any difference in the length of the managerial vision between the decision aspects, a bonus incentive design can either soften or strengthen this effect. However, this situation represents what the manager in general believes of what is the best course of action. Hence, I expect that there are no differences in the length of the managerial vision across the three decision aspects when a manager receives a fixed compensation. The null hypothesis is as following:

Hypothesis 1

> H1: When a manager receives a fixed compensation, there are no differences in the length of the managerial vision between strategic, investment and human resource decisions.

Based on the statement that Hopwood (1974) and others make about the positive impact on the employee's productivity by monetary incentives, companies implemented incentive systems. These systems provide a possible bonus compensation to the manager when he achieves his target. The expected outcome for the following hypothesis should be consistent with the intention by companies of the incentives. Moreover, all decision aspects should receive a similar trigger as a result of short-term incentives. In general, the expectation is that the length of the vision decreases across the decision areas. The focus of the managers is on the shorter-term, thus decreases the length of the managerial vision.

As found by prior studies, the expected effect is that the manager shows a shorter-minded vision, since his compensation is completely based on the company's performance of year 1 (i.e., Laverty, 1996; Schotter and Schweigelt, 1992). Therefore, the expectation is that there should be no difference in the length of the vision between the decision aspects, when the manager changes from a fixed to a variable compensation based on a short-term performance target. As a result of the change in incentives design, the subjects are expected to show different behavior in their decisions. However, following my reasoning as described in the previous section, there are possible differences across the decision aspects. In specific, a manager may show reluctance in the firing of employees in return for a cost reduction in the short-term. Moreover, other managers may stand abide their long-term view for their company, thus show relatively less short-termism. The null hypothesis is as following:

Hypothesis 2

> H2: When a manager switches from a fixed to a short-term performance-based compensation, there are no differences in the changed length of the managerial vision between strategic, investment and human resource decisions

Similar to the previous hypothesis, the third hypothesis is also subject to an incentive design as they are used by a company. This time, however, a manager receives his bonus compensation based on the long-term performance of the company. In general, the expectation is that the length of the vision increases across the decision areas. The focus of the managers is on the longer-term, thus increases the length of the managerial vision.

For the third hypothesis, in line with the intention of companies, there should be no expected differences across the three decision aspects in the length of the managerial vision. As a result of the change in incentives design, the subjects are expected to show different behavior in their decisions. In reality, there is still the possibility that one decision aspect is more sensitive to incentives change than another. This is described in the previous section and the hypothesis of this study. The null hypothesis is as following:

Hypothesis 3

> H3: When a manager switches from a fixed to a long-term performance-based compensation, there are no differences in the changed length of the managerial vision between strategic, investment and human resource decisions.

The last hypothesis states that a manager is less consistent in his decisions when he receives long-term performance-based incentives, relative to short-term incentives. More specific, the difference in the length of the vision between the decision areas are larger, when a manager receives long-term incentives. This hypothesis investigates which type of bonus incentives design results in more consistent decisions by a manager. Following Weber and Chapman (2005), people are risk-averse and choose certainty over uncertainty in the choice between a sooner and later alternative. In the design of this research, both alternatives in an intertemporal choice carry an equal certainty level, although this does not imply a steady risk-appetite by the manager. Moreover, a manager receives the payment of his long-term bonuses after a few years, while the short-term bonuses mostly pay within one year.

Therefore, short-term targets are more relevant to the manager's personal financial situation. As a result, this manager is able to choose more effectively on what maximizes his compensation. In addition to that, a manager with long-term targets may choose shorter-term projects, in order to guarantee the continuity for the company (Holmstrom and Costa, 1986). To conclude, based on the fact that people are risk-averse, prefer certainty over uncertainty and incorporate their personal finance in their job, could result in more consistent decisions when a manager receives short-term incentives. More consistency in the decisions results in smaller differences in the managerial vision length between decision aspects, and vice versa. The null hypothesis is as following:

Hypothesis 4

H4: When a manager receives a compensation based on a long-term performance, the differences in the length of the managerial vision between strategic, investment and human resource decisions are larger, relative to a manager with short-term incentives.

4. RESEARCH DESIGN

This section presents the research design this thesis uses in order to investigate its hypotheses. Section 4.1 describes the projected sample group. Next, section 4.2 elaborates on the method that this study uses in order to gather the necessary data observations. Section 4.3 describes which variables are used and how they are measured or proxied. In section 4.4, the Libby box is presented. The Libby box merges the theory from section 2, the hypotheses from section 3 and the operationalization in this section. Section 4.5 elaborates on the experiment's design and the subjects' rewards. Section 4.6 describes what methods are used in order to analyze the gathered data.

4.1 - RESEARCH SAMPLE AND POPULATION

In this research, the focus is on highly educated, European people at age 18-30. The reason to choose this target group is that this specific group has less experience dealing with large amounts of money in their early career. Despite their age, they do have the prospect of being at the job where they have to decide over important decisions for the company. The focus is on European people, because they are more likely to be familiar with the experiment's currency, the Euro. The aim is at highly educated people, since they are young professionals with a stronger feeling to make a career and the potential to fully understand of what the case are about.

4.2 - RESEARCH METHOD

In order to test the hypotheses as described in the prior chapter and thereby answering the main research question, a quantitative research is performed. It is difficult to observe the behavior of managers and how this is influenced by incentives structure based on accounting data. As an alternative, though commonly used method in academics, this thesis uses an experimental survey as the source of data. The use of this (or a quasi-experimental) method to test economic theory is legitimate and used by prior studies in the specific area of literature (i.e., Schotter and Schweigelt, 1992; Kuziemko et al., 2015; Flammer and Bansal, 2017). Next to that, it is easier to control for factors that harm the theoretical basis of this thesis in an artificial environment. For example, (excellent) past performance may nudge a manager to be less reluctant to invest in the company in the future. Important advantages for conducting this experiment online are that a large group of people can be reached in only a short matter of time and that they are able to fill in the survey in their own time. A disadvantage is that the subjects can manipulate their answers or take too little time for filling in the survey, which is addressed for during the analysis. The research is not at the company level, but at the individual level, since the preferences of the subjects is investigated.

The data for this research is retrieved from two self-designed online survey experiments on Amazon's mTurk[2] [3]. A relatively new system to generate observations, but more and more often used for academic research (i.e., Kuziemko et al., 2015; Saez and Stantcheva, 2016). Several steps were taken to ensure the validity of the results. First, there are many foreign workers on Amazon's mTurk, especially from the USA or India. In order to exclude the effect of lack of familiarity with the euro as currency, mTurk only shows the experiments to workers with European addresses. Next to that, to exclude robots from the experiments, workers are only allowed to participate with a past completion rate of at least 90%. Moreover, before starting with the experimental task, the subjects are shown a CAPTCHA[4], in order to distinguish humans from any computers. Finally, the participants of the surveys are told that the payment is only after they completely finished the experimental survey. After completion of the survey, they are given a unique code which they can use to validate their entry on mTurk. This code allows me to verify if all entries are complete and originating from the Amazon's pool of workers. All of the questions are required to fill in, in order to prevent the subjects from skipping any parts of the experiment.

4.3 - MEASUREMENT OF THE VARIABLES

4.3.1 INDEPENDENT VARIABLES

Decisional aspects

This research investigates several types of decisions in the job of a manager. Moreover, the aim the research is to seek for any/none differences between the three decision aspects, due to the impact of different compensation designs. Each of the three aspects, as discussed in the theoretical framework, have a separate indicator variable. The decisions are distinguished in the following aspects: Strategic decisions (STR_D = 1), Investment decisions (INV_D = 1) or Human Resource decisions (HR_D = 1), and 0 otherwise.

Compensation design

The dependent variables include several dummy variables for the compensation design, being either based on the fixed compensation (FIXED_PAY = 1), short-term performance (SHORTTERM_PAY = 1) or long-term performance (LONGTERM_PAY = 1). Moreover, an extra variable is generated to make a distinction between the subjects that participated in Experiment I or II (Long_Short; where fixed + short-term compensation = 1).

[2] Managerial vision and incentives 'Experiment I', including the short-term incentives treatment, is available at: https://erasmusuniversity.eu.qualtrics.com/jfe/form/SV_2iAht66YTRCcfd3

[3] Managerial vision and incentives 'Experiment II', including the long-term incentives treatment, is available at: https://erasmusuniversity.eu.qualtrics.com/jfe/form/SV_0U87viMLVKOz26h

[4] CAPTCHA is an abbreviation for: "completely automated public Turing test to tell computers and humans apart".

4.3.2 DEPENDENT VARIABLE

A manager's vision length

The dependent variable, reflecting the length of the vision of the manager, is proxied by the indifference points for each decision aspect (VISION_MANAGER). In the analysis, mostly a ratio variable is used. In this case, there is an initial value and a value as a result of the treatment. The initial value is determined by the subject's indifference point when receiving a fixed compensation in the first part of the experiment. The treatment value is the subject's indifference point for the same question in the second part of the experiment, when given a short- or long-term performance-based compensation. In addition to the first dependent variable, a second and third variable is added to improve the quality of the analysis. First, VISION_MANAGER_RATIO is the relative value of VISION_MANAGER, as a percentage of the maximum value a subject could have chosen for this case. This variable controls for the differences in the value of the indifference points within the six cases, and therefore creates more comparable observations. Lastly, VISION_MANAGER_CHANGE (VISION_MANAGER_ CHANGE2) measures for the relative, unweighted [5] (weighted [6]) change for the VISION_MANAGER_RATIO variable, when the subject changes from the treatment with a fixed payment to a variable, performance-based payment. How the indifference point is approximated and how this is further analysed for this research, is elaborated in section 4.5 and 4.6, respectively.

4.3.3 CONTROL VARIABLES

Next to the previously described effects, differences can grow from the culture and nurture that affects the behavior of individuals in making decisions for the company. Therefore, a dummy variable is created for the gender of the subjects (gender; 1=man/2=woman) and whether they currently live in the country they were born in (country_dummy; 1/0). The latter may explain any differences that are caused by the fact of an individual not operating in his home country and be less familiar with the environment.

In order to control for any lack of potential to be a manager in the future, a dummy variable for subjects is created that at least finished their bachelor study at the university (education_dummy; 1/0). Next to that, a dummy variable is created when the subject is still studying (student_dummy; 1/0). Next, in order to limit the effect of having too much experience in managing (a part of) a company, a dummy variable is created when subjects have less than 5 years of relevant working experience (experience_dummy; 1/0). Lastly, a dummy variable is created when the participants are not any years older than 24 (age_dummy; 1/0). Clearly, all of the control variables refer to the characteristics of a manager. In addition, this research design does not require control variables like 'past performance' or

[5] VISION_MANAGER_CHANGE - is unweighted. For instance, a decision area consists out of two cases. The relative change for both cases is equally important and therefore each contribute 50% for this variable.

[6] VISION_MANAGER_CHANGE2 - is weighted. For instance, a decision area consists out of two cases. Case 1 and case 2 bring forward a net result of 6 and 4 million EUR, respectively. Hence, the relative change for case 1 and case 2 contribute 60% and 40% for this variable.

'the level of competition', like they are used by Abernethy et al. (2013). A complete overview of the variables that this research uses, including a description, can be found in Appendix H.

4.4 - LIBBY BOX

Figure 4 presents the theoretical constructs and operational proxies of hypotheses H1, H2, H3 and H4 in one Libby box. The Libby box shows the conceptual items, related to this research, as earlier described in section 2 and onwards. Next, it shows the operationalization for all hypotheses in this thesis.

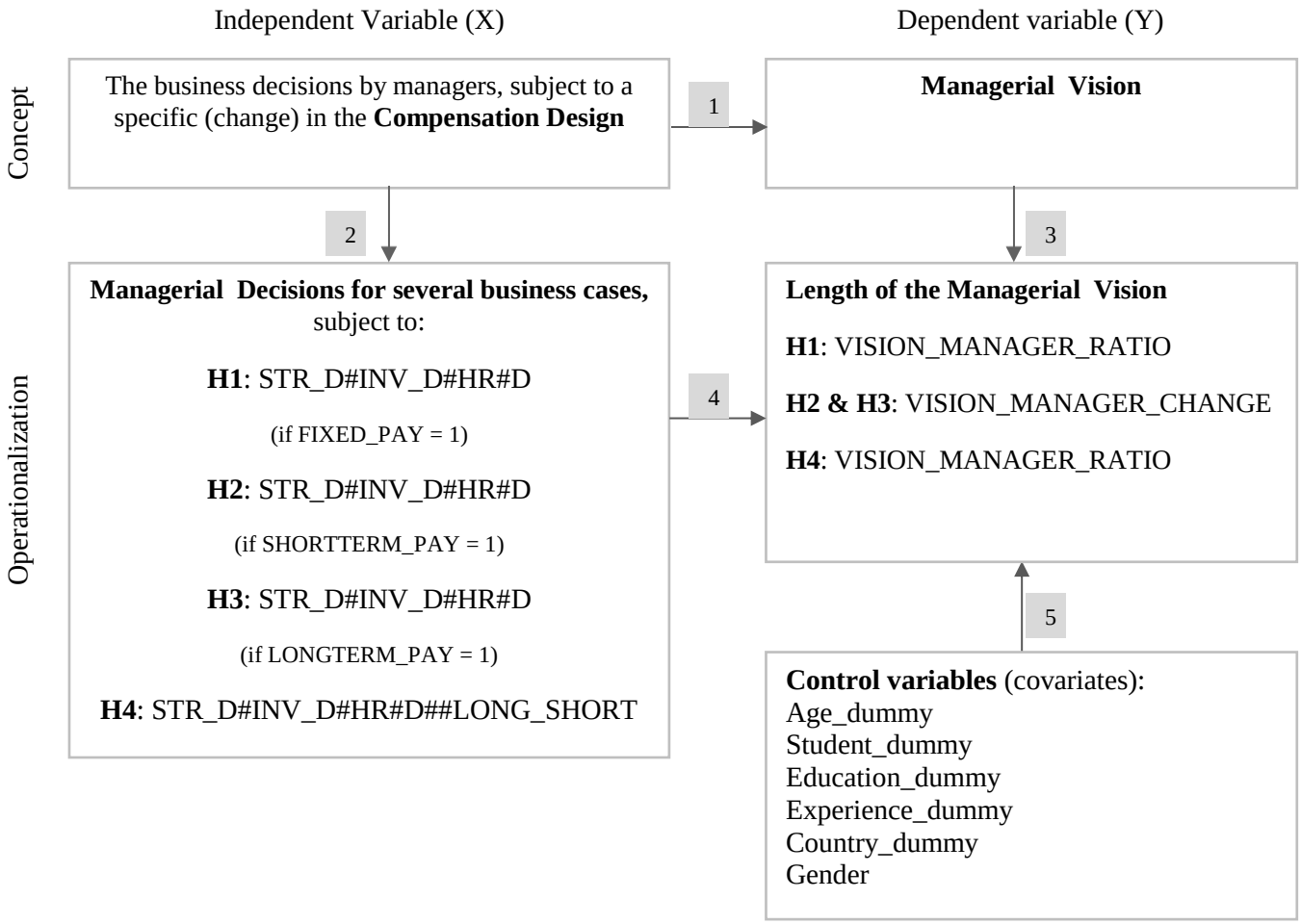


FIGURE 4 - LIBBY BOXES OF HYPOTHESES H1, H2, H3 AND H4 - THE EFFECT OF THE INCENTIVE DESIGN ON THE LENGTH OF THE MANAGERIAL VISION, SPECIFIED FOR THREE DECISION ASPECTS

4.5 - THE EXPERIMENT (AND ITS PROCEDURES)

4.5.1 THE EXPERIMENTAL DESIGN

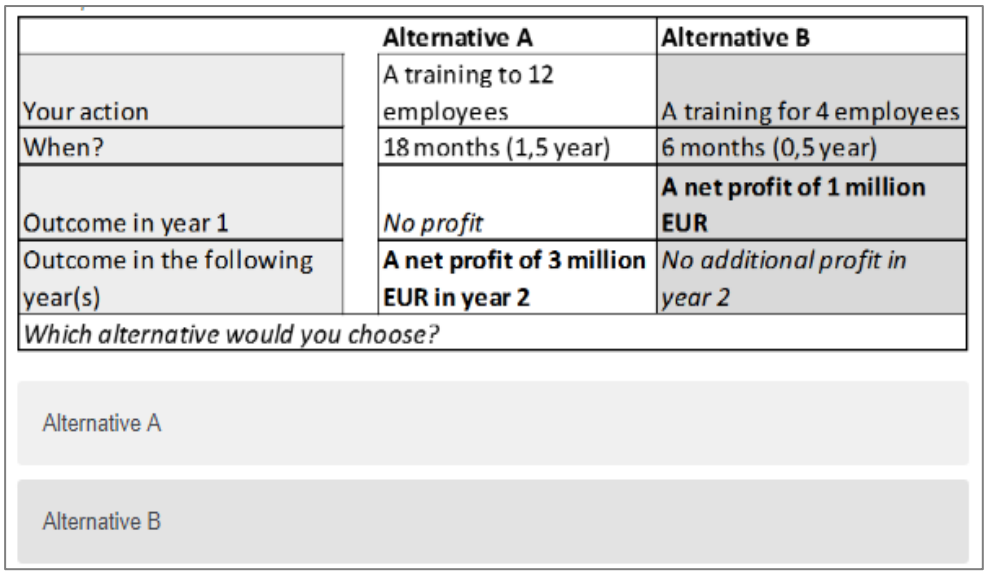
Each subject is presented exclusively with one of the two experimental surveys. This prevents that certain workers on mTurk would unfairly exploit their learning head start. As the result, approximately half participated in the survey where the compensation consisted of a fixed reward and a variable reward based on the short-term. In the other survey, the compensation consisted of a fixed reward and a variable reward based on the long-term performance. For both surveys, the experiment has a 2 (fixed reward vs. short- *or* long-term performance-based compensation) x 3 (strategic decision condition vs. investment decision condition vs. human resource decision condition) multi-factor design. It is a within-subjects design, since there is a control and treatment value for all three decision aspects from all participants. Moreover, it is a between-subjects design, since there are two treatment groups versus one control group. For instance, this study investigates, inter alia, whether the differences in the length of the vision across the decision aspects are larger in one treatment group than for the other. On average, it took the subjects slightly over 18 minutes to complete the survey, with the option of a refreshing break halfway during the experiment.

As described before, the experiment is conducted online by using Amazon's mTurk as source of the necessary subjects. In essence, this thesis investigates the consistency in the effect of long-term performance-based compensation - on the length of the vision of a manager - over several decisional aspects. However, in order to compare and measure the difference between different compensation designs, the same effect is also investigated for a change from fixed to short-term based compensation. An example of how a complete survey looks like, can be found in Appendix K.

4.5.2 THE PROCEDURE OF APPROXIMATING THE INDIFFERENCE POINT (LENGTH OF THE VISION)

The experimental survey consists out of two parts, each part with six cases that are related with the three decisional aspects. The change in the output for the second part is exogenous, since all other factors in the experiment remain constant. For every case, there is a repeated series of questions, following the choice titration method that tries to approach the indifference point of the manager (Scholten and Read, 2006). For instance, consider the case where subjects had to choose between a project with only profits in year 1 and another project with higher profits in the following three years, but with no profit in year 1. In this case, the profitable project in year 1 represents the sooner smaller (SS) outcome and the other represents the later larger (LL) outcome. In every case, the two alternatives are randomly, but evenly presented to the subjects. This prevents the subjects from constantly choosing the first option out of comfort, because it looks similar to the previous case. As a result, this subject does not perform as good as compared to the subject that reads every case carefully. Hence, this measure

motivates the subject to actively read the context of a case since the performance pay is depending on his decisions. In Figure 5 is an example of how a question is presented in the experiment.



	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

Alternative A

Alternative B

FIGURE 5 - EXAMPLE QUESTION FROM THE EXPERIMENT

The main question is followed by three sub questions to approximate for the subject's indifference point. The alternating outcomes are determined by the 'split-the-difference' procedure, whereas the LL alternative remains at its initial value. This procedure produces the new outcomes based on the subject's last preference. For instance, when the subject prefers the LL outcome in the first question, results in adding half of the value difference between the two outcomes to the SS outcome in the subsequent question. In this way, the outcomes come closer together, approaching the subject's indifference point. Alternatively, when the subject chooses the SS outcome in this first question, this value appears to be more valuable than the LL. In this case, the SS outcome is reduced with half of the difference of the value of SS and null. This process continues until the subject answered four questions in a case, and the difference to split is only a small amount of the initial value. Where applicable, the outcomes are rounded on two decimals for the sake of clarity for the subjects. All of this results in the approximated point where the subject is indifferent in choosing between two alternatives. The actual measure for the indifference point is the midpoint between the most recent value of where the SS outcome was preferred and neglected. An example of this process is showed in the titration procedure in Appendix A.

4.5.3 THE PAYMENT

In return for the provided effort during the experiment, the subjects receive a compensation after completion. The actual amount of compensation the subjects receive, depends on their performance during the experiment. The decisions by the subjects influence the company's future value and their personal compensation as well. This reflects on what base actual a manager receives his salary and how his decisions turn out for the company. For the first part of the experiment, the subjects receive a fixed reward of € 1,00. During this part, their preferences are more independent from their compensation and

preferences. Moreover, they decide what they personally think is best for the company. In the second part of the experiment, the subjects receive a scheme with performance targets and the relating bonus rewards, with a minimum of € 0,10 and a maximum of € 1,00, as shown in Table 1. Before the start of the second part of the experiment, it is clearly emphasized that their compensation is now based on the long-term (or short-term) performance of the company. This study deliberately chooses to emphasize this, in order to send out a clear incentive to the subjects that their decisions now impact their bonus payment. As well as in the initial instruction, the subjects are encouraged to follow the best course for the company, albeit this time with the opportunity to earn a bonus.

TABLE 1 - OVERVIEW OF COMPENSATION LEVEL IN PART TWO OF THE EXPERIMENT

Experiment I: *(short-term targets)* Total result in **Year 1**	Experiment II: *(long-term targets)* Total result in **Years 2, 3 and 4**	**Your bonus reward:**
.. - 1 million EUR	.. -9 million EUR	€ 0,10 (in cash)
1-2 million EUR	9-13 million EUR	€ 0,25 (in cash)
2-4 million EUR	13-17 million EUR	€ 0,50 (in cash)
4-6 million EUR	17-24 million EUR	€ 0,75 (in cash)
6+ million EUR	24+ million EUR	€ 1,00 (in cash)

Thus, the variable reward of the second part depends on the subject's performance for the fictitious company. The result is determined by the choices that the subject makes and measured by the outcome value of the indifference point. The approach and measurement of this point is described in the previous section. For instance, when a subject from Experiment I chooses the short-term alternative in a case, the derived mean value from the indifference point is added to his performance. This continues until the subject finished the experiment and all his performances of the second part are added together. For instance, when the subject from Experiment I achieves a short-term performance of 3 million EUR, he receives € 0,50 for this part and € 1,50 in total. The subjects only see the targets for their version of the two experiments, since they have no use on seeing the targets that the other treatment group receives.

The procedure is almost identical for the subjects in Experiment II, except that they have long-term targets. This means that the outcome value of short-term is only added to the performance of subjects in Experiment I, and vice versa. Appendix A gives an overview of the titration procedure of a question, including the available scoring values for both subject groups. This gives a clear overview of how the compensation of the second part of the experiment is constructed. The last row shows the values of what is added to a subject's performance, given the subject's last choice. The payment of the compensation is due until the subject finished the complete experiment and transferred within a week after the entry has been accepted. The maximum amount of compensation is identical for both parts and experimental tasks. This is also communicated before the start of the experiment. This prevents that subjects show an excessive effort in either one of the two parts.

4.6 - ANALYSIS

In order to analyze the data, the indifference points are compared between the different conditions and treatment groups. Since most variations on the dependent variable, the length of the managerial vision, is a ratio variable and the independent variables are binary, this research mostly uses the one-way and sometimes the two-way ANOVA test. With the use of the F-distribution, this technique is used to compare the means of two or more samples. In concept, the ANOVA test is similar to the two-sample t-test, but results in less type I errors[7] due to its conservatism. The two-way ANOVA extends the one-way ANOVA test by the possibility of examining the influence of several, independent variables on one dependent variable. For instance, the one-way ANOVA is used when comparing the length of the vision across the decision aspects when a subject receives a fixed compensation. Moreover, the same test is used when the manager switches from a fixed to long-term (or, short-term) incentives. In contrast, the two-way ANOVA test is used when comparing the difference in the effect of both variable compensation designs across the decisional aspects. All of the tests are two-sided, since it is possible that the difference in the length of the vision is in both directions. Unless stated differently, a significance level of 5% is implemented.

In addition to the regular ANOVA test, analyses of covariates are executed. The ANCOVA adds control variables, like the Experience_dummy, to the normal ANOVA test. Similar to control variables in a regression analysis, covariates are used to control for any confounding factors in the analysis. Moreover, these factors might be positively contributing in their effect, but are not of main interest in a study.

Before the data is ready to be used in an AN(C)OVA test, it has to meet certain qualifications. First, each group sample is from a normally distributed population[8]. In order to assess the normality, histograms or Kernel density plots can show how the observations within a variable are distributed. Second, all samples have an equal variance and are drawn independently from each other. The variances can be tested by using the Levene's test for equal variances (Levene, 1960). Third, all groups should be assigned randomly and independent. This is applicable to this study's dataset, since I have no influence in anyone to participate in one of the surveys.

The repeated measures ANOVA test is performed in order to provide the additional analysis for this study. This test control for idiosyncratic effects that belong specifically to one subject. The repeated measures ANOVA connects the various observations within one subject. This improves the analysis with independent observations, but most likely decreases the number of observations. The tables for these tests are all given in the appendices.

[7] Type I error - Is the situation where the null hypothesis is accepted, while it should have been rejected (false positive).
[8] For now, I assume that all samples are normally distributed. If not, I consider using non-parametric tests to investigate the relationship in this study, such as the Wilcoxon and/or Kruskal-Wallis test.

5. RESULTS

This section presents the results from the statistical tests from this research. All tests are executed by using Stata/MP. First, section 5.1 shows the results from the tests to assess the normality, equality in variances and the correlation analysis. Second, section 5.2 presents the descriptive statistics. The results of the AN(C)OVA tests belonging to hypotheses H1, H2, H3 and H4 are given in section 5.3, 5.4, 5.5 and 5.6, respectively. Finally, a summary and discussion of the findings from this section is given in section 5.8.

5.1 - TESTS FOR NORMALITY, EQUALITY IN VARIANCES AND THE CORRELATION ANALYSES

Before the data is ready for the ANOVA tests, it has to qualify by being normally distributed and have equal variances. Moreover, the samples have to be independent from each other. Since most of the variables that are used in the analysis are binary, only the dependent variables have to be tested for their normality and variances. Outliers can skew the data, resulting in less accurate results from the statistical analysis. In this research, I chose to drop the outliers, instead of winsorizing (i.e., transforming the extreme values into the value of the upper and under limits). Like earlier mentioned, the three-sigma rule is used to identify and drop outliers, followed by a manual dropping of observations when they are still far removed from the sample mean. Appendix B shows an overview of all graphs of the four continuous (and dependent) variables in this research, before the dropping of any outliers.

The graphs in Appendix B show that three out of four are normally distributed, although skewed by means of a tail on the right side. The fourth variable, VISION_MANAGER_RATIO is not normally distributed and is for a large part nested around 1 (or: 100%). This value means that the subject chose the maximum alternative possible in the case, and is hence a popular choice. Nonnormality increases the likelihood of a Type 1 error, or: false positive result, in the analysis. However, since this study combines the use of this variable with the other dependent variables, it decreases the probability of incorrectly accepting the null hypotheses. Next to that, the descriptive are analyzed by using the three-sigma rule, separately for all three decision aspects within all three treatments. As a result, nine observations are being dropped from the data from the variable VISION_MANAGER_CHANGE. Moreover, any existing observations within the same variable are manually dropped, when a subject showed an increase in the length of the vision of 500% or more. This resulted in dropping three extra observations. A detailed overview of this process can be found in Appendix D. The histogram graphs and density plots after dropping the outliers can be found in Appendix C.

The equality of the variances is the second qualification before the data is ready for any ANOVA testing. This study uses the Levene's test to determine whether the variances between the subsamples are equal to each other. The variances are equal when the Levene's test gives an $p > 0,05$. In the case of

the first continuous variable, VISION_MANAGER, the variances suggest to be unequal for both treatments (p = 0,00). Resulting from that, this variable is not used in any following analysis. For the remaining variables, VISION_MANAGER_RATIO and VISION_MANAGER_CHANGE, the variances are mostly equal (with p varying from 0,103 - 0,957). However, there are a few exceptions. First, for hypothesis H2 and H3, VISION_MANAGER_CHANGE shows a significant unequal (p < 0,01). By not complying to one of the qualifications, the chance of stating false-positive increases. Despite that, the second qualification of equal variances before starting the ANOVA tests is guaranteed. Appendix E shows a complete overview for the separate Levene's tests that are used in order to determine the equality of the variances in this research.

5.1.1 CORRELATION ANALYSES

The Spearman rank-order correlation matrix is used in order to analyze the relationship between the variables of this thesis. The result of the relationship between two variables results in a (significant) correlation between +1 and -1, whereas +1 is a perfect, positive correlation and vice versa. A correlation value of 0 is no correlation between the two variables. The results of the Spearman correlation are given in Panel B of Table 2. The correlation coefficients in the presented matrix show no unexpected signs. For instance, the three main dependent variables show a positive (inter)correlation with each other (e.g., VISION_MANAGER and VISION_MANAGER_RATIO; 0,8003; p < 0,01). This is also the case for the three decision aspect variables. Interestingly, the Experience_dummy variable is positively correlated with Student_dummy (0,5984; p < 0,01), indicating that managers with less experience is more often related with being a student. In the researcher's opinion, there is no fear for a multicollinearity between a pair of explanatory variables in this study[9]. This is based on Panel B of Table 2, that shows no near perfect correlations between explanatory variables. The highest correlation is between VISION_MANAGER and VISION_MANAGER_RATIO, which are never used together in an analysis. The presented correlation matrix is the analysis of the complete dataset. The correlation matrices for the subsamples for the hypotheses can be found in Appendix F.

5.2 - DESCRIPTIVE STATISTICS

In total, 61 people[10] participated with the two separate experiments, of which only 16 % was female. On average, a subject worked for 18 minutes and 10 seconds before completing the experiment. Only 8% of the participants used a mobile device in order to complete the survey. The participants are from 14 different European countries that all have adopted the Euro as their national currency. Of all the participants, 75% completed at least a university bachelor's or a higher degree and 57% gained a maximum of working experience of 5 years or less. Lastly, 41% is currently still studying, while the others are working as an: an engineer, designer, a PhD candidate or as executive officer. The workers

[9] The multicollinearity is detected by using the 'variance inflation factors' (VIF-)test

[10] There were six subjects that entered both surveys. In order to mitigate for any learning effect, their second entry was rejected. The message these subjects received can be found in Appendix I.

received a compensation for their provided effort and earned an average total payment of € 1,44. Interestingly, there is a difference in the level of performance between the two treatment groups, resulting that long-term incentivized workers earned an average pay of € 1,63, while the short-term incentivized workers earned an amount of €1,22.

Panel A of Table 2 presents the descriptive statistics of the (four versions of the) dependent variable and the control variables. After correction, there are 366 manager-indifference point observations, divided over the several treatments in the experiment. The descriptives for the independent variable that divides the sample into the three decision aspects are similar to each other, thus do not provide useful information at this point. The descriptives are subdivided for the three incentive designs. For instance, it shows that the mean of VISION_MANAGER_RATIO on average changes from 62,4% to 48,4%, as the result of a change in the incentives design in the survey from a fixed to a short-term performance-based compensation. In contrast, the ratio variable increases to an average of 68,3% as the result of a change of the incentives design from a fixed to a long-term performance-based compensation. Moreover, 44,3% is student in the short-term treatment group, while 38,5% of the long-term treatment group is still student. Overall, there are minor differences visible in the composition of the two treatment groups, as compared to the control group. This results from the fact that each group has different and unique participants. Next to that, the dependent variables show results that are not unexpected, following the outcomes of prior literature. In addition to the earlier example, VISION_MANAGER_CHANGE shows a positive change in the length of the managerial vision when a manager switches from fixed to a long-term performance-based compensation (+ 43,1%). In contrast, the change in the length of the vision is negative when a manager switches to short-term incentives (- 25,3%). Apart from what the investigation in this study, these results show that the direction of the managerial vision is correct. More detailed descriptive statistics and the descriptives for the subsamples of hypotheses H1-H4 can be found in Appendix F.

TABLE 2 - DESCRIPTIVE STATISTICS, TOTAL DATASET

Panel A: Descriptive Statistics

Variable	TREATMENT (FIXED=F; SHORT-TERM=S; LONG-TERM=L)	MEAN	Std. Dev	MIN	MAX
VISION_MANAGER	F	5.0537	4.239	0.0800	15
	S	3.9396	4.028	0.0650	15
	L	5.5239	4.493	0.0650	15
VISION_MANAGER_RATIO	F	0.6240	0.305	0.0210	1
	S	0.4842	0.349	0.0112	1
	L	0.6832	0.312	0.0222	1
VISION_MANAGER_CHANGE	F	--	--	--	--
	S	-0.2533	0.905	-0.9856	3.5544
	L	0.4310	0.961	-0.9117	4.7991
VISION_MANAGER_CHANGE2	F	--	--	--	--
	S	-0.3007	0.868	-0.9888	3.4583
	L	0.4213	1.097	-0.9747	5.1790
AGE_DUMMY	F	0.2787	0.450	0	1
	S	0.3291	0.473	0	1
	L	0.2396	0.429	0	1
STUDENT_DUMMY	F	0.4098	0.493	0	1
	S	0.4430	0.500	0	1
	L	0.3854	0.489	0	1
EDUCATION_DUMMY	F	0.7541	0.432	0	1
	S	0.7975	0.405	0	1
	L	0.7292	0.447	0	1
EXPERIENCE_DUMMY	F	0.5738	0.496	0	1
	S	0.5190	0.503	0	1
	L	0.6458	0.481	0	1
GENDER	F	1.164	0.371	1	2
	S	1.215	0.414	1	2
	L	1.125	0.333	1	2

Panel B: Spearman's R Correlation matrix

	a	b	c	d	e	f	g	h	i	j	k	l
VISION_MANAGER (a)	1.000											
VISION_MANAGER_RATIO (b)	0.8003***	1.000										
VISION_MANAGER_CHANGE (c)	0.6307***	0.7165***	1.000									
STR_D (d)	-0.1592**	-0.0843	-0.0315	1.000								
INV_D (e)	0.4879***	-0.0083	0.0101	-0.4933***	1.000							
HR_D (f)	-0.3308***	0.0915	0.0209	-0.4933***	-0.5133***	1.000						
Gender (g)	0.0705	0.0521	-0.0807	-0.0109	0.0054	0.0054	1.000					
Education_dummy (h)	-0.0796	-0.1180	-0.0728	0.0148	0.0070	-0.0216	-0.0318	1.000				
Student_dummy (i)	0.0312	0.0018	-0.0028	0.0042	-0.0021	-0.0021	0.1568**	0.0121	1.000			
Experience_dummy (j)	0.0959	0.0990	0.0377	-0.0467	0.0105	0.0356	0.1013	-0.0463	0.5984***	1.000		
Age_dummy (k)	0.0704	0.0473	-0.0183	-0.0313	0.0016	0.0293	0.0010	-0.1660**	0.4382***	0.5250***	1.000	
Country_dummy (l)	0.0143	0.0117	-0.0036	-0.0094	0.0046	0.0046	0.1691**	-0.0893	0.2068***	0.2222***	0.1106	1.000

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*

Panel A: shows the descriptive statistics of the following variables:
***VISION_MANAGER** (Length of the managerial vision), **VISION_MANAGER_RATIO** (Length of the managerial vision, relative to maximum), **VISION_MANAGER_CHANGE** (Length of the managerial vision, relative change), **VISION_MANAGER_CHANGE2** (Length of the managerial vision, relative change, weighted to size of individual score within one aspect), **AGE_DUMMY** (age), **STUDENT_DUMMY** (1=subject is a student), **EDUCATION_DUMMY** (1=subject completed at least a university's bachelor), **EXPERIENCE_DUMMY** (1=subject has at maximum 5 years working experience), **Country_dummy** (1= if subject lives in country he is born)and **GENDER**(1= male; 2= female).*
*Panel B: shows the intercorrelation between the (in)dependent variables, same as Panel A; except **VISION_MANAGER_CHANGE2**, but with **STR_D** (Strategic decisions), **INV_D** (Investment decisions) and **HR_D** (Human resource decisions).*

5.3 - ONE-WAY AN(C)OVA TEST HYPOTHESIS H1 - FIXED COMPENSATION

As a reminder, the null hypothesis for this first investigation is as following:

> H1: When a manager receives a fixed compensation, there are no differences in the length of the managerial vision between strategic, investment and human resource decisions.

The first ANOVA test uses a number of 183 manager-indifference point observations. Based on the results of the one-way ANOVA test, I can conclude that there is no difference in the length of the vision between the three decision aspects when a manager receives a fixed compensation. The interaction effect between the three decision aspects does not report a significant difference between each other ($F(2,120)=2{,}20$; $p > 0{,}10$). As can be seen in Table 3, there is a difference between the managers as observed by the variable Worker ($F(60,120)=2{,}27$; $p < 0{,}00$). However, this is not what is investigated for this hypothesis. A graphic display of the managerial vision length between the three

decision aspects can be found in Figure 6. Visually, the graph shows minor but insignificant differences between the decision aspects. The mean length of the vision for the strategy aspect reports the shortest, while the human resources reports the longest vision. The latter finding is in line with the expectation, since the human resources is sensitive for the wellbeing of employees and other social factors.

Next to that, I included an ANCOVA test. This test includes multiple covariates, like Gender and Student_dummy. Moreover, the covariate variables control for possible effects that are not of main interest in this research. However, there is still no difference in the length of the vision between the three decision aspects under a fixed compensation. Interestingly, there is a difference in the length of the managerial vision as a general effect between being a man or woman, thus for all observations.

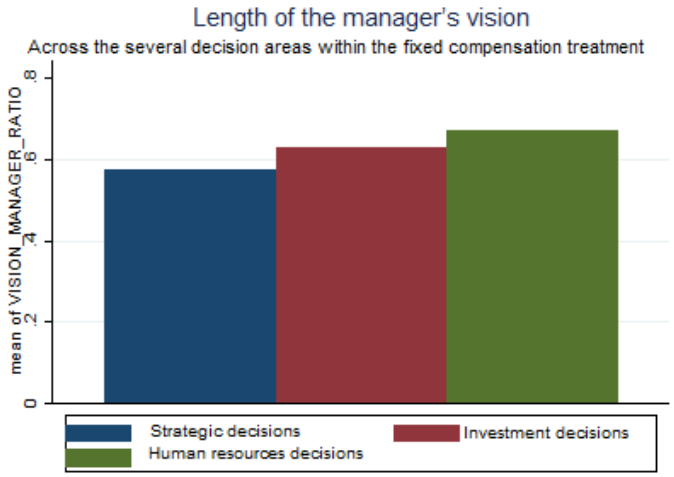


FIGURE 6 - THE MANAGERIAL VISION LENGTH FOR THREE DECISION ASPECTS, UNDER A FIXED COMPENSATION

In addition, the post-hoc analyses for both the ANOVA and ANCOVA do not show any differences in the length of the vision between the decision aspects. The analysis only shows weak, but insignificant evidence for a difference between the strategy and human resources decision aspect (e.g., $t = 1.77$; $p < 0{,}10$). By using a post-hoc analysis after the ANOVA test, STATA performs pairwise comparisons across the available combinations of factor variables. In this case, three pairwise combinations with the decision aspects are investigated. These and following post-hoc analyses can be found in Appendix G.

TABLE 3 - SUMMARY RESULTS OF THE ONE-WAY AN(C)OVA TESTS FOR HYPOTHESIS H1

Dependent variable: VISION_MANAGER_RATIO	*ANOVA*		*ANCOVA*	
Variable	**F-statistic**	**p-value**	**F-statistic**	**p-value**
Worker[3]	**2.27**	**0.000*** **	**5.65**	**0.019** **
STR_D#INV_D#HR_D[1]	2.20	0.115	1.60	0.205
Age_dummy[3]			0.50	0.479
Student_dummy[3]			0.11	0.737
Education_dummy[3]			0.00	0.953

Experience_dummy[3]			1.81	0.180
Country_dummy[3]			0.02	0.881
Gender[3]			**6.26**	**0.013****
Adjusted R-squared[2] (%)	*30,2%*		*4,1%*	

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.
[1] *- Is the interaction effect between the three decision aspects.*
[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*
[3] *- These variables are used as a covariate variable in the ANCOVA test.*

*This table shows the AN(C)OVA results for the third hypothesis of this study. The dependent variable is **VISION_MANAGER_RATIO**. The independent variables **STR_D#INV_D#HR_D** show the interaction effect between the three decision aspects. The two left columns present the results from the ANOVA test, excluding control variables. The F-statistic, in combination with the degrees of freedom determine the significance value. The two right columns present the results from the ANCOVA test, including control variables. The control dummies are **Age_dummy** (Age of subject), **Student_dummy** (1= if subject is a student), **Education_dummy** (1= subject at least completed a university's bachelor), **Experience_dummy** (1= subject has at maximum 5 years of working experience), **Country_dummy** (1= if subject lives in the country he is born) and **Gender** (1=male;2=female).*

5.4 - ONE-WAY AN(C)OVA TEST HYPOTHESIS H2 - SHORT-TERM INCENTIVES

As a reminder, the null hypothesis for this investigation is as following:

> H2: When a manager switches from a fixed to a short-term performance-based compensation, there are no differences in the changed length of the managerial vision between strategic, investment and human resource decisions

For the second ANOVA test, a number of 79 manager-indifference point observations is used. Based on the results as presented in Table 4, I can conclude that there is no explicit difference in the length of the vision between the three decision aspects when a manager switches from a fixed to a variable compensation, based on the short-term performance. For the analysis of this hypothesis, the dependent variable VISION_MANAGER_CHANGE is used. Although showing weaker results for the equality of variances than VISION_MANAGER_RATIO, the normality in the distribution of the observations is better[11]. The figure below shows the mean of the vision length, specified for this subsample. The red bars represent the mean of the observed vision lengths as a result of the fixed compensation (control) group, whereas the blue bars are the means for the same group, but with the short-term incentives treatment. The graph shows an explicit drop in the length of the managerial vision for all decision aspects. This is in line with the predictions and confirm the results as shown by prior literature. The subjects show a change in their behavior, in specific result from the change in the incentive design. Despite from this finding, there still might be differences in the change between the three aspects. The magnitude of the change for most individual decision aspects is in line with the earlier

[11] Nevertheless, I analysed the same hypothesis by using VISION_MANAGER_RATIO, although with no differences in the results of the tests. This remark is equal for hypothesis H3.

example. For instance, investment decisions have the least impact on the length of the vision as the result of an incentives change to the short-term performance.

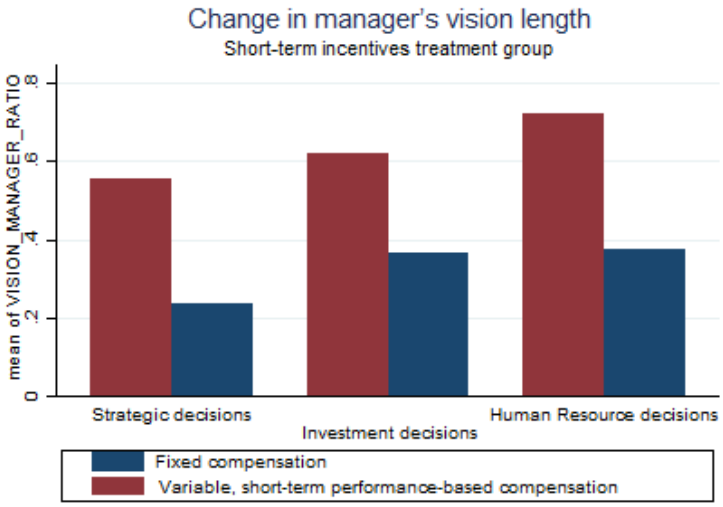


FIGURE 7 - THE MANAGERIAL VISION LENGTH FOR MANAGERS SWITCHING FROM A FIXED TO VARIABLE, SHORT-TERM BASED INCENTIVE DESIGN

Like the previous test for hypothesis H1, the differences in the vision length between the managers (Worker) is significantly different ($F(27,49)=2,20$; $p < 0,00$). Moreover, this may be the result that each manager has his personal preferences and shows a stronger change in their vision length, as a result of short-term incentives. The differences between the three decision aspects show a weak difference between each other as a result of the change in the compensation design ($F(2,49)=2,65$; $p < 0,10$). However, the results from the post-hoc analysis show differences between pairs of decision aspects. First, there is a significant difference between the change in vision length between the strategic and investment decision aspect ($t=-2,06$; $p < 0,05$). Second, there is only weak evidence for a difference between the investment and human resources decision aspect ($t=1,89$; $p < 0,10$). In contrast, there is no difference between the strategic and human resources decision aspect ($t=-0,19$; $p = 0,848$). The complete table with the post-hoc analysis for the ANOVA test can be found in Appendix G.

Next, by adding the dummy variables as covariates to the test, the results from the ANCOVA test are weaker than previously. As can be found in Table 4, the test only reports weak evidence for a difference between the change in the vision length as a result of the Experience_dummy variable ($F(2,69)=3,26$; $p < 0,10$). In the situation of a significant difference, this means that having less working experience results in a different effect on the change in vision length as the result of the incentives changes. In general, this model does not provide very useful information to confirm or deny the results by the ANOVA test, since the explanatory power dropped tremendously. The post-hoc analysis still shows weak evidence for a difference between the strategic and investment decision aspects ($t=-1,94$; $p < 0,10$). However, the analysis reports no significance for the other two pairwise connections.

TABLE 4 - SUMMARY RESULTS OF THE ONE-WAY AN(C)OVA TESTS FOR HYPOTHESIS H2

Dependent variable: VISION_MANAGER_CHANGE	*ANOVA*		*ANCOVA*	
Variable	**F-statistic**	**p-value**	**F-statistic**	**p-value**
Worker[3]	**2.20**	**0.008*** **	2.06	0.156
STR_D#INV_D#HR_D[1]	**2.65**	**0.081***	2.14	0.126
Age_dummy[3]			2.09	0.153
Student_dummy[3]			0.63	0.431
Education_dummy[3]			0.03	0.873
Experience_dummy[3]			**3.26**	**0.075***
Country_dummy[3]			0.02	0.878
Gender[3]			0.33	0.570
Adjusted R-squared[2] (%)	*32,2%*		*1,9%*	

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.
[1] *- Is the interaction effect between the three decision aspects.*
[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*
[3] *- These variables are used as a covariate variable in the ANCOVA test.*

*This table shows the AN(C)OVA results for the third hypothesis of this study. The dependent variable is **VISION_MANAGER_CHANGE**. The independent variables **STR_D#INV_D#HR_D** show the interaction effect between the three decision aspects. The two left columns present the results from the ANOVA test, excluding control variables. The F-statistic, in combination with the degrees of freedom determine the significance value. The two right columns present the results from the ANCOVA test, including control variables. The control dummies are **Age_dummy** (Age of subject), **Student_dummy** (1= if subject is a student), **Education_dummy** (1= subject at least completed a university's bachelor), **Experience_dummy** (1= subject has at maximum 5 years of working experience), **Country_dummy** (1= if subject lives in the country he is born) and **Gender** (1=male;2=female).*

Hence, based on the previously reported information in this section, I partially reject hypothesis H2, since there are some differences in the change of the managerial vision length between the decision aspect under a short-term incentives design. In specific, the strategic decision aspect experienced a stronger effect in the vision length, as the result of a switch in the incentives design from a fixed to short-term incentives compensation. Moreover, there is weak evidence that the strategic decision aspect is significantly different from the HR decision aspect, in terms of the vision length as the result of a change in the compensation design. Hence, the short-term performance-based incentives do not equally incentivize a manager in all decision aspects.

5.5 - ONE-WAY AN(C)OVA TEST HYPOTHESIS H3 - LONG-TERM INCENTIVES

As a reminder, the null hypothesis for this third investigation is as following:

> H3: When a manager switches from a fixed to a long-term performance-based compensation, there are no differences in the changed length of the managerial vision between strategic, investment and human resource decisions.

For the third ANOVA test, a number of 92 manager-indifference point observations is used. Based on the results as presented in Table 5, I can conclude that there is no explicit difference in the length of

the vision between the three decision aspects when a manager switches from a fixed compensation to a variable compensation, based on the long-term performance. For the analysis of this hypothesis, the dependent variable VISION_MANAGER_CHANGE is used. The figure below shows the control and treatment mean of the vision length, specified for the three decision aspects. At first sight, the graph shows a smaller change (i.e., increase) in the managerial vision length as a result of the shifting from the incentives design than hypothesis H2. Again, the red bars represent the means of the observed vision lengths as a result of the fixed compensation (control) group, whereas the blue bars are the means for the same group, but with a long-term incentives treatment. The difference between the red and blue bars show that the length of the vision is increased for all decision areas, as the result of a change to long-term incentives. This is in line with the predictions and confirm the results as shown by prior literature. In specific, it shows that strategic decision is most sensitive to long-term incentives, while investment decision show the least sensitive decision aspect. The subjects appear to show a reaction on the change to long-term incentives, according to the prediction. Moreover, the specific changes for all decision aspects are quite stable and without any surprises, as compared to the earlier predictions.

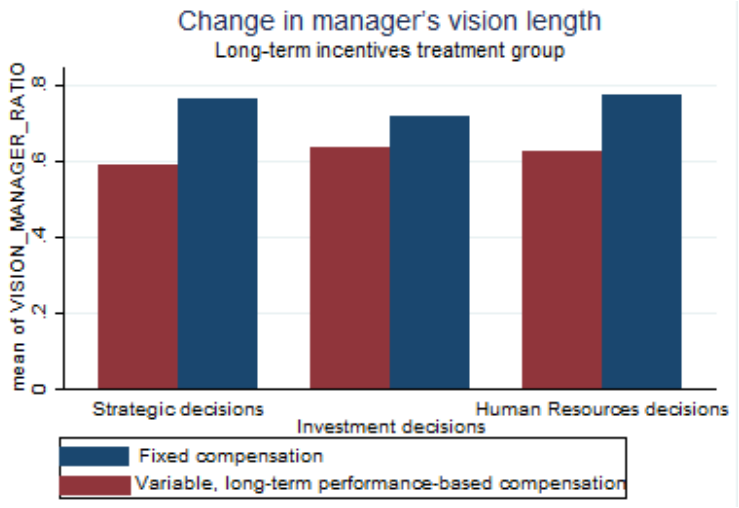


FIGURE 8 - THE MANAGERIAL VISION LENGTH FOR MANAGERS SWITCHING FROM A FIXED TO VARIABLE, LONG-TERM BASED INCENTIVE DESIGN

Now, in contrast to hypothesis H1 and H2, the ANOVA test only shows weak evidence for differences in the change of the length of the vision as observed for managers (Worker) ($F(32,57)=1,58$; $p < 0,10$). Moreover, there are is no significant differences between the three decision aspects ($F(2,57)=1,67$; $p > 0,10$). The pairwise comparisons in the post-hoc analysis confirmed this by providing no evidence for differences in the change in vision length between the decision aspects. Thus far, I can conclude that there is no difference in the effect of long-term incentives on the length of the managerial vision in the three decision aspects that are observed in this research. By adding the dummy variables as covariates in order to control for distorting factors in the analysis, the ANCOVA test still shows no evidence for differences between the decision aspects. As can be seen in Table 5, the explanatory power decreased to the level where the model is considered as not useful. Accordingly, the post-hoc analysis,

as can be found in Appendix G, confirms that there are no differences across the different pairs of decision aspects (e.g., p = 0,177 and higher).

TABLE 5 - SUMMARY RESULTS OF THE ONE-WAY AN(C)OVA TESTS FOR HYPOTHESIS H3

Dependent variable: VISION_MANAGER_CHANGE	*ANOVA*		*ANCOVA*	
Variable	**F-statistic**	**p-value**	**F-statistic**	**p-value**
Worker[3]	**1.58**	**0.065***	0.47	0.493
STR_D#INV_D#HR_D[1]	1.67	0.197	1.15	0.323
Age_dummy[3]			0.11	0.737
Student_dummy[3]			0.03	0.867
Education_dummy[3]			0.00	0.986
Experience_dummy[3]			0.08	0.776
Country_dummy[3]			2.03	0.708
Gender[3]			0.33	0.158
Adjusted R-squared[2] (%)	*17,7%*		--	

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.
[1] *- Is the interaction effect between the three decision aspects.*
[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*
[3] *- These variables are used as a covariate variable in the ANCOVA test.*

*This table shows the AN(C)OVA results for the third hypothesis of this study. The dependent variable is **VISION_MANAGER_CHANGE**. The independent variables **STR_D#INV_D#HR_D** show the interaction effect between the three decision aspects. The two left columns present the results from the ANOVA test, excluding control variables. The F-statistic, in combination with the degrees of freedom determine the significance value. The two right columns present the results from the ANCOVA test, including control variables. The control dummies are **Age_dummy** (Age of subject), **Student_dummy** (1= if subject is a student), **Education_dummy** (1= subject at least completed a university's bachelor), **Experience_dummy** (1= subject has at maximum 5 years of working experience), **Country_dummy** (1= if subject lives in the country he is born) and **Gender** (1=male;2=female).*

Hence, based on the previously reported information in this section, I accept hypothesis H3, since there are no explicit differences in the change of the managerial vision length between all decision aspects under a long-term incentives design. Next to the AN(C)OVA tests, the post-hoc analyses did not report any difference between pairs of decision aspects. Hence, the long-term performance-based incentives do not equally incentivize the manager in all decision aspects.

In general, long- and short-term incentives have both common and different effects on the three different types of decisions. For instance, it showed that investment decisions showed the weakest effect during both treatments. The change in the length of the vision across the three decision areas (with long-term incentives) suggests to be more consistent, since the independent value move more closely. In contrast, short-term incentives create less consistent results between the decision aspects. Even though the conclusions are based on the previous hypotheses, hypothesis H4 explicitly investigates whether the differences between the decision aspects in the length of the vision between both treatment groups.

5.6 - TWO-WAY AN(C)OVA TEST HYPOTHESIS H4 - CONSISTENCY IN INCENTIVES EFFECT

As a reminder, the null hypothesis for this third investigation is as following:

> H4: When a manager receives a compensation based on a long-term performance, the differences in the length of the managerial vision between strategic, investment and human resource decisions are larger, relative to a manager with short-term incentives.

For the fourth and last two-way ANOVA test, a number of 171 manager-indifference point observations is used. This number is the sum of the observations from the two previous hypotheses. Based on the post-hoc analysis as reported in Appendix G, I can conclude that the differences in the length of the managerial vision between the decision aspects is larger when a manager is incentivized with short-term incentives. For this hypothesis, the dependent variable VISION_MANAGER_RATIO is used, since VISION_MANAGER does not require for the equality in variances and a normal distribution of the observations. Moreover, the variable VISION_MANAGER_CHANGE cannot be used, since this hypothesis does not investigate the change in the length of the managerial vision. Figure 9 shows a complete overview of the length of the vision for the control and both treatment groups, subdivided into the three decision aspects. The focus area of this hypothesis the differences between the decision aspects at both right sides of the figure. This point reports the mean vision length (treatment) value for the decision aspects. Visually, the graphs would also suggest that the differences are larger for the short-term incentivized treatment group.

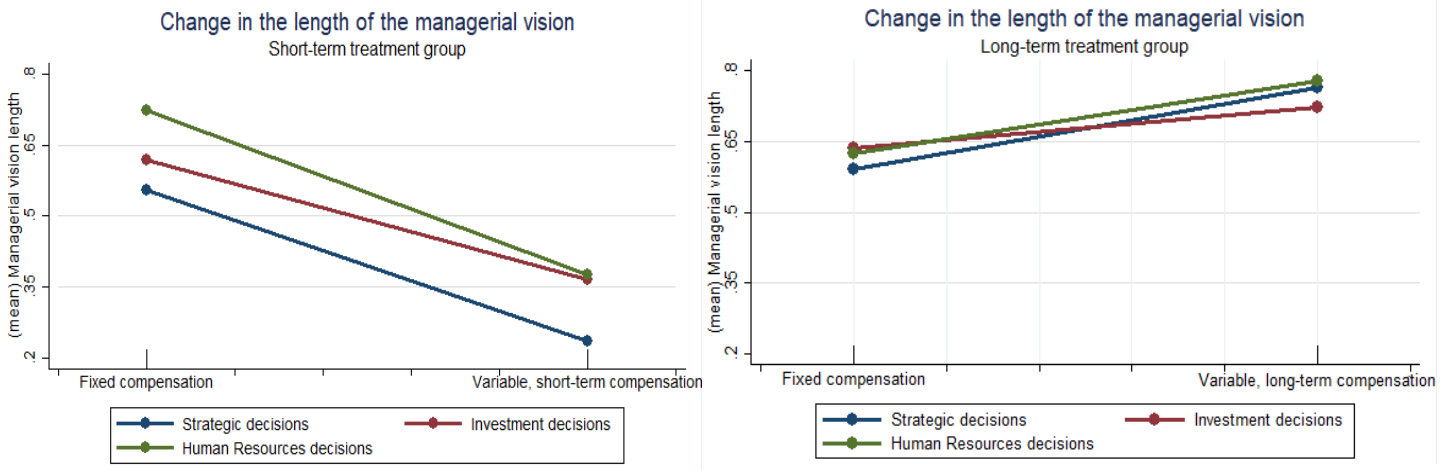


FIGURE 9 - A BEFORE-AFTER DISPLAY, CONNECTED LINE GRAPH OF THE MEAN VISION LENGTH FOR THE SHORT-TERM (LONG-TERM) INCENTIVES TREATMENT, DISPLAYED ON THE LEFT (RIGHT). FOR BOTH DISPLAYS, THE FIXED COMPENSATION REPRESENTS THE CONTROL VALUE, AND THE VARIABLE COMPENSATION THE TREATMENT VALUE.

Since this hypothesis investigates the differences between the several decision aspects, the analysis is slightly different when compared to the previous hypotheses. First, both an ANOVA and ANCOVA test was executed. Then, the contrast (i.e., difference between a pair) values from the post-hoc analysis

are used to accumulate the differences between the pairs. Theoretically, when there are no differences between the decision aspects within a treatment, this value would be 0. The long-term incentives treatment reports an accumulated contrast value of approximately -0,03, whereas the short-term treatment is -0,26. Apparently, these values already show that the managers show less differences between the decision aspect when they receive long-term incentives. Next, in order to compare the accumulated differences between the two treatment groups, the totals are divided by each other, by using the comparability index[12]. As a result of the post-hoc analysis from the ANOVA test, the differences are approximately six times larger (CI score = 0,1576). The ANCOVA test resulted in an even higher CI score (0,1099), implying that the differences within the short-term incentives treatment is still larger (or even larger than previously expected. This is mainly caused by the fact that strategy decisions are subject to a stronger short-termism effect than the other two decision aspects, as displayed in the figure above. The complete overview of the AN(C)OVA tests and the post-hoc analyses can be found in Appendix G.

Hence, based on the previously reported information in this section, I reject hypothesis H4, since the differences in the length of the managerial vision between the decision aspects are not larger for the long-term incentivized managers, relative to the short-term treatment. The results from the post-hoc analyses suggest that the differences within the short-term treatment are actually larger. Hence, the decisions by a manager appear to be less consistent in this situation.

5.7 - Additional analysis for the hypotheses

This section presents the additional analysis as a robustness check for the results of the hypotheses in this research. The repeated measures ANOVA test is used for the additional analysis for all four hypotheses of this thesis[13]. Each participant produces six observations for the dependent variable, resulting from the questions in the control and treatment-based experimental environment. The repeated measure ANOVA method combines all observations from one subject before the analysis starts. This method controls for idiosyncratic differences that are specifically related to an individual's behavior. Moreover, the repeated measures ANOVA tests for possible violations of the sphericity. Sphericity is the condition where all levels (in this case: the subjects) should have equal variances in their differences across the decision aspects. The repeated measures ANOVA produces several epsilon values, which tests whether the condition of sphericity is met. A value close to 1 indicates that the condition is met. When the condition is not met, it automatically applies a correction factor to the degrees of freedom for the F-test. The Box's epsilon is considered as the most conservative measure. When the Box's epsilon

[12] Comparability index (CI) - (| Accumulated differences of contrast long-term incentives group | / | Accumulated differences of contrast short-term incentives group |); CI score > 1 = larger differences of vision length in the long-term treatment group, and vice versa.

[13] Due to oversaturation of the test model, it was not possible to do the nested, repeated measures ANOVA test. In specific, a nested ANOVA means that the observations of dependent variable B (e.g., VISION_MANAGER) is nested within one subject. As a result, the post-hoc analyses are not included in the additional analysis (i.e., in order to investigate the pairwise differences between the decision aspects).

value indicates no violation to the condition of sphericity, other epsilon values from different measures do the same. Similar to the regular ANOVA, this test also assumes that the sample has a normal distribution at each level of the independent variable. The results from the repeated measures ANOVA tests for all additional analyses are given in Appendix G.2.

The first repeated measures ANOVA reports no differences in the length of the vision between managers with a fixed compensation (Hypothesis H1), using the error term of the interaction effect between the three decision aspects ($F(60,2)=1,03$; $p > 0,10$). This result differs from the regular AN(C)OVA tests in section 5.3. No differences between the subjects implies that the variances for the individual managers do not show significant differences in the length of the managerial vision. The Box's epsilon, considered as the most conservative method, reports the lowest value for this ANOVA test (Box's $\varepsilon = 0,5$; $F(2,120)=2,20$; $p > 0,10$). Hence, the result slightly decreases but remains insignificant, as can be seen in Panel B of Table 20 in Appendix G.2.

The repeated measures ANOVA reports very weak evidence that there are differences in the length of the vision between managers when they switch from fixed to short-term incentives (Hypothesis H2), using the error term of the interaction effect between the three decision aspects ($F(27,2)=0,83$; $p < 0,10$). The differences in the length of the vision are no longer significant. As the result of more unequal variances in the differences of the interaction effect between the decision aspects, the degrees of freedom are corrected (Box's $\varepsilon = 0,5$; $F(2,49)=2,65$; $p > 0,10$). The detailed table is given in Panel B of Table 21 in Appendix G.2.

The repeated measures ANOVA reports that there are no differences in the length of the vision between managers if they switch from fixed to long-term incentives (Hypothesis H3), using the error term of the interaction between the three decision aspects ($F(32,2)=0,95$; $p > 0,10$). The condition of sphericity is not fully met, thus the degrees of freedom for the F-test is corrected. The result, however, is still insignificant and implies that there are no differences between the decision aspects in a switch from fixed to long-term managerial incentives (Box's $\varepsilon = 0,5$; $F(2,57)=1,67$; $p = 0,206$).

The last repeated measures ANOVA is used to analyze whether the difference in the length of the vision between the three decision aspects is larger when a manager receives long-term incentives in contrast to short-term incentives (Hypothesis H4). As mentioned earlier, the post-hoc analysis cannot be performed for this test. Therefore, this test does not give confirming information about which incentives design produces the most consistent decisions by a manager. However, the repeated measures test reports other interesting information. It reports weak evidence that there are differences in the length of the vision between managers, using the error term of the interaction effect between the three decision aspects and both treatment groups ($F(60,4)=4,26$; $p < 0,10$). Moreover, this test reports (weak) evidence for differences in the length of the vision between the decision aspects, in contrast with the prior repeated measures ANOVA tests. This shows that the subjects in both treatments have a different pattern of

making decisions. This evidence confirms the results from the AN(C)OVA tests in section 5.6, which showed that short-term incentives produce less consistent decisions by a manager than long-term incentives. The detailed table is given in Table 23 in Appendix G.2.

5.8 - SUMMARY AND DISCUSSION OF THE EMPIRICAL RESULTS

In order to answer the main research question of this study, several statistical tests are performed. After the assessment of the normality of the distribution and the equality in variances of the dependent variables, the descriptive statistics and correlation analyses are given. The descriptive statistics report the (differences) in the composition of the subsamples and the correlation analyses report the association between the variables that are used in this research.

The outcome of the one-way ANOVA test of hypothesis H1 indicate that there are no differences in the length of the vision between the three decision aspects when managers receive a fixed compensation. The post-hoc analysis and the ANCOVA test show confirming evidence for this finding. Hence, hypothesis H1 is accepted.

Based on the one-way ANOVA test and the belonging post-hoc analysis, hypothesis H2 is rejected. In addition to the weak evidence for differences between the three decision aspects when they change from a fixed to a short-term performance-based incentives design, the post-hoc analysis showed significant differences between the strategic and human resources decision aspects. Moreover, the test showed weak evidence for a significant difference between the investment and human resources decision aspects. The ANCOVA test and the related post-hoc analysis only give weak, though confirming evidence for a difference in the vision length between the strategic and investment decision aspect.

The outcome of the one-way AN(C)OVA tests of hypothesis H3 indicate that there are no differences in the length of the vision of a manager when he changes from a fixed to a long-term performance-based incentives design. Hence, this hypothesis is accepted. There are several explanations for not finding any significant differences with regard to this hypothesis. First, it is possible that the overall change in the length of the vision is too weak, resulting in more difficulty for the ANOVA tests to find the effect. Second, the subjects might have showed a genuine change in the length of the vision due to intrinsic motivation, resulting in no differences between several decision aspects a manager faces.

The results from the two previous hypotheses already suggest a possible outcome for hypothesis H4. Given the earlier results that there are differences between the decision aspects in a short-term incentivized environment, suggesting a less consistent change in length of the vision than long-term incentives. This suggestion is confirmed, based on the empirical results from the post-hoc analyses from the AN(C)OVA tests. Hence, hypothesis H4 is rejected. The length of the vision by a manager appears to be less consistent when a manager receives short-term incentives in contrast to long-term incentives.

6. CONCLUSION

6.1 - KEY FINDINGS AND IMPLICATIONS

This section presents and discusses the key findings and implications of this study. In addition, this section answers the main question of this study, which was as following:

Is the effect of long-term performance based compensation on the length of the vision of managers consistently reflected over strategic, investment and human resource decisions in their job?

Based on the empirical results from the experiment conducted in this study, the answer to this question is that long-term incentives consistently affect the length of the managerial vision over strategic, investment and resource decisions (Hypothesis H3). The ANOVA tests did not find any significant differences between the decision aspects. Next to this, there are some interesting findings that confirm or complement this main result. In general, the subjects showed a clear direction in the change of the length of the managerial vision, when switching from fixed to short-term incentives. Strategic and human resources decisions showed the strongest incentives effect on the length of the vision, which is in line with the predictions. Investment decisions showed relatively less of a strong differential effect on the change of the length of the vision.

This study uses two independent, online surveys that observed the length of the managerial vision of three decision aspects under three compensation designs. In the first experiment, 28 subjects expressed their point of indifference between a sooner and later alternative in 12 cases. The indifference point was approximated after a repeated series of four questions. The subjects received a fixed compensation for the first half of the first experiment, but were compensated on Company X's short-term performance in the second part. The second experiment was almost identical to the first one, but this time with 33 subjects and a compensation that was based on the long-term performance in the second part of the survey.

First, hypothesis H1 investigated if a manager already shows differences in the length of the vision when he receives a fixed compensation. The fixed payment represents how an employee normally receives his salary, without the option of a bonus. As a result, the manager's decisions are not directly driven by his personal finances. This is in line with the prior expectations of what the subjects would decide. Based on the empirical results, there are no differences in the length of the managerial vision between the decision aspects when a manager is incentivized with a fixed compensation. Hence, if there are to be differences between the decision aspects, they are most likely caused by the type of incentives a manager receives.

Second, hypothesis H2 investigated if the change from a fixed to a variable, short-term performance-based compensation results in differences between the decision aspects. Based on the

empirical findings, there are differences in the length of the vision between the three decision aspects. Hence, it appears that a switch to short-term incentives differently affects the length of the vision between the decision aspects. The subjects showed a clear direction of the change of the length of the vision, as a result of a switch in the incentives from a fixed to a short-term compensation. Specifically, the human resources decision aspect experiences a relatively sharper decrease in the length of the vision, relative to the other two aspects. This is interesting, since the decisions that managers make within the human resources aspect appear to be more shorter-term minded than in the other two aspects. In other words, managers try to increase their personal bonus payment, with the implication of employees receiving less training or the possibility of getting fired sooner. In contrast with the predictions in section 3, managers show relatively less empathy with their subordinates (i.e., by not firing the employees).

Third, hypothesis H4 investigated the differences in the length of the vision between short- and long-term incentives. Based on the empirical results, the differences are larger when a manager receives short-term incentives. This result is against the predictions from section 3. It has been shown that there is more consistency in the decisions when a manager receives long-term incentives than when a manager with short-term incentives.

Lastly, the results from the additional analyses overall weakened the prior results. By connecting all of the observations within one subject, most p-values decreased in significance and therefore weaken the outcome of this study. However, some incentive effects still influence the differences in the length of the vision between decision aspects.

To conclude, this thesis does not find any specific evidence that long-term incentives have an inconsistent effect on the length of the vision of managers. Short-term incentives on the other hand appear to be more inconsistent in its differential effect on the strategic, investment and human resources aspect. Hence, the study brings implications for academics and company owners. The company owners, or shareholders, have more insight in the side-effects of incentives, as well as the cause of the misalignment of their preferences with those of the manager. Next to this, this study opens a new field of research by elaborating on the causal effect of managerial incentives and (the length of) the vision with specific decision aspects a manager faces during his job. The following section elaborates on the contributions of this study.

6.2 - CONTRIBUTIONS

This study contributes to the existing literature in several ways. First, to the best of my knowledge, this study is the first to investigate the differences between different decision aspects of a manager's job, within the causal effect of incentives on the managerial horizon. Based on the fact that this study finds several differences between pairs of decision aspects (hypothesis H2), this study brings potentially important implications for corporate incentive designers.

Second, this study adds the comparison of the consistency in the managerial vision length between different incentives designs. This study contributes to have learned that, in contrast with long-term incentives, short-term incentives implicitly nudges the manager to decide less consistently, in terms of the length of the vision (hypothesis H4).

Third, this study contributes to several fields of research, like: managerial compensation, corporate governance and the decisions made by a manager. This study shows that providing incentives to a manager results in unanticipated side-effects, other than in prior studies was found. A lack of interest for specific activities, may increase the self-awareness of the manager and his salary.

Hence, the implications of this study provide sufficient (non-monetary) incentives for further research in the area of managerial incentives, his decisions and its effect on the length of the managerial horizon.

6.3 - LIMITATIONS

Although precision and care is used during the preparation, execution and writing of this thesis, there are still a few limitations the researcher faces, in retrospective. This section describes the limitations, which is followed by ideas for further research in section 6.4.

Similar to the short- and/or long-term incentives from this study are used in real business life. However, it is difficult to make an excise replica of a design in an experiment that only consists out of 12 questions in total. Moreover, the subjects of both treatment groups received their total compensation within a week after completion. Next to the fact that bonuses are at least based on a month or a quarter, the eventual payment of the bonus takes a lot longer than only a week. Hence, based on a longer waiting time for the due payments, a manager may change his decision behavior in the actual business environment.

Second, the experiments that are used to gather the necessary data for this study, is only a replication from the real business world. Although the subjects received a variable pay for the second part of the survey that determined by their choices, most of them do not face this kind of situations at this time. Moreover, the subjects had to finish the dilemmas only in a short matter of time, given a limited source of information. Hence, there is still room for improvement in order the replicate the actual business world for further research.

6.4 - FURTHER RESEARCH

First, the design of this study can be extended by adding more specific decision aspects. For example, decisions belonging the marketing aspect is an interesting aspect of the manager's job. Since this study was exploring a new field of research, its scope was limited only to investigate three decision

aspects. However, as the result of adding more decision aspects, there may emerge more differences in general or between specific pairs of decision areas.

Second, this research used observations that are gathered by using (online) experimental surveys. However, it could also be interesting when using quasi-experimental observations for this research design. This is a viable research idea, with the availability of records that show the reject- or acceptance of projects or other investment ideas, in combination with the exogenous change of an incentive design. For instance, Schotter and Schweigelt (1992) had the availability over the required data from Corporation X. In addition, this study used the same incentives design that was used in this company.

Third, this study investigates the decisions in intertemporal choices, giving alternatives that include the net return of investments. In contrast, this study can also be replicated when a manager faces decisions that include losses. Again, the effect of an incentives design could have a different effect on the length of the vision across several decision aspects.

Lastly, the presentation of the questions in the experimental survey for a part determines how and/or the subjects chooses. Due to the possibility of framing the questions, the difference in value between the sooner and later alternative can be too much, with the result of either one alternative being too attractive to the subject. However, in designing the experiment, I've carefully worked out how to present the questions.

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APPENDICES

APPENDIX A - OVERVIEW OF CHOICE TITRATION PROCEDURE; PERFORMANCE STRUCTURE

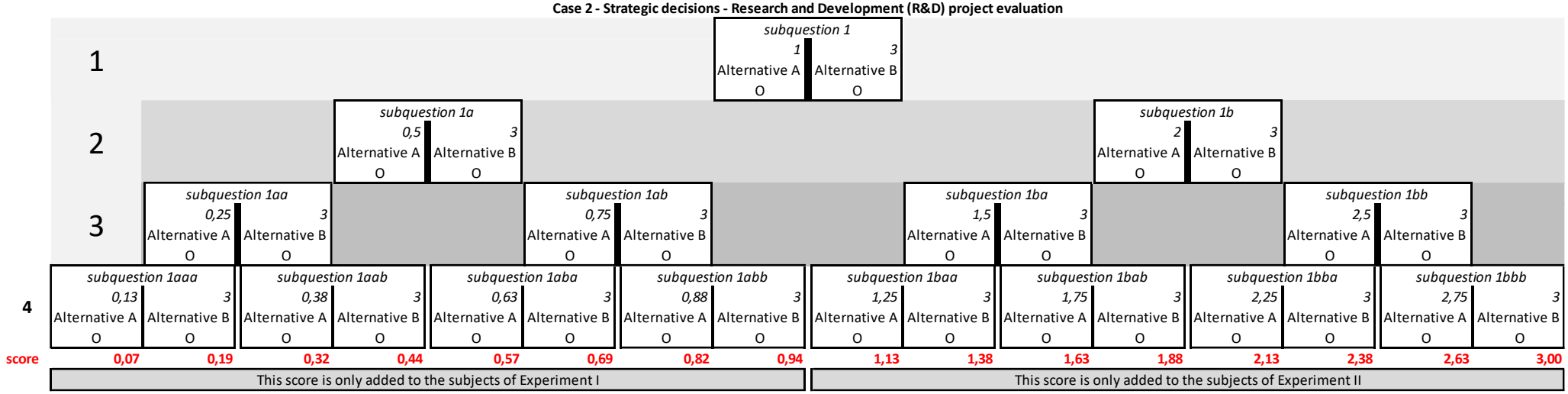

FIGURE 10 - THE OVERVIEW OF THE REPEATED SERIES OF QUESTIONS FOR A CASE IN THE EXPERIMENT. THE SUBJECT STARTS WITH SUBQUESTION 1A. WHEN THE SUBJECT CHOOSES ALTERNATIVE A, HE WILL RECEIVE SUBQUESTION 1A NEXT, ET CETERA. THE ROW WITH RED SCORES REPRESENT THE VALUE THAT IS ADDED TO THE SUBJECT'S PERFORMANCE TARGETS, IF APPLICABLE TO HIS EXPERIMENTAL SURVEY (EITHER EXPERIMENT I OR II).

APPENDIX B - HISTOGRAMS AND KERNEL DENSITY PLOTS - BEFORE DROPPING OUTLIERS

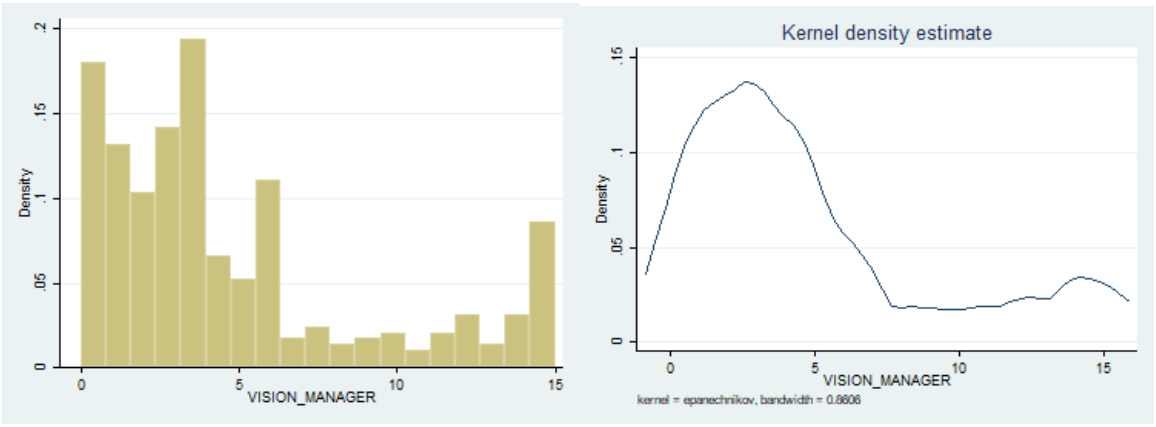

FIGURE 11 - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER, BEFORE DROPPING POSSIBLE OUTLIERS

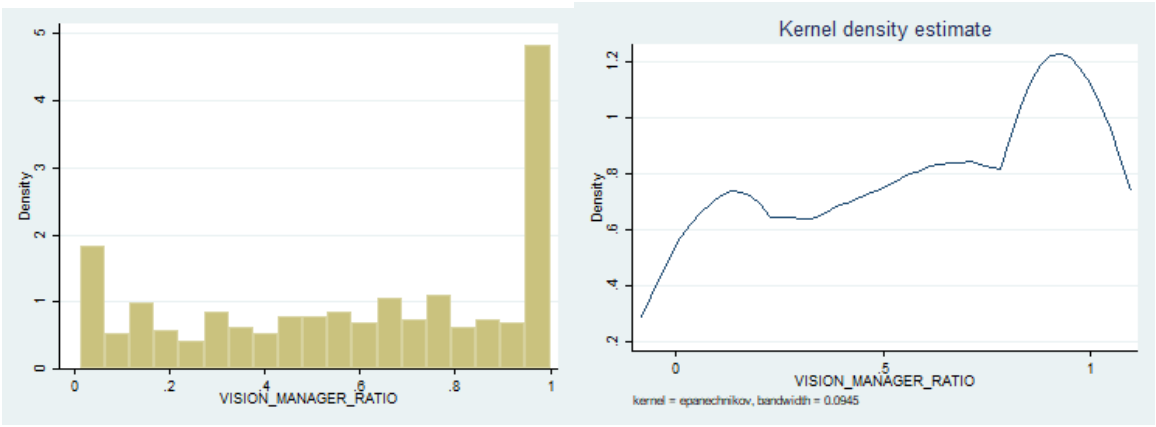

FIGURE 12 - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER_RATIO, BEFORE DROPPING POSSIBLE OUTLIERS

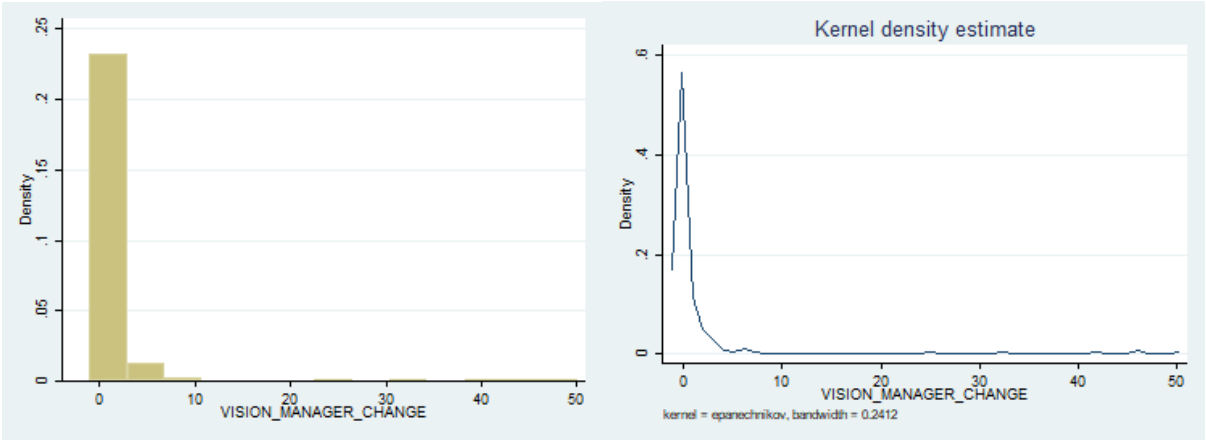

FIGURE 13 - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER_CHANGE, BEFORE DROPPING POSSIBLE OUTLIERS

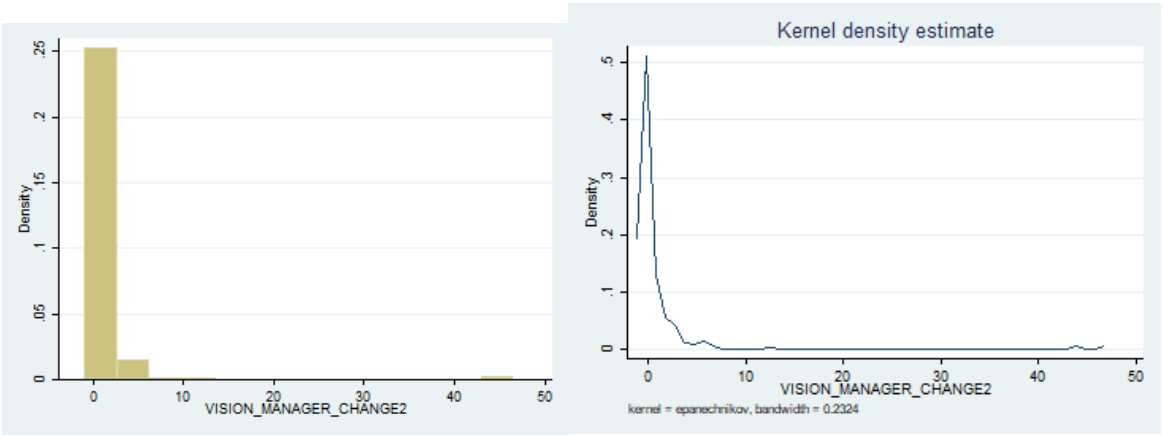

FIGURE 14 - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER_CHANGE2, BEFORE DROPPING POSSIBLE OUTLIERS

APPENDIX C - HISTOGRAMS AND KERNEL DENSITY PLOTS - BEFORE DROPPING OUTLIERS

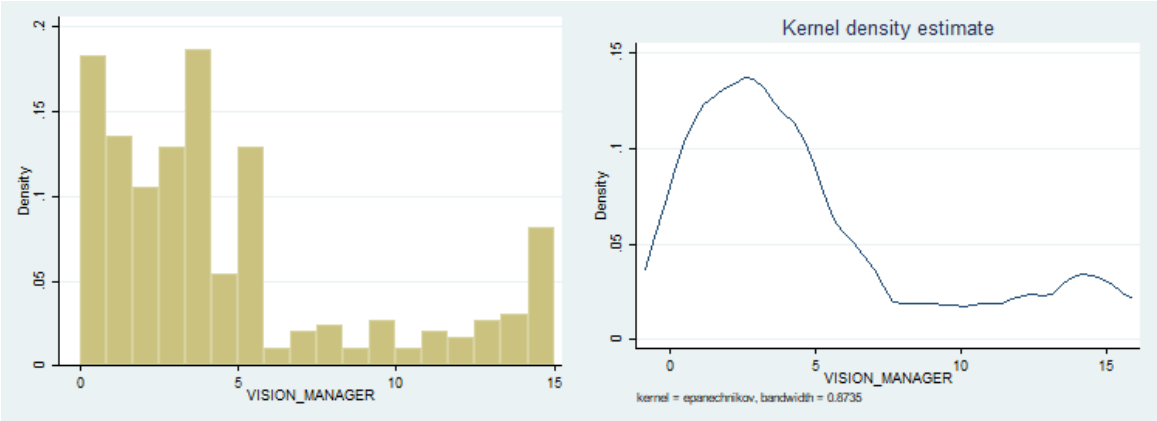

FIGURE 15 - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER, AFTER DROPPING POSSIBLE OUTLIERS

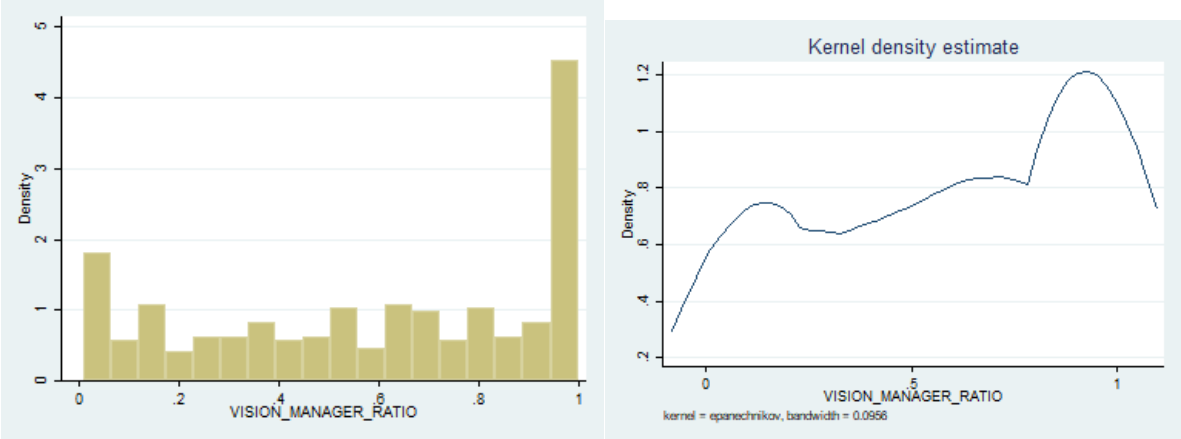

FIGURE 16 - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER_RATIO, AFTER DROPPING POSSIBLE OUTLIERS

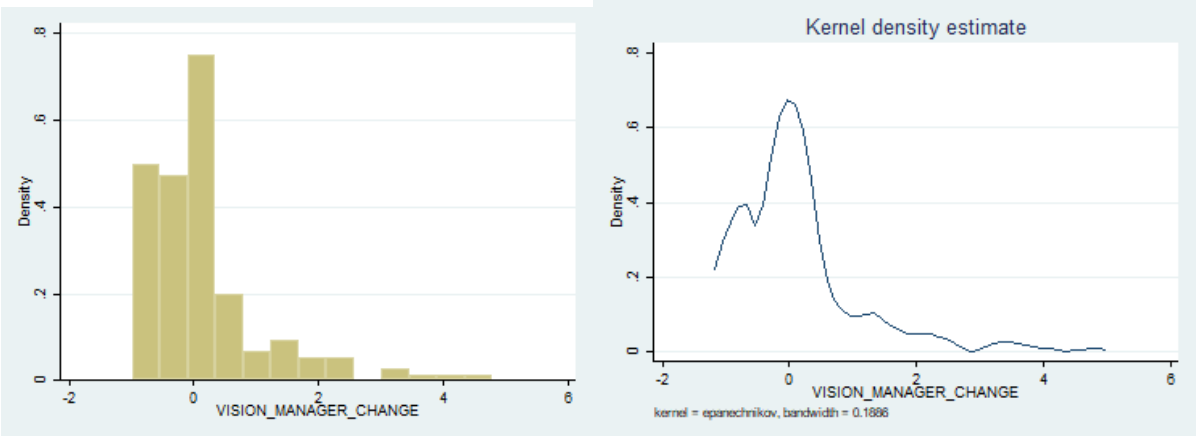

FIGURE 17 - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER_CHANGE, AFTER DROPPING POSSIBLE OUTLIERS

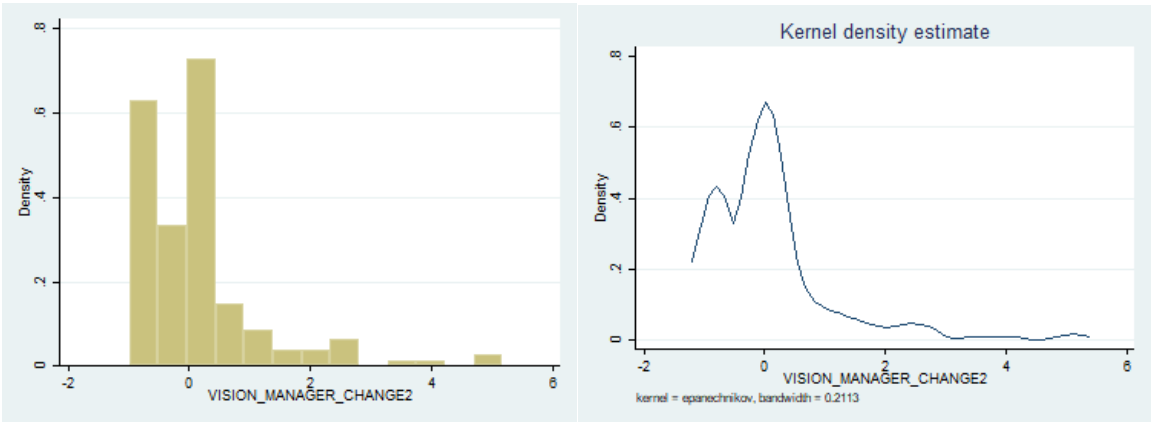

FIGURE 18 - - HISTOGRAM (LEFT) AND KERNEL DENSITY PLOT (RIGHT) OF VARIABLE: VISION_MANAGER_CHANGE2, AFTER DROPPING POSSIBLE OUTLIERS

APPENDIX D - SAMPLE TREATMENT

TABLE 6 - OVERVIEW OF THE DROPPING OF OBSERVATIONS

	No. of subjects	Times no. of questions	Manager-indifference point (no. of subjects * 6 questions)
Total number of subjects that participated with the online survey experiments	67	*6*	402
Less: Subjects rejected *(incorrectly participating both experiments)*	6	*6*	36
(0 1 0) vs (0 0 1)	61	*6*	366
Subdivided into:			
Experiment I: (Fixed+short-term bonus compensation)	*28*	*6*	*168*
Experiment II: (Fixed+long-term bonus compensation)	*33*	*6*	*198*
Trimming of data, as a result of			
Outliers, using the three-sigma rule	--	--	8
Outliers, visually	--	--	4
Total of outliers	--	--	12
H1: Total manager-indifference point observations (=366/2)	61	*3*	183
H2: Total before trimming (=168/2)	28	*3*	84
Less: 5 outliers	--	--	5
Total manager-indifference point observations:		--	79
H3: Total before trimming (=198/2)	33	*3*	99
Less:7 outliers	--	--	7
Total manager-indifference point observations:		--	92
H4: Total before trimming (=366/2)	61	*6*	183
Less: 12 outliers	--	--	12
Total manager-indifference point observations:		--	171

APPENDIX E - LEVENE'S TESTS

TABLE 7 - LEVENE'S TESTS HYPOTHESIS H1- THE EQUALITY OF THE VARIANCES

Best variable to use: VISION_MANAGER_RATIO

Variable	**Point of**	**value**	**Sign (p)[4]**	**Usability**
Differences between:	**measurement**			
Decision areas				
VISION_MANAGER	W0[1]	78.764	0,000***	No
DF(2,180)	W50[2]	69.375	0,000***	No
Variances between decision areas	W10[3]	66.178	0,000***	No
				NO
VISION_MANAGER_RATIO	W0[1]	0.451	0.638	Yes
DF(2,180)	W50[2]	0.342	0.711	Yes
Variances between decision areas	W10[3]	0.344	0.711	Yes
				YES

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] - Uses the mean when testing the equality of the variances.
[2] - Uses the median when testing the equality of the variances.
[3] - Uses the trimmed mean when testing the equality of the variances (top and bottom 10% is dropped).
[4] - The variances are considered equal when p > 0,05. Of main interest is the significance at the mean (W0).

*This table presents the aggregated results for the several tests for equality in variances (between the **decision areas** or the **control and treatment value**. Of main interest is the significance at point W0 (= measured at the mean).*

TABLE 8 - LEVENE'S TESTS HYPOTHESIS H2 - THE EQUALITY OF THE VARIANCES

Best variable to use: VISION_MANAGER_RATIO

Variable	**Point of**	**value**	**Sign (p)[4]**	**Usability**
	measurement			
VISION_MANAGER	W0[1]	60.430	0,000***	
DF(2,160)	W50[2]	52.838	0,000***	
Variances between decision areas	W10[3]	69.146	0,000***	
				NO
VISION_MANAGER_RATIO	W0[1]	0.991	0.374	
DF(2,160)	W50[2]	1.066	0.347	
Variances between decision areas	W10[3]	0.770	0.465	
				YES
VISION_MANAGER_RATIO	W0[1]	0.029	0.864	
DF(2,161)	W50[2]	0.006	0.938	
Variances between control and treatment (2 parts of experiment)	W10[3]	0.003	0.957	
				YES
VISION_MANAGER_CHANGE	W0[1]	5.582	0.005***	
DF(2,76)	W50[2]	4.213	0.018**	
Variances between decision areas	W10[3]	4.152	0.019**	
				NO

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] - Uses the mean when testing the equality of the variances.

[2] - *Uses the median when testing the equality of the variances.*
[3] - *Uses the trimmed mean when testing the equality of the variances (top and bottom 10% is dropped).*
[4] - *The variances are considered equal when p > 0,05. Of main interest is the significance at the mean (W0).*

*This table presents the aggregated results for the several tests for equality in variances (between the **decision areas** or the **control and treatment value**. Of main interest is the significance at point W0 (= measured at the mean).*

TABLE 9 - LEVENE'S TESTS HYPOTHESIS H3 - THE EQUALITY OF THE VARIANCES

Best variable to use: VISION_MANAGER_RATIO, then VISION_MANAGER_CHANGE

Variable	Point of measurement	value	Sign (p)[4]	Usability
VISION_MANAGER	W0[1]	90.724	0,000***	
DF(2,188)	W50[2]	56.532	0,000***	
Variances between decision areas	W10[3]	66.766	0,000***	
				NO
VISION_MANAGER_RATIO	W0[1]	2.298	0.103	
DF(2,188)	W50[2]	1.033	0.358	
Variances between decision areas	W10[3]	1.212	0.299	
				YES
VISION_MANAGER_RATIO	W0[1]	0.006	0.940	
DF(2,189)	W50[2]	0.254	0.615	
Variances between control and treatment (2 parts of experiment)	W10[3]	0.112	0.738	
				YES
VISION_MANAGER_CHANGE	W0[1]	4.372	0.015**	
DF(2,89)	W50[2]	1.981	0.144	
Variances between decision areas	W10[3]	2.796	0.066*	
				YES/NO

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] - *Uses the mean when testing the equality of the variances.*
[2] - *Uses the median when testing the equality of the variances.*
[3] - *Uses the trimmed mean when testing the equality of the variances (top and bottom 10% is dropped).*
[4] - *The variances are considered equal when p > 0,05. Of main interest is the significance at the mean (W0).*

*This table presents the aggregated results for the several tests for equality in variances (between the **decision areas** or the **control and treatment value**. Of main interest is the significance at point W0 (= measured at the mean).*

TABLE 10 - LEVENE'S TESTS HYPOTHESIS H4 - THE EQUALITY OF THE VARIANCES

Best variable to use: VISION_MANAGER_CHANGE, then VISION_MANAGER_RATIO

Variable	Point of measurement	value	Sign (p)[4]	Usability
VISION_MANAGER	W0[1]	75.847	0,000***	
DF(2,168)	W50[2]	69.281	0,000***	
Variances between decision areas	W10[3]	75.787	0,000***	
				NO
VISION_MANAGER_RATIO	W0[1]	2.663	0.073*	
DF(2,188)	W50[2]	2.533	0.082*	

Variances between decision areas	W10[3]	2.663	0.073*	
				YES
VISION_MANAGER_CHANGE	W0[1]	1.752	0.177	
DF(2,89)	W50[2]	1.054	0.351	
Variances between decision areas	W10[3]	1.040	0.356	
				YES

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] - Uses the mean when testing the equality of the variances.
[2] - Uses the median when testing the equality of the variances.
[3] - Uses the trimmed mean when testing the equality of the variances (top and bottom 10% is dropped).
[4] - The variances are considered equal when p > 0,05. Of main interest is the significance at the mean (W0).

*This table presents the aggregated results for the several tests for equality in variances (between the **decision areas** or the **control and treatment value**. Of main interest is the significance at point W0 (= measured at the mean).*

APPENDIX F - DESCRIPTIVE STATISTICS & CORRELATION MATRICES OF HYPOTHESES

TABLE 11 - DESCRIPTIVE STATISTICS AND CORRELATION MATRIX FOR HYPOTHESIS H1

Panel A: Descriptive Statistics (N=61

Variable	Decision aspect (1=strategy; 2=investment; 3=human resources)	MEAN	Std. Dev	MIN	MAX
VISION_MANAGER	1	3.3270	1.868	0.140	5.80
	2	9.4222	4.517	0.315	15
	3	2.4132	1.042	0.080	3.60
VISION_MANAGER_RATIO	1	0.5742	0.322	0.024	1
	2	0.6280	0.301	0.021	1
	3	0.6700	0.290	0.022	1
VISION_MANAGER_CHANGE	1	--	--	--	--
	2	--	--	--	--
	3	--	--	--	--
AGE_DUMMY		0.2787	0.450	0	1
STUDENT_DUMMY		0.4098	0.493	0	1
EDUCATION_DUMMY		0.7541	0.432	0	1
EXPERIENCE_DUMMY		0.5738	0.496	0	1
COUNTRY_DUMMY		0.8852	0.321	0	1
GENDER		1.1640	0.371	1	2

Panel B: Spearman's R Correlation matrix

	a	b	d	e	f	g	h	i	j	k	l
VISION_MANAGER (a)	1.000										
VISION_MANAGER_RATIO (b)	0.6640***	1.000									
STR_D (d)	-0.1640**	-0.1153	1.000								
INV_D (e)	0.6387***	0.0051	-0.5000***	1.000							
HR_D (f)	-0.4747***	0.1103	-0.5000***	-0.5000***	1.000						
Gender (g)	0.1317*	0.1698**	0.000***	0.000***	0.000***	1.000					
Education_dummy (h)	0.0243	-0.0037	0.000***	0.000***	0.000***	-0.0556	1.000				
Student_dummy (i)	0.0476	0.0738	0.000***	0.000***	0.000***	0.1712**	0.0114	1.000			
Experience_dummy (j)	0.0882	0.1091	0.000***	0.000***	0.0356	0.1130	-0.0303	0.5834***	1.000		
Age_dummy (k)	0.0215	0.0058	0.000***	0.000***	0.000***	0.0210	-0.1545**	0.4485***	0.5357***	1.000	

Country_dummy (l)	-0.0296	0.0137	0.000 ***	0.000 ***	0.000 ***	0.1594 **	-0.0862	0.1955 ***	0.2097 ***	0.1091	1.000

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*

Panel A: shows the descriptive statistics of the following variables:
VISION_MANAGER *(Length of the managerial vision),* ***VISION_MANAGER_RATIO*** *(Length of the managerial vision, relative to maximum),* ***VISION_MANAGER_CHANGE*** *(Length of the managerial vision, relative change),* ***VISION_MANAGER_CHANGE2*** *(Length of the managerial vision, relative change, weighted to size of individual score within one aspect),* ***AGE_DUMMY*** *(age),* ***STUDENT_DUMMY*** *(1=subject is a student),* ***EDUCATION_DUMMY*** *(1=subject completed at least a university's bachelor),* ***EXPERIENCE_DUMMY*** *(1=subject has at maximum 5 years working experience) and* ***GENDER****(1= male; 2= female).*
Panel B: shows the intercorrelation between the (in)dependent variables, same as Panel A; except ***VISION_MANAGER_CHANGE2****, but with* ***STR_D*** *(Strategic decisions),* ***INV_D*** *(Investment decisions) and* ***HR_D*** *(Human resource decisions).*

TABLE 12 - DESCRIPTIVE STATISTICS AND CORRELATION MATRIX FOR HYPOTHESIS H2

Panel A: Descriptive Statistics (n=54)

Variable	Decision aspect	MEAN	Std. Dev	MIN	MAX
VISION_MANAGER	strategic	2.3280	1.954	0.065	5.800
	investment	7.4247	4.948	0.315	15
	human resources	2.0017	1.321	0.080	3.600
VISION_MANAGER_RATIO	strategic	0.4014	0.337	0.011	1
	investment	0.4950	0.330	0.021	1
	human resources	0.5560	0.367	0.022	1
VISION_MANAGER_CHANGE	strategic	-0.4563	0.445	-0.986	0.601
(n=26)	investment	0.0394	1.300	-0.979	3.554
	human resources	-0.3542	0.673	-0.977	1.602
AGE_DUMMY	strategic	0.3148	0.469	0	1
	investment	0.3273	0.474	0	1
	human resources	0.3333	0.476	0	1
STUDENT_DUMMY	strategic	0.4259	0.499	0	1
	investment	0.4364	0.501	0	1
	human resources	0.4444	0.502	0	1
EDUCATION_DUMMY	strategic	0.8148	0.392	0	1
	investment	0.7818	0.417	0	1
	human resources	0.7778	0.420	0	1
EXPERIENCE_DUMMY	strategic	0.5000	0.505	0	1
	investment	0.5091	0.505	0	1
	human resources	0.5045	0.504	0	1
COUNTRY_DUMMY	strategic	0.8519	0.359	0	1
	investment	0.8545	0.356	0	1
	human resources	0.8519	0.359	0	1
GENDER	strategic	1.2047	0.407	1	2
	investment	1.2182	0.417	1	2
	human resources	1.2222	0.420	1	2

Panel B: Spearman's R Correlation matrix

	a	b	c	d	e	f	g	h	i	j	k	l
VISION_MANAGER (a)	1.000											
VISION_MANAGER_RATIO (b)	0.9009***	1.000										
VISION_MANAGER_CHANGE (c)	0.8084***	0.8180***	1.000									
STR_D (d)	-0.2930**	-0.2362**	-0.0839	1.000								
INV_D (e)	0.4468***	-0.0756	0.1141	-0.5047***	1.000							
HR_D (f)	-0.1580	0.1598	-0.0313	-0.4906***	-0.5047***	1.000						
Gender (g)	0.1976**	0.1996*	-0.0993	-0.0390	0.0123	0.0266	1.000					
Education_dummy (h)	-0.1114	-0.1280	-0.0967	0.0848	-0.0353	-0.0492	0.1106	1.000				
Student_dummy (i)	0.0633	0.0750	0.012	-0.0281	0.0020	0.0261	0.0290	-0.0578	1.000			
Experience_dummy (j)	0.0050	0.0083	-0.0300	-0.0266	-0.0007	0.0273	-0.0507	0.0192	0.7056***	1.000		
Age_dummy (k)	0.2048*	0.2125	-0.2181*	-0.0319	0.0065	0.0254	-0.2357**	-0.1833**	0.4599***	0.6743***	1.000	
Country_dummy (l)	0.0845	0.1054	-0.0518	-0.0038	0.0075	-0.0038	0.2216**	0.0500	0.1645	0.0161***	0.0713	1.000

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*

Panel A: shows the descriptive statistics of the following variables:
VISION_MANAGER *(Length of the managerial vision),* ***VISION_MANAGER_RATIO*** *(Length of the managerial vision, relative to maximum),* ***VISION_MANAGER_CHANGE*** *(Length of the managerial vision, relative change),* ***VISION_MANAGER_CHANGE2*** *(Length of the managerial vision, relative change, weighted to size of individual score within one aspect),* ***AGE_DUMMY*** *(age),* ***STUDENT_DUMMY*** *(1=subject is a student),* ***EDUCATION_DUMMY*** *(1=subject completed at least a university's bachelor),* ***EXPERIENCE_DUMMY*** *(1=subject has at maximum 5 years working experience) and* ***GENDER****(1= male; 2= female).*
Panel B: shows the intercorrelation between the (in)dependent variables, same as Panel A; except ***VISION_MANAGER_CHANGE2****, but with* ***STR_D*** *(Strategic decisions),* ***INV_D*** *(Investment decisions) and* ***HR_D*** *(Human resource decisions).*

TABLE 13 - - DESCRIPTIVE STATISTICS AND CORRELATION MATRIX FOR HYPOTHESIS H3

Panel A: Descriptive Statistics (n=62)

Variable	Decision aspect (1=strategy; 2=investment; 3=human resources)	MEAN	Std. Dev	MIN	MAX
VISION_MANAGER	strategic	3.8916	2.009	0.080	5.8
	investment	10.1529	4.721	1.065	15
	human resources	2.5230	0.998	0.080	3.6
VISION_MANAGER_RATIO	strategic	0.6714	0.346	0.024	1
	investment	0.6769	0.315	0.071	1
	human resources	0.7008	0.277	0.022	1
VISION_MANAGER_CHANGE (n=29)	strategic	0.6599	1.342	-0.912	4.799
	investment	0.3122	0.821	-0.629	2.442
	human resources	0.3388	0.599	-0.831	1.977
AGE_DUMMY	strategic	0.2258	0.422	0	1

	investment	0.2344	0.427	0	1
	human resources	0.2462	0.434	0	1
STUDENT_DUMMY	strategic	0.4032	0.495	0	1
	investment	0.3906	0.492	0	1
	human resources	0.3846	0.490	0	1
EDUCATION_DUMMY	strategic	0.7097	0.457	0	1
	investment	0.7344	0.445	0	1
	human resources	0.7231	0.451	0	1
EXPERIENCE_DUMMY	strategic	0.6129	0.491	0	1
	investment	0.6406	0.484	0	1
	human resources	0.6462	0.482	0	1
COUNTRY_DUMMY	strategic	0.9032	0.298	0	1
	investment	0.9063	0.294	0	1
	human resources	0.9077	0.292	0	1
GENDER	strategic	1.1290	0.338	1	2
	investment	1.1250	0.333	1	2
	human resources	1.1231	0.331	1	2

Panel B: Spearman's R Correlation matrix

	a	b	c	d	e	f	g	h	i	j	k	l
VISION_MANAGER (a)	1.000											
VISION_MANAGER_RATIO (b)	0.8003***	1.000										
VISION_MANAGER_CHANGE (c)	0.6307**	0.7165***	1.000									
STR_D (d)	-0.1592**	-0.0843	-0.0315	1.000								
INV_D (e)	0.4879***	-0.0083	0.0101	-0.4933***	1.000							
HR_D (f)	-0.3308***	0.0915	0.0209	-0.4933***	-0.5133***	1.000						
Gender (g)	0.0705	0.0521	-0.0807	-0.0109	-0.0054	0.0054	1.000					
Education_dummy (h)	-0.0796	-0.1180	0.0728	-0.0148	0.0070	-0.0216	-0.0318	1.000				
Student_dummy (i)	0.0312	0.0018	0.0042	0.0042	-0.0021	-0.0021	0.1568**	0.0121	1.000			
Experience_dummy (j)	0.0959	0.0990	-0.0467	-0.0467	0.0105	0.0356	0.1013	-0.0463	0.5984***	1.000		
Age_dummy (k)	0.0704	0.0473	-0.0313	-0.0313	-0.0016	0.0293	0.0010**	-0.1660**	0.4382***	0.5250***	1.000	
Country_dummy (l)	0.0143	0.0117	-0.0036	-0.0094	0.0046	0.0046	0.1691**	-0.0893	0.2068***	0.2222***	0.1106	1.000

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*

Panel A: shows the descriptive statistics of the following variables:
***VISION_MANAGER** (Length of the managerial vision), **VISION_MANAGER_RATIO** (Length of the managerial vision, relative to maximum), **VISION_MANAGER_CHANGE** (Length of the managerial vision, relative change), **VISION_MANAGER_CHANGE2** (Length of the managerial vision, relative change, weighted to size of individual score within one aspect), **AGE_DUMMY** (age), **STUDENT_DUMMY** (1=subject is a student), **EDUCATION_DUMMY** (1=subject completed at least a university's bachelor), **EXPERIENCE_DUMMY** (1=subject has at maximum 5 years working experience) and **GENDER**(1= male; 2= female).*
*Panel B: shows the intercorrelation between the (in)dependent variables, same as Panel A; except **VISION_MANAGER_CHANGE2**, but with **STR_D** (Strategic decisions), **INV_D** (Investment decisions) and **HR_D** (Human resource decisions).*

TABLE 14 - - DESCRIPTIVE STATISTICS AND CORRELATION MATRIX FOR HYPOTHESIS H4

Panel A: Descriptive Statistics (n=55)

Variable	Decision aspect (1=strategy; 2=investment; 3=human resources)	MEAN	Std. Dev	MIN	MAX
VISION_MANAGER	strategic	2.9830	2.383	0.065	5.800
	investment	8.3349	5.440	0.315	15
	human resources	2.1535	1.304	0.080	3.600
VISION_MANAGER_RATIO	strategic	0.5147	0.410	0.011	1
	investment	0.5557	0.363	0.021	1
	human resources	0.5982	0.362	0.022	1
VISION_MANAGER_CHANGE	strategic	0.1322	1.158	-0.986	4.799
	investment	0.1852	1.069	-0.979	3.554
	human resources	0.0281	0.718	-0.977	1.977
AGE_DUMMY	strategic	0.2545	0.440	0	1
	investment	0.2759	0.451	0	1
	human resources	0.2931	0.459	0	1
STUDENT_DUMMY	strategic	0.4182	0.498	0	1
	investment	0.4138	0.497	0	1
	human resources	0.4138	0.497	0	1
EDUCATION_DUMMY	strategic	0.7636	0.429	0	1
	investment	0.7586	0.432	0	1
	human resources	0.7414	0.442	0	1
EXPERIENCE_DUMMY	strategic	0.5455	0.503	0	1
	investment	0.5862	0.497	0	1
	human resources	0.6034	0.493	0	1
COUNTRY_DUMMY	strategic	0.8727	0.336	0	1
	investment	0.8793	0.329	0	1
	human resources	0.8793	0.329	0	1
GENDER	strategic	1.164	0.371	1	2
	investment	1.172	0.381	1	2
	human resources	1.172	0.381	1	2

Panel B: Spearman's R Correlation matrix

	a	b	c	d	e	f	g	h	i	j	k	l
VISION_MANAGER (a)	1.000											
VISION_MANAGER_RATIO (b)	0.8003***	1.000										
VISION_MANAGER_CHANGE (c)	0.6307***	0.7165***	1.000									
STR_D (d)	-0.1592**	-0.0843	-0.0315	1.000								
INV_D (e)	0.4879***	-0.0083	0.0101	-0.4933***	1.000							
HR_D (f)	-0.3308***	0.0915	0.0209	-0.4933***	-0.5133***	1.000						
Gender (g)	0.0705	0.0521	-0.0807	-0.0109	0.0054	0.0054	1.000					
Education_dummy (h)	-0.0796	-0.1180	-0.0728	0.0148	0.0070	-0.0216	-0.0318	1.000				
Student_dummy (i)	0.0312	0.0018	-0.0028	0.0042	-0.0021	-0.0021	0.1568**	0.0121	1.000			
Experience_dummy (j)	0.0959	0.0990	0.0377	-0.0467	0.0105	0.0356	0.1013	-0.0463	0.5984***	1.000		
Age_dummy (k)	0.0704	0.0473	-0.0183	-0.0313	0.0016	0.0293	0.0010	-0.1660**	0.4382***	0.5250***	1.000	
Country_dummy (l)	0.0143	0.0117	-0.0036	-0.0094	0.0046	0.0046	0.1691**	-0.0893	0.2068***	0.2222***	0.1106	1.000

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*

Panel A: shows the descriptive statistics of the following variables:
***VISION_MANAGER** (Length of the managerial vision), **VISION_MANAGER_RATIO** (Length of the managerial vision, relative to maximum), **VISION_MANAGER_CHANGE** (Length of the managerial vision, relative change), **VISION_MANAGER_CHANGE2** (Length of the managerial vision, relative change, weighted to size of individual score within one aspect), **AGE_DUMMY** (age), **STUDENT_DUMMY** (1=subject is a student), **EDUCATION_DUMMY** (1=subject completed at least a university's bachelor), **EXPERIENCE_DUMMY** (1=subject has at maximum 5 years working experience) and **GENDER**(1= male; 2= female).*
*Panel B: shows the intercorrelation between the (in)dependent variables, same as Panel A; except **VISION_MANAGER_CHANGE2**, but with **STR_D** (Strategic decisions), **INV_D** (Investment decisions) and **HR_D** (Human resource decisions).*

APPENDIX G - POST-HOC ANALYSES

Hypothesis H1 - post-hoc analysis

TABLE 15 - HYPOTHESIS H1 - POST-HOC ANALYSIS

	ANOVA		*ANCOVA*	
Available pairs between variable:				
STR_D#INV_D#HR_D[1]	**t-statistic**	**p-value**	**t-statistic**	**p-value**
(1 0 0) vs (0 0 1)	**-1.77**	**0.078***	**-1.78**	**0.076***
(1 0 0) vs (0 1 0)	-1.00	0.319	-1.01	0.315
(0 1 0) vs (0 0 1)	-0.77	0.442	-0.78	0.438

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] - Is the interaction effect between the three decision aspects.

This table presents the results from the post-hoc analyses for both the ANOVA and ANCOVA tests. In the two left columns, the t-statistic and significance value for the ANOVA post-hoc analysis is presented. In the two right columns are the results from the ANCOVA post-hoc analysis. Significant factors imply that there is a difference between the two factorials, based on the pairwise comparison.

Hypothesis H2 - post-hoc analysis

TABLE 16 - HYPOTHESIS H2 - POST-HOC ANALYSIS

	ANOVA		*ANCOVA*	
Available pairs between variable:				
STR_D#INV_D#HR_D[1]	**t-statistic**	**p-value**	**t-statistic**	**p-value**
(1 0 0) vs (0 0 1)	-0.19	0.848	-0.37	0.710
(1 0 0) vs (0 1 0)	**-2.06**	**0.045****	**-1.94**	**0.056***
(0 1 0) vs (0 0 1)	**1.89**	**0.065***	1.57	0.121

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] - Is the interaction effect between the three decision aspects.

This table presents the results from the post-hoc analyses for both the ANOVA and ANCOVA tests. In the two left columns, the t-statistic and significance value for the ANOVA post-hoc analysis is presented. In the two right columns are the results from the ANCOVA post-hoc analysis. Significant factors imply that there is a difference between the two factorials, based on the pairwise comparison.

Hypothesis H3 - post-hoc analysis

TABLE 17 - HYPOTHESIS H3 - POST-HOC ANALYSIS

	ANOVA		*ANCOVA*	
Available pairs between variable:				
STR_D#INV_D#HR_D[1]	**t-statistic**	**p-value**	**t-statistic**	**p-value**
(1 0 0) vs (0 0 1)	1.65	0.104	1.28	0.206
(1 0 0) vs (0 1 0)	1.54	0.130	1.36	0.177
(0 1 0) vs (0 0 1)	0.12	0.905	-0.10	0.922

*, **, *** *indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] *- Is the interaction effect between the three decision aspects.*

This table presents the results from the post-hoc analyses for both the ANOVA and ANCOVA tests. In the two left columns, the t-statistic and significance value for the ANOVA post-hoc analysis is presented. In the two right columns are the results from the ANCOVA post-hoc analysis. Significant factors imply that there is a difference between the two factorials, based on the pairwise comparison.

Hypothesis H4 - AN(C)OVA tests and the post-hoc analysis

TABLE 18 - SUMMARY RESULTS OF THE TWO-WAY AN(C)OVA TESTS FOR HYPOTHESIS H4

Dependent variable: VISION_MANAGER_RATIO	*ANOVA*		*ANCOVA*	
Variable	**F-statistic**	**p-value**	**F-statistic**	**p-value**
Worker[3]	**5.94**	**0.000*** **	1.29	0.257
STR_D#INV_D#HR_D[1]	1.17	0.316	0.77	0.4640
long_short			**85.89**	**0.000*** **
STR_D#INV_D#HR_D##long_short	1.40	0.252	1.01	0.365
Age_dummy[3]			**4.86**	**0.029***
Student_dummy[3]			0.00	0.978
Education_dummy[3]			0.00	0.960
Experience_dummy[3]			0.27	0.603
Country_dummy[3]			1.99	0.160
Gender[3]			**3.85**	**0.052***
Adjusted R-squared[2] (%)	*69,8%*		*33,1%*	

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.
[1] *- Is the interaction effect between the three decision aspects.*
[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*
[3] *- These variables are used as a covariate variable in the ANCOVA test.*

*This table shows the AN(C)OVA results for the third hypothesis of this study. The dependent variable is **VISION_MANAGER_RATIO**. The independent variables **STR_D#INV_D#HR_D** show the interaction effect between the three decision aspects. The two left columns present the results from the ANOVA test, excluding control variables. The F-statistic, in combination with the degrees of freedom determine the significance value. The two right columns present the results from the ANCOVA test, including control variables. The control dummies are **Age_dummy** (Age of subject), **Student_dummy** (1= if subject is a student), **Education_dummy** (1= subject at least completed a university's bachelor), **Experience_dummy** (1= subject has at maximum 5 years of working experience), **Country_dummy** (1= if subject lives in the country he is born) and **Gender** (1=male;2=female).*

TABLE 19 - HYPOTHESIS H4 - POST-HOC ANALYSIS

	ANOVA				95% conf. interval		*ANCOVA*				95% conf. interval	
Available pairs between variable: STR_D#INV_D#HR_D[1]	**Contrast**	**St. Dev.**	**t-statistic**	**p-value**	Lower limit	Upper limit	**Contrast**	**St. Dev.**	**t-statistic**	**p-value**	Lower limit	Upper limit
Short-term incentives treatment												
(1 0 0) vs (0 0 1)	-0.1049	0.060	**-1.78**	**0.078***	-.2219	.0121	-0.1307	0.086	-1.52	0.130	-0.3003	0.0389
(1 0 0) vs (0 1 0)	-0.0898	0.058	-1.54	0.125	-.2052	.0255	-0.1220	0.085	-1.44	0.153	-0.2899	0.0459
(0 1 0) vs (0 0 1)	-0.0151	0.057	-0.26	0.793	-.1287	.0986	-0.0087	0.085	-0.10	0.919	-0.1764	0.1590
Total	-0.20977						-0.26135					
Long-term incentives treatment												
(1 0 0) vs (0 0 1)	-0.0165	0.055	-0.30	0.762	-.1247	.0916	-0.0144	0.080	-0.18	0.857	-0.1714	0.1427
(1 0 0) vs (0 1 0)	0.0416	0.055	0.76	0.447	-.0665	.1498	0.0400	0.080	0.50	0.618	-0.1181	0.1981
(0 1 0) vs (0 0 1)	-0.0582	0.053	-1.09	0.276	-.1635	.0472	-0.0544	0.078	-0.70	0.486	-0.2082	0.0995
Total	-0.03306						-0.02872					
Comparability index (long/|short|)	**0,1576**		(= 0.17671 difference)				**0,1099**		(= 0.23262 difference)			

, **, * indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.*
[1] - Is the interaction effect between the three decision aspects.

*This table presents the detailed results from the post-hoc analyses for both the ANOVA and ANCOVA tests. In the left columns, the t-statistic and significance value for the ANOVA post-hoc analysis is presented. In the right columns are the results from the ANCOVA post-hoc analysis. Significant factors imply that there is a difference between the two factorials, based on the pairwise comparison. In essence, the cumulative differences of the contrast value between the **short-term** and **long-term incentives** treatment will explain what treatment results in more differences in the **decisions by managers,** as expressed by **the length of the managerial vision**.*

*The cumulative value of the contrast in the pairwise comparison (row: **Total**) show the differences in a treatment. A value close to 0,00 represents little differences in the length of the vision between the decision aspects within a treatment group, and vice versa. Next, by dividing the absolute value of long-term incentivized total by short-term incentivized total, the comparability index is calculated (row: **Comparability index**). A value close to 1,00 represents little difference between the treatment groups in the length of the vision of the decision aspects, and vice versa.*

APPENDIX G.2 - ADDITIONAL ANALYSIS - REPEATED MEASURES ANOVA

TABLE 20 - REPEATED MEASURE ANOVA TEST FOR HYPOTHESIS H1

Panel A: Results of the repeated measures ANOVA test for hypothesis H1

Dependent variable:

VISION_MANAGER_RATIO

Variable	**Partial SS**	**df**	**MS**	**F-statistic**	**p-value**
Model	9.1700	62	0.1479	**2.27**	**0.000*** **
Worker	8.8835	60	0.1481	1.03	0.614
STR_D#INV_D#HR_D[1]	0.2865	2	0.1433		
STR_D#INV_D#HR_D[1]	0.2865	2	0.1433	2.20	0.115
Residual	7.8102	120	0.0651		
Total	16.9802	182	0.0933		
Adjusted R-squared[2] (%)	*30,2%*				

Panel B: Results of the repeated measures ANOVA test for hypothesis H1

Repeated variable within subject:	*STR_D#INV_D#HR_D[1]*
Huynh-Feldt epsilon	*= 0.9654*
Greenhouse-Geisser epsilon	*= 0.9364*
Box's conservative epsilon	*= 0.5000*

Source	**df**	**F**	**Regular**	**H-F**	**G-G**	**Box**
STR_D#INV_D#HR_D[1]	2	2.20	0.115	0.117	0.119	0.143
residual	120					

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.

[1] *- Is the interaction effect between the three decision aspects.*

[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*

*Panel A shows the repeated measure ANOVA results for the first hypothesis of this study. The dependent variable is **VISION_MANAGER_RATIO**. The independent variables **STR_D#INV_D#HR_D** show the interaction effect between the three decision aspects.*

*Panel B shows the results for the corrections on the effect of the differences between the decision aspects within the subjects. First, there are several epsilon values presented, that each represent a way to specific violations to the repeated measures ANOVA. Each epsilon value corresponds with a significance value. **Box's conservative epsilon** (Box) is considered as most conservative measure and **Huynh-Feldt** (H-F) as least conservative. When the Box epsilon is significant, there is no need in investigating the other epsilon value.*

TABLE 21 - REPEATED MEASURE ANOVA TEST FOR HYPOTHESIS H2

Panel A: Results of the repeated measures ANOVA test for hypothesis H2

Dependent variable:

VISION_MANAGER_CHANGE

Variable	**Partial SS**	**df**	**MS**	**F-statistic**	**p-value**
Model	36.6219	29	1.2628	**2.27**	**0.000*** **
Worker	32.9726	27	1.2212	0.83	0.685
STR_D#INV_D#HR_D[1]	2.9442	2	1.4721		
STR_D#INV_D#HR_D[1]	2.9442	2	1.4721	**2.65**	**0.081***
Residual	27.2065	49	0.5552		
Total	63.8284	78	0.8183		
Adjusted R-squared[2] (%)	*32,2%*				

Panel B: Results of the repeated measures ANOVA test for hypothesis H2

Repeated variable within subject:	*STR_D#INV_D#HR_D[1]*
Huynh-Feldt epsilon	*= 0.6847*
Greenhouse-Geisser epsilon	*= 0.6635*
Box's conservative epsilon	*= 0.5000*

Source	**df**	**F**	**Regular**	**H-F**	**G-G**	**Box**
STR_D#INV_D#HR_D[1]	2	2.65	**0.081***	0.102	0.104	0.116
residual	49					

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.

[1] *- Is the interaction effect between the three decision aspects.*

[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*

*Panel A shows the repeated measure ANOVA results for the second hypothesis of this study. The dependent variable is **VISION_MANAGER_RATIO**. The independent variables **STR_D#INV_D#HR_D** show the interaction effect between the three decision aspects.*

*Panel B shows the results for the corrections on the effect of the differences between the decision aspects within the subjects. First, there are several epsilon values presented, that each represent a way to specific violations to the repeated measures ANOVA. Each epsilon value corresponds with a significance value. **Box's conservative epsilon** (Box) is considered as most conservative measure and **Huynh-Feldt** (H-F) as least conservative. When the Box epsilon is significant, there is no need in investigating the other epsilon value.*

TABLE 22 - REPEATED MEASURE ANOVA TEST FOR HYPOTHESIS H3

Panel A: Results of the repeated measures ANOVA test for hypothesis H3

Dependent variable:
VISION_MANAGER_CHANGE

Variable	**Partial SS**	**df**	**MS**	**F-statistic**	**p-value**
Model	40.7060	34	1.1972	**1.58**	**0.064***
Worker	38.4773	32	1.2024	0.95	0.640
STR_D#INV_D#HR_D[1]	2.5385	2	1.2692		
STR_D#INV_D#HR_D[1]	2.5385	2	1.2692	1.67	0.197
Residual	43.2758	57	0.7592		
Total	83.9818	91	0.9229		
Adjusted R-squared[2] (%)	*17,7%*				

Panel B: Results of the repeated measures ANOVA test for hypothesis H3

Repeated variable within subject:	*STR_D#INV_D#HR_D[1]*
Huynh-Feldt epsilon	*= 0.7301*
Greenhouse-Geisser epsilon	*= 0.7070*
Box's conservative epsilon	*= 0.5000*

Source	**df**	**F**	**Regular**	**H-F**	**G-G**	**Box**
STR_D#INV_D#HR_D[1]	2	1.67	0.197	0.205	0.205	0.206
residual	57					

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.
[1] *- Is the interaction effect between the three decision aspects.*
[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*
*Panel A shows the repeated measure ANOVA results for the third hypothesis of this study. The dependent variable is **VISION_MANAGER_RATIO**. The independent variables **STR_D#INV_D#HR_D** show the interaction effect between the three decision aspects.*
*Panel B shows the results for the corrections on the effect of the differences between the decision aspects within the subjects. First, there are several epsilon values presented, that each represent a way to specific violations to the repeated measures ANOVA. Each epsilon value corresponds with a significance value. **Box's conservative epsilon** (Box) is considered as most conservative measure and **Huynh-Feldt** (H-F) as least conservative. When the Box epsilon is significant, there is no need in investigating the other epsilon value.*

TABLE 23 - REPEATED MEASURE ANOVA TEST FOR HYPOTHESIS H4

Dependent variable:
VISION_MANAGER_RATIO

Variable	**Partial SS**	**df**	**MS**	**F-statistic**	**p-value**
Model	19.6974	64	0.3078	**7.14**	**0.000*** **
Worker	13.6193	60	0.2270	**4.26**	**0.082***
STR_D#INV_D#HR_D##long_short[1]	0.2132	4	0.0533		
STR_D#INV_D#HR_D##long_short[1]	0.2132	4	0.0533	1.24	0.300
Residual	4.5679	106	0.0431		
Total	24.2653	170	0.1427		
Adjusted R-squared[2] (%)	*69,8%*				

*, **, *** indicate significance of the coefficients at the 10%, 5% and 1%-level, respectively.
[1] *- Is the interaction effect between the three decision aspects.*
[2] *- Is the percentage in the variance of the dependent variable that is explained by the independent variables.*
Panel A shows the repeated measure ANOVA results for the fourth hypothesis of this study. The dependent variable is ***VISION_MANAGER_RATIO****. The independent variables* ***STR_D#INV_D#HR_D##lon_short*** *show the interaction effect between the three decision aspects and the two treatment groups.*

APPENDIX H - VARIABLE DESCRIPTIONS

Variable	Description
STR_D	Dummy variable equals 1 if the question is in the Strategy decision aspect, 0 otherwise
INV_D	Dummy variable equals 1 if the question is in the Investment decision aspect, 0 otherwise
HR_D	Dummy variable equals 1 if the question is in the Human Resources decision aspect, 0 otherwise
FIXED_PAY	Dummy variable equals 1 if the question is in the first part (control) of the experiment, 0 otherwise
SHORTTERM_PAY	Dummy variable equals 1 if the question is in the second part, and short-term bonus treatment group, of the experiment, 0 otherwise
LONGTERM_PAY	Dummy variable equals 1 if the question is in the second part, and long-term bonus treatment group, of the experiment, 0 otherwise
Long_Short	Dummy variable equals 1 if the question is in the second part, and long-term bonus treatment group, of the experiment, 0 otherwise
VISION_MANAGER	Absolute value of the length of the vision by the manager, proxied by the indifference point after a repeated series of questions.
VISION_MANAGER_RATIO	Relative value of what the subject could have achieved in a question = $\frac{VISION\_MANAGER}{'maximum\ value\ of\ question'}$
VISION_MANAGER_CHANGE	Change of VISION_MANAGER_RATIO, where $_{t-1}$ = Fixed compensation (control); and $_{t}$ = variable compensation (treatment). Each question within an aspect contributes for an equal proportion in the change. For instance, 4 questions contribute each for 25% in the change in the length of the vision.
VISION_MANAGER_CHANGE2	Change of VISION_MANAGER_RATIO, where $_{t-1}$ = Fixed compensation (control); and $_{t}$ = variable compensation (treatment). Each question within an area contributes for their proportion in size in the change. For instance, given 2 questions, one could contribute 75% in the change and the other 25%.
GENDER	Dummy variable equals 1 if the subject is male, 0 otherwise
AGE_DUMMY	Dummy variable equals 1 if the subject is 24 years old or younger, 0 otherwise
STUDENT_DUMMY	Dummy variable equals 1 if the subject is still a student, 0 otherwise
EDUCATION_DUMMY	Dummy variable equals 1 if the subject completed at least a University Bachelor's degree, 0 otherwise
EXPERIENCE_DUMMY	Dummy variable equals 1 if the subject has at maximum 5 years of relevant working experience, 0 otherwise
COUNTRY_DUMMY	Dummy variable equals 1 if currently lives in the country he was born, 0 otherwise

APPENDIX I - MESSAGE TO SUBJECTS THAT ENTERED BOTH EXPERIMENTAL SURVEYS

Dear worker,

I thank you for your interest in my experiment.

However, as was stated before this experiment started: (for endogeneity reasons) you cannot both participate with this experiment and the counter experiment "Answer an experimental survey about managerial vision and incentives (1/2)".

Based on that fact: you are excluded from payment for this task.

However, if all correct, you still will receive payment for the counter experiment.

Kind regards, William

APPENDIX J - OVERVIEW OF THE PLACING OF THE SURVEYS ON AMAZON'S MTURK

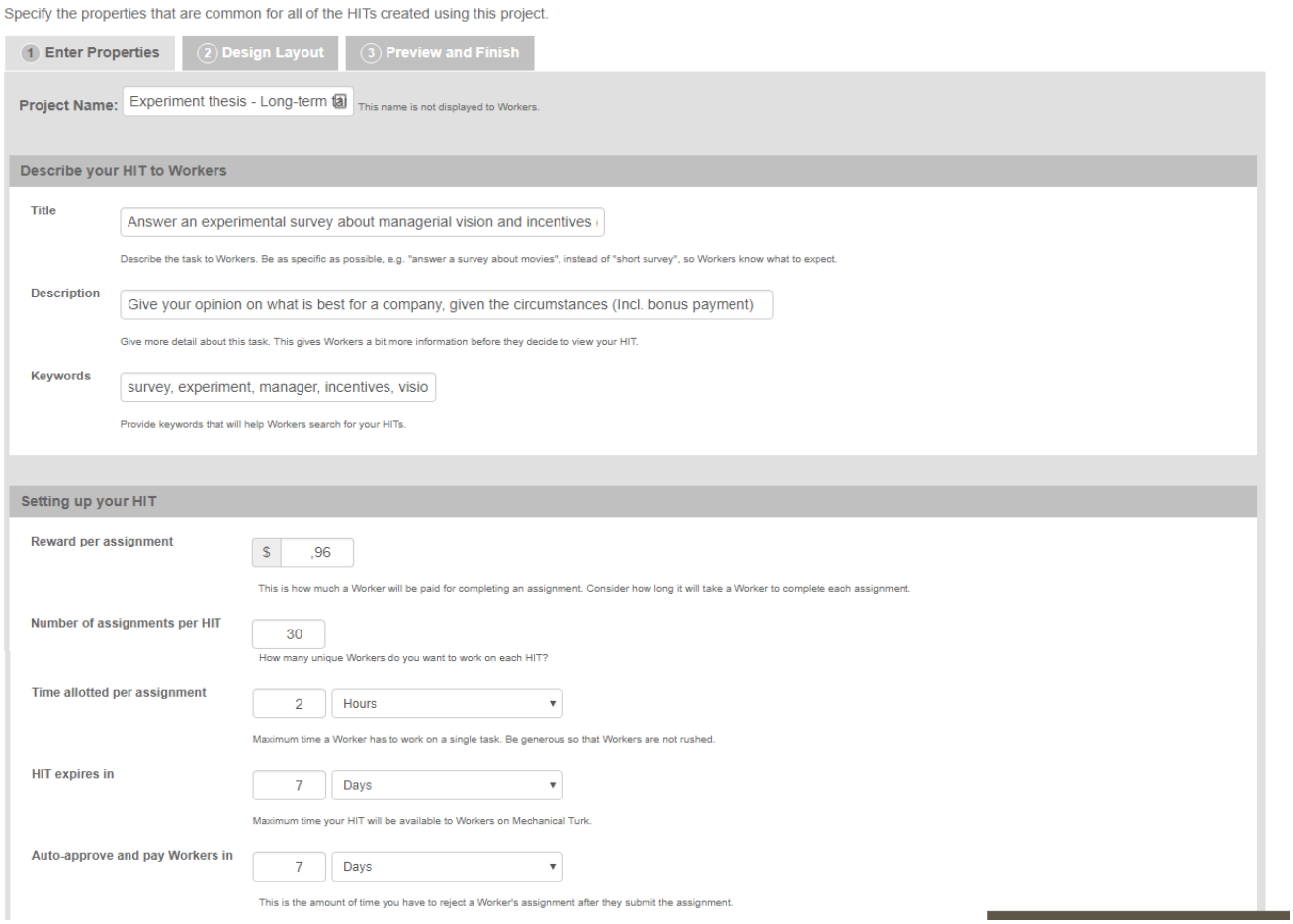

FIGURE 20 - PRINT OF SCREEN FROM AMAZON'S MECHANICAL TURK, SHOWING THE DESCRIPTION, FIXED REWARD AND RELATED SETTINGS FOR THE SURVEYS

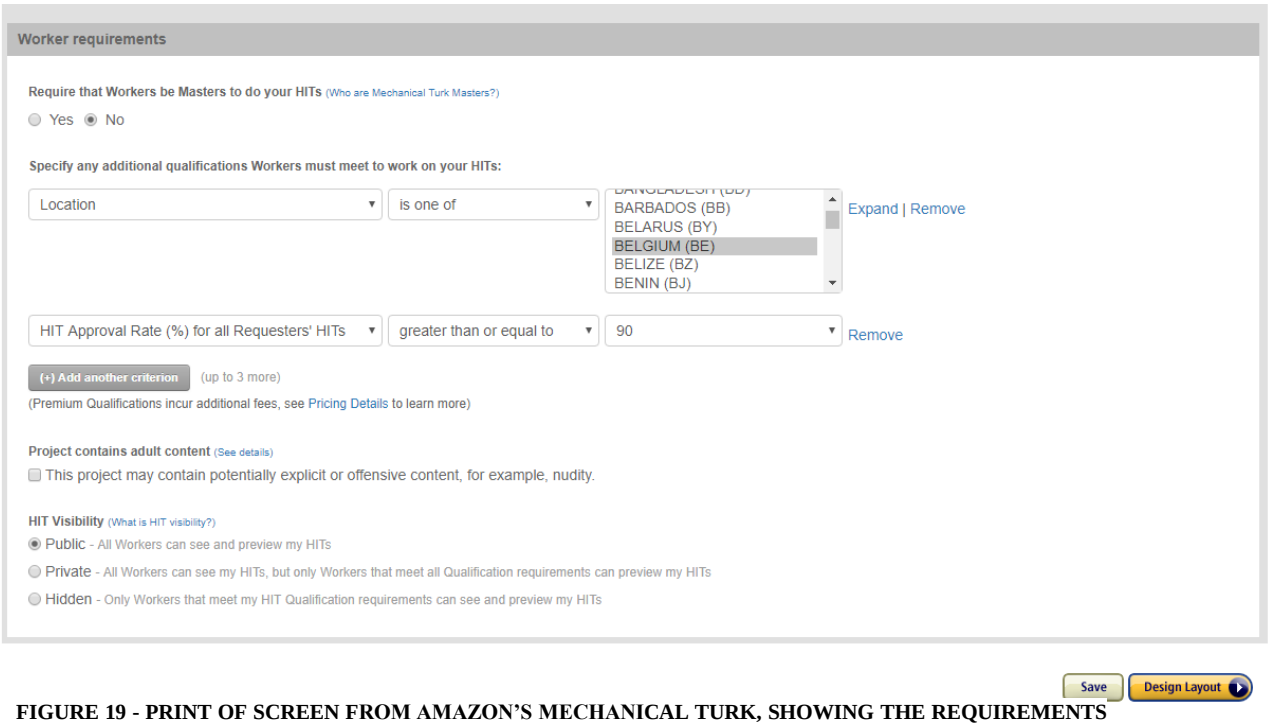

FIGURE 19 - PRINT OF SCREEN FROM AMAZON'S MECHANICAL TURK, SHOWING THE REQUIREMENTS FOR WORKERS BEFORE PARTICIPATING WITH ANY OF THE SURVEYS.

APPENDIX K - PRINT EXAMPLE OF EXPERIMENT

A random entry from the experimental survey (Experiment II) on Amazon's mTurk

rotate. It has been detected you are on a mobile device:

Please, hold your device **horizontally** in order to optimize the view during this survey.

This question was not displayed to the respondent.

Q1. Dear Sir or Madam,

You are invited to participate in this (experimental) survey, that supports the investigation of my master's thesis. The survey is called: 'Managerial vision and incentives'.

This survey consists out of 12 cases, divided over two tasks. In total, your payment can sum up to € 2,00. The payout for the two seperate tasks is as following:
Task 1: a fixed payment of € 1,00
Task 2: a variable payment, depending on your performance (minimum € 0,10; maximum € 1,00)

Notes:
- In order to participate in this survey, you have to be: an European citizen and at least 18 years old.
- Your entry for this survey will remain anonymous and is not provided to any third parties.
- Before the survey starts, you have to answer some questions about your background, such as: age, study and working experience.
- This research only uses aggregated information for its analysis. Individual information will be ignored.

Important: You have to complete both parts in order to receive your compensation.

For further information about this research, you can contact me by email (385473wk@student.eur.nl).

Q15.
Please verify that you're human:

Privacy & Terms

Q2.
Instruction of the experiment - task 1 (out of 2)

1. Your role:
Suppose you are a manager at production company 'Company X', responsible for an entire business unit. Your (fictitious) compensation is a fixed salary, without any bonus. As a normal way of business, you are regularly confronted with a variety of decisions. The economic impact on the business depends on your choice, since there are multiple ways to handle these decisions. Your job is take into account the company owners' objective, which is to maximize the value of the company.

2. The task:
You receive 6 cases with occurring matters at 'Company X' during the year. Please take a careful look at the example below, which shows how the questions are designed:

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,2 million EUR this year**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

Alternative A

Alternative B

You have to decide between two alternatives on what to do in this case, given your role as manager. Note that both alternatives differently impact the company over time. In the first row '*your action*' is specified. In this example, that is the amount of time you choose to spend on long-term activities. '*When*' specifies the moment in which your action returns to any given profits. The subsequent two rows present the outcome of year 1 or in the following years. You will express your preference by clicking on either of the two buttons under the table. Choose what is best for the company, in your opinion. After you made your choice, three more questions for the same case will follow.

All cases are divided into three aspects of your/the manager's job:
1. Strategic decisions (i.e., how you spend your working time as a manager)
2. Investment decisions (i.e., the evaluation of an investment in your production facility)
3. Human resource decisions (i.e., deciding to hire/fire employees)

3. Your payment:
As stated before, your (fictitious) compensation at 'Company X' for the first task is a **fixed amount** of **€ 1,00**. Important: the decisions you make as a manager, do not impact the level of compensation in this part of the survey.

Good luck!

Q3. What is your age?

- ○ 18-24
- ◉ 24-36
- ○ 36-50
- ○ 50+

Q4. What is your gender?

- ◉ Male
- ○ Female

Q663. What is the highest level of education you have completed?

- ○ Less than high school
- ○ High school graduate
- ○ University Bachelor's
- ◉ University Master's
- ○ Doctorate
- ○ Other

Q5. What is your nationality?

- ○ Dutch
- ○ French
- ◉ German
- ○ Spanish

- ○ Italian
- ○ Other; please specify:

Q16. What is your country of residence?

- ○ The Netherlands
- ○ France
- ◉ Germany
- ○ Spain
- ○ Italy
- ○ Other; please specify:

Q17. What is your profession?

- ○ Student
- ○ Manager
- ◉ Other; please specify:

Former manager. But now PhD Candidate

Q8. What is your working experience? (approximately)

- ○ 0-1 year
- ◉ 1-5 years
- ○ 5-15 years
- ○ 15+ years

Q15.

START EXPERIMENT - TASK 1 (OF 2)

Important: The decisions you as a manager make have no impact on the level of compensation. Your compensation for this first task stays at the fixed amount of € 1,00.

intro_1.

Topic 1 - Strategic decisions

Case 1 - The utilization of your working time

Your working time as a manager is scarce. You will have to decide on what activities you spend your time during the week. You can focus on roughly two different type of activities:

1. During **long-term activities,** you invest your time in order to improve the competencies and/or capabilities of your products, employees and the future. > *after year 1*
2. During **short-term activities,** you focus on the necessity of the continuity of the firm (i.e., the need for cash). > *within year 1*

This question was not displayed to the respondent.

Q1.1.

Case 1: Utilization of personal working time

main question

	Alternative A	Alternative B
Your action	Spend 10% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1a.
Case 1: Utilization of personal working time
sub question 1

	Alternative A	Alternative B
Your action	Spend 5% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1aa.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 2,5% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**
Outcome in the	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1aaa.
Case 1: Utilization of personal working time

sub question 3

	Alternative A	Alternative B
Your action	Spend 1% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1aab.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 4% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1aab.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 8% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1aba.
Case 1: Utilization of personal working time

sub question 3

	Alternative A	Alternative B
Your action	Spend 7% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1abb.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 9% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1b.
Case 1: Utilization of personal working time
sub question 1

	Alternative A	Alternative B
Your action	Spend 30% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1bb.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 40% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1bbb.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 45% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1bba.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 35% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1ba.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 20% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1bab.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 25% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q1.1baa.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 15% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

r_intro_1.
Topic 1 - Strategic decisions
Case 1 - The utilization of your working time

Your working time as a manager is scarce. You will have to decide on what activities you spend your time during the week. You can focus on roughly two different type of activities:

1. During **long-term activities,** you invest your time in order to improve the competencies and/or capabilities of your products, employees and the future. > *after year 1*
2. During **short-term activities,** you focus on the necessity of the continuity of the firm (i.e., the need for cash). > *within year 1*

rQ1.1.
Case 1: Utilization of personal working time
main question

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 10% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

rQ1.1a.
Case 1: Utilization of personal working time
sub question 1

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 30% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1aa.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 40% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1aaa
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 45% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1aab
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 35% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1ab
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 20% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1aba.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 25% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1abb.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 15% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1b.
Case 1: Utilization of personal working time
sub question 1

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 5% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

rQ1.1bb.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 2,5% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**in maximizing the company's performance of year 1 (relatively more on short-term activities).**
Outcome in the	*None specified*	*None specified*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

rQ1.1bbb.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 1% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

- ◉ Alternative A
- ○ Alternative B

rQ1.1bba.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 4% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1ba.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 8% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1bab.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 7% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ1.1baa.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 9% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

intro_2.

Topic 1 - Strategic decisions

Case 2 - Advertising expenditures (for your products)

Since your business is launching multiple products each year, the new products need promotion in order to receive the necessary attention from potential customers. Last week, an extra product is introduced on the market, but this year's marketing budget has already been consumed.
Which alternative do you prefer?

This question was not displayed to the respondent.

Q2.1. **Case 2 - Advertising Expenditure**
Main question

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,2 million EUR this year**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1a.
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,1 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1aa.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,05 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1aaa.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,03 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1aab. **Case 2 - Advertising Expenditure**
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,08 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1ab.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,15 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1aba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,13 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1abb.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,18 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1b.
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,5 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1bb.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,65 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1bbb.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,73 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1bba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,58 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1ba.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,35 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1bab.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,43 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q2.1baa.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,28 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

r_intro_2.

Topic 1 - Strategic decisions

Case 2 - Advertising expenditures (for your products)

Since your business is launching multiple products each year, the new products need promotion in order to receive the necessary attention from potential customers. Last week, an extra product is introduced on the market, but this year's marketing budget has already been consumed.
Which alternative do you prefer?

rQ2.1. **Case 2 - Advertising Expenditure**
Main question

	Alternative A	**Alternative B**
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,2 million EUR this year**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

- ◉ Alternative A
- ○ Alternative B

rQ2.1a.
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,5 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

rQ2.1aa.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	Net profit of 0,65 million EUR this year.
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1aaa.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	Net profit of 0,73 million EUR this year.
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1aab. **Case 2 - Advertising Expenditure**
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	Net profit of 0,58 million EUR this year.
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1ab.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	**Alternative B**
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,35 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

rQ2.1aba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	Net profit of 0,43 million EUR this year.
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1abb.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,28 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

rQ2.1b.
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	Net profit of 0,1 million EUR this year.
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1bb.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	Net profit of 0,05 million EUR this year.
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1bbb.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,03 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1bba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,08 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1ba.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,15 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1bab.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,13 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ2.1baa.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,18 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

intro_3.
Topic 2 - Investment decisions
Case 3 - The evaluation of Research and Development (R&D) projects

There is still a lot to investigate, in order to continuously develop new products. At the beginning of this year, two different research projects are presented to the company. Due to scarcity in the company's resources, you can only choose one of these projects. Which fits most to your strategy?

This question was not displayed to the respondent.

Q3.1. **Case 3: Research and Development (R&D) project evaluation**
Main question

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1a. **Case 3: Research and Development (R&D) project evaluation**
sub question 1

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,5 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1aa. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,25 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1aaa. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,13 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1aab. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,38 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1ab. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,75 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1aba. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,63 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1abb. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,88 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1b. **Case 3: Research and Development (R&D) project evaluation**

sub question 1

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1bb. **Case 3: Research and Development (R&D) project evaluation**

sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2,5 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1bbb. **Case 3: Research and Development (R&D) project evaluation**

sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2,75 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**

This question was not displayed to the respondent.

Q3.1bba. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2,25 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1ba. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1,5 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1bab. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1,75 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q3.1baa. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1,25 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

r_intro_3.

Topic 2 - Investment decisions

Case 3 - The evaluation of Research and Development (R&D) projects

There is still a lot to investigate, in order to continuously develop new products. At the beginning of this year, two different research projects are presented to the company. Due to scarcity in the company's resources, you can only choose one of these projects.
Which fits most to your strategy?

rQ3.1. **Case 3: Research and Development (R&D) project evaluation**
Main question

	Alternative A	**Alternative B**
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

rQ3.1a. **Case 3: Research and Development (R&D) project evaluation**
sub question 1

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 2 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

rQ3.1aa. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 2,5 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

rQ3.1aaa. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

- (•) Alternative A
- ( ) Alternative B

rQ3.1aab. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 2,25 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1aab. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1,5 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1aba. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1,75 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1abb. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1,25 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1b. **Case 3: Research and Development (R&D) project evaluation**
sub question 1

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,5 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1bb. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,25 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1bbb. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,13 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1bba. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,38 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1ba. **Case 3: Research and Development (R&D) project evaluation sub question 2**

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,75 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1bab. **Case 3: Research and Development (R&D) project evaluation sub question 3**

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,63 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ3.1baa. Case 3: Research and Development (R&D) project evaluation
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	Enabling a governmental subsidy of 0,88 million EUR. No other profits.
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

intro_4.

Topic 2 - Investment decisions

Case 4 - The investment in the company's production capacity

Following last year's strategy, your company needs to open a new production facility in another region. At the beginning of this year, there are two different plans for a new production facility. Due to scarcity in the company's resources, you can only choose one of these projects. Given your strategic view, which do you prefer:

Q4.1.
Case 4 - Investment in production capacity
Main question

	Alternative A	**Alternative B**
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 4 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

Q4.1a.
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 2 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1aa.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 1 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1aaa.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 0,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1aab.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 1,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1ab.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 3 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1aba.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 2,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1abb.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 3,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1b.
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 8 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

Q4.1bb.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 10 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

Q4.1bbb.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 11 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

Q4.1bba
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 9 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1ba
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 6 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1bab
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 7 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q4.1baa.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_r_intro_4

Topic 2 - Investment decisions

Case 4 - The investment in the company's production capacity

Following last year's strategy, your company needs to open a new production facility in another region. At the beginning of this year, there are two different plans for a new production facility. Due to scarcity in the company's resources, you can only choose one of these projects. Given your strategic view, which do you prefer:

This question was not displayed to the respondent.

2_rQ4.1.
Case 4 - Investment in production capacity
Main question

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 4 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1a.
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 8 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1aa.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 10 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1aaa.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 11 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1aab.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 9 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1ab.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 6 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1aba.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 7 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1abb.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1b
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 2 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1bb
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 1 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1bbb
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 0,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1bba.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 1,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1ba.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 3 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1bab.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 2,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ4.1baa
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 3,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

intro_5.

Topic 3 - Human Resource decisions

Case 5 - A training program for your employees

Depending on the availability during the year, there are several training programs that help to improve the skills and knowledge of your employees. However, the training company is almost fully booked this year. You have to make a decision between a partial training program for a few employees this year or a full program for more employees next year. Which alternative do you prefer:

Q5.1. **Case 5 - Training program for employees**
Main question

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

Q5.1a.
Case 5 - Training program for employees
sub question 1

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,5 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1aa.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,25 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1aaa.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,13 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1aab.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,38 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1ab.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,75 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1aba.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,63 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1abb.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,88 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1b.
Case 5 - Training program for employees
sub question 1

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

Q5.1bb.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2,5 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1bbb.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2,75 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1bba.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2,25 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1ba.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1,5 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- (●) Alternative A
- ( ) Alternative B

Q5.1bab.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1,75 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q5.1baa.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1,25 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

nintro_5.

Topic 3 - Human Resource decisions
Case 5 - A training program for your employees

Depending on the availability during the year, there are several training programs that help to improve the skills and knowledge of your employees. However, the training company is almost fully booked this year. You have to make a decision between a partial training program for a few employees this year or a full program for more employees next year. Which alternative do you prefer:

This question was not displayed to the respondent.

rQ5.1. **Case 5 - Training program for employees**
Main question

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1a.
Case 5 - Training program for employees
sub question 1

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1aa.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2,5 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1aaa.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2,75 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1aab.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2,25 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1ab.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1,5 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1aba.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1,75 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1abb.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1,25 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1b.
Case 5 - Training program for employees
sub question 1

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,5 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1bb.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,25 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1bbb.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,13 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1bba
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,38 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1ba
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,75 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1bab
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,63 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ5.1baa.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,88 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

intro_6.

Topic 3 - Human resource decisions

Case 6- Firing some of your employees

Due to a few number of months with bad sales, it appeared that you don't need all your employees until the end of this year. However, this might not be the case for successive years, following the industry outlook. Which alternative do you prefer?

This question was not displayed to the respondent.

Q6.1. **Case 6 - Firing employees**
Main question

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,2 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1a. **Case 6 - Firing employees**

sub question 1

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,1 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1aa. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,05 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1aaa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,03 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1aab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,08 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1ab. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,15 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1aba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,13 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1abb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,18 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1b. **Case 6 - Firing employees**
sub question 1

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,4 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1bb. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,5 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1bbb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,55 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1bba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,45 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1ba. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,3 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1bab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,35 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

Q6.1baa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,25 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

r_intro_6.

Topic 3 - Human resource decisions

Case 6- Firing some of your employees

Due to a few number of months with bad sales, it appeared that you don't need all your employees until the end of this year. However, this might not be the case for successive years, following the industry outlook. Which alternative do you prefer?

rQ6.1. **Case 6 - Firing employees**
Main question

	Alternative A	**Alternative B**
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,2 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- ◉ Alternative A
- ○ Alternative B

rQ6.1a. **Case 6 - Firing employees**
sub question 1

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,4 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

rQ6.1aa. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,5 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

rQ6.1aaa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,55 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

rQ6.1aab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,45 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1ab. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,3 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1aba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,35 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1abb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,25 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1b. **Case 6 - Firing employees**
sub question 1

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,1 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1bb. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,05 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1bbb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,03 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1bba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,08 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1ba. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,15 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1bab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,13 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ6.1baa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,18 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Q162.

- BREAK -

You finished the first part of the experiment.

You can continue with the second part whenever you are ready.

Q163.

Instruction of task 2 (out of 2)

NOTE: The instruction of task 2 is equal to the first task. Take into mind that the payment structure is different than before, so pay attention to points 1 and 3.

1. Your role:

Suppose you are a manager at production company 'Company *X*', responsible for an entire business unit. Your (fictitious) compensation is based on your long-term performance at the company, with a minimum pay of € 0,10. As a normal way of business, you are regularly confronted with a variety of decisions. The economic impact on the business depends on your choice, since there are multiple ways to handle these decisions. Your job is take into account the company owners' objective, which is to maximize the value of the company.

2. The task:

No differences from the first task you have just finished.

3. Your payment

Your payment for the second task is determined by your long-term performance. More specific, this target represents how well the company operates in year 2 and further years. The following table presents what you will receive given your performance in the second task:

Total result in: Years 2, 3 and 4 (long-term targets)	**Your payment** (in cash)
.. - 9 million EUR	€ 0,10
9-13 million EUR	€ 0,25
13-17 million EUR	€ 0,50

17-24 million EUR	€ 0,75
24+ million EUR	€ 1,00

In this last part, you will receive six cases again. This time, your level of payment is determined by the sum of the 6 outcomes you chose at the end of each case.

For instance, if the last choice (in sub question 3) you made in a case was a long-term project with a related outcome of € 12 million in Years 2, 3 and 4, this value is added to your final result. A change of preference during a case between alternative A and B implies that your result is the average of your last two given answers.
Finally, your choices for all six cases are added together and results in your payment for this round. You will receive the payment one week after your entry has been approved, paid out in cash. If you do not manage to perform well on this task, there is no reason to worry. You still receive the guaranteed payment of € 0,10, as well as the € 1,00 for the previous part of this experiment.

Good luck!

Q208.

START EXPERIMENT - TASK 2 (OF 2)

Important: *The decisions you* make *as the manager, influences the performance of your business unit and your level of compensation.*

2_intro_1.

Topic 1 - Strategic decisions

Case 1 - The utilization of your working time

Your working time as a manager is scarce. You will have to decide on what activities you spend your time during the week. You can focus on roughly two different type of activities:

1. During **long-term activities,** you invest your time in order to improve the competencies and/or capabilities of your products, employees and the future. > *after year 1*
2. During **short-term activities,** you focus on the necessity of the continuity of the firm (i.e., the need for cash). > *within year 1*

2_Q1.1.

Case 1: Utilization of personal working time

main question

	Alternative A	Alternative B
Your action	Spend 10% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q1.1a.

Case 1: Utilization of personal working time

sub question 1

	Alternative A	Alternative B
Your action	Spend 5% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1aa.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 2,5% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1aaa.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 1% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1aab.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 4% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1ab
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 8% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1aba
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 7% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1abb
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 9% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1b.
Case 1: Utilization of personal working time
sub question 1

	Alternative A	**Alternative B**
Your action	Spend 30% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

- (●) Alternative A
- ( ) Alternative B

2_Q1.1bb.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 40% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1bbb.
Case 1: Utilization of personal working time

sub question 3

	Alternative A	Alternative B
Your action	Spend 45% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1bba.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 35% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q1.1ba.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	**Alternative B**
Your action	Spend 20% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q1.1bab.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 25% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).**	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q1.1baa
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 15% of your working time on long-term activities	Spend 50% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_r_intro_1.
Topic 1 - Strategic decisions
Case 1 - The utilization of your working time

Your working time as a manager is scarce. You will have to decide on what activities you spend your time during the week. You can focus on roughly two different type of activities:

1. During **long-term activities,** you invest your time in order to improve the competencies and/or capabilities of your products, employees and the future. > *after year 1*
2. During **short-term activities,** you focus on the necessity of the continuity of the firm (i.e., the need for cash). > *within year 1*

This question was not displayed to the respondent.

2_rQ1.1.
Case 1: Utilization of personal working time
main question

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 10% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1a.
Case 1: Utilization of personal working time
sub question 1

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 30% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1aa.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 40% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	**You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).**	**You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term**
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1aaa.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 45% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1aab
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 35% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1aab
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 20% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1aba
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 25% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1abb.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 15% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1b.
Case 1: Utilization of personal working time
sub question 1

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 5% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1bb.
Case 1: Utilization of personal working time

sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 2,5% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1bbb.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 1% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1bba.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 4% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1bba.
Case 1: Utilization of personal working time
sub question 2

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 8% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1bab.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 7% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	in maximizing the company's performance of year 1 (relatively more on short-term activities).
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ1.1baa.
Case 1: Utilization of personal working time
sub question 3

	Alternative A	Alternative B
Your action	Spend 50% of your working time on long-term activities	Spend 9% of your working time on long-term activities
When?	Year 1	Year 1
Outcome in year 1	You invest more time in developing your products and employees for the years after year 1 (relatively more on long-term activities).	You invest relatively more time in maximizing the company's performance of year 1 (relatively more on short-term
Outcome in the following year(s)	*None specified*	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_intro_2.

Topic 1 - Strategic decisions
Case 2 - Advertising expenditures (for your products)

Since your business is launching multiple products each year, the new products need promotion in order to receive the necessary attention from potential customers. Last week, an extra product is introduced on the market, but this year's marketing budget has already been consumed.
Which alternative do you prefer?

2_Q2.1. **Case 2 - Advertising Expenditure**
Main question

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,2 million EUR this year**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q2.1a.
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,1 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2.1aa.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,05 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2.1aaa.
Case 2 - Advertising Expenditure

sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,03 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2:1aab. **Case 2 - Advertising Expenditure**
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,08 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2:1ab.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,15 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2:1aba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,13 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2.1abb
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,18 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2.1b.
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,5 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

- (●) Alternative A
- ( ) Alternative B

2_Q2.1bb
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,65 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2.1bbb.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,73 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2.1bba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,58 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q2.1ba.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,35 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q2.1bab.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,43 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

- ◉ Alternative A
- ○ Alternative B

2_Q2.1baa
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	No extra spending on promoting the new product	Extra spending on promoting the new product
When?	Year 1	Year 2
Outcome in year 1	**Net profit of 0,28 million EUR this year.**	*No further profits*
Outcome in the following year(s)	*No further profit*	**Cumulative net profit of 0,8 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_r_intro_2

Topic 1 - Strategic decisions
Case 2 - Advertising expenditures (for your products)

Since your business is launching multiple products each year, the new products need promotion in order to receive the necessary attention from potential customers. Last week, an extra product is introduced on the market, but this year's marketing budget has already been consumed.
Which alternative do you prefer?

This question was not displayed to the respondent.

2_rQ2.1: **Case 2 - Advertising Expenditure**
Main question

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,2 million EUR this year**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1a:
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,5 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1aa:
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,65 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1aaa:
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,73 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1aab. **Case 2 - Advertising Expenditure**
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,58 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1aab.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,35 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1aba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,43 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1abb.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,28 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1b.
Case 2 - Advertising Expenditure
sub question 1

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,1 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1bb.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,05 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1bbb.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,03 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1bba.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,08 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1ba.
Case 2 - Advertising Expenditure
sub question 2

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,15 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1bab.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,13 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ2.1baa.
Case 2 - Advertising Expenditure
sub question 3

	Alternative A	Alternative B
Your action	Extra spending on promoting the new product	No extra spending on promoting the new product
When?	Year 2	Year 1
Outcome in year 1	*No further profits*	**Net profit of 0,18 million EUR this year.**
Outcome in the following year(s)	**Cumulative net profit of 0,8 million EUR in year 2**	*No further profit*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_intro_3.

Topic 2 - Investment decisions

Case 3 - The evaluation of Research and Development (R&D) projects

There is still a lot to investigate, in order to continuously develop new products. At the beginning of this year, two different research projects are presented to the company. Due to scarcity in the company's resources, you can only choose one of these projects.
Which fits most to your strategy?

2_Q3.1. **Case 3: Research and Development (R&D) project evaluation**
Main question

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_Q3.1a. **Case 3: Research and Development (R&D) project evaluation**
sub question 1

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,5 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ( ) Alternative A
- (•) Alternative B

2_Q3.1aa. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,25 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1aaa. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,13 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1aab. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,38 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1ab. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,75 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q3.1aba. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,63 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1abb. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	**Alternative B**
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 0,88 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q3.1b. **Case 3: Research and Development (R&D) project evaluation**
sub question 1

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1bb. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2,5 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1bbb. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2,75 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**

This question was not displayed to the respondent.

2_Q3.1bba. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 2,25 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1ba. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1,5 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1bab **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1,75 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q3.1baa **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that starts now, with quick results in year 1.	The research project that provides results from year 2 onwards.
When?	Year 1	Year 2
Outcome in year 1	**Enabling a governmental subsidy of 1,25 million EUR. No other profits.**	*No profits in Year 1*
Outcome in the following year(s)	*No subsidies or other profits in years 2, 3 and 4*	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_r_intro_3

Topic 2 - Investment decisions

Case 3 - The evaluation of Research and Development (R&D) projects

There is still a lot to investigate, in order to continuously develop new products. At the beginning of this year, two different research projects are presented to the company. Due to scarcity in the company's resources, you can only choose one of these projects.
Which fits most to your strategy?

This question was not displayed to the respondent.

2_rQ3.1: **Case 3: Research and Development (R&D) project evaluation**
Main question

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1a: **Case 3: Research and Development (R&D) project evaluation**
sub question 1

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 2 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1aa: **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 2,5 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1*aaa*. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

This question was not displayed to the respondent.

2_rQ3.1*aab*. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 2,25 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1*ab*. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1,5 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1aba. **Case 3: Research and Development (R&D) project evaluation sub question 3**

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1,75 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1abb. **Case 3: Research and Development (R&D) project evaluation sub question 3**

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 1,25 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1b. **Case 3: Research and Development (R&D) project evaluation**
sub question 1

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,5 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1bb. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,25 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1bbb. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,13 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1bba. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,38 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1ba. **Case 3: Research and Development (R&D) project evaluation**
sub question 2

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,75 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1bab. **Case 3: Research and Development (R&D) project evaluation**
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	**Enabling a governmental subsidy of 0,63 million EUR. No other profits.**
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ3.1baa. Case 3: Research and Development (R&D) project evaluation
sub question 3

	Alternative A	Alternative B
Your action	The research project that provides results from year 2 onwards.	The research project that starts now, with quick results in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profits in Year 1*	Enabling a governmental subsidy of 0,88 million EUR. No other profits.
Outcome in the following year(s)	**Producing a cumulative net profit of 3 million EUR in years 2, 3 and 4.**	*No subsidies or other profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_intro_4.

Topic 2 - Investment decisions

Case 4 - The investment in the company's production capacity

Following last year's strategy, your company needs to open a new production facility in another region. At the beginning of this year, there are two different plans for a new production facility. Due to scarcity in the company's resources, you can only choose one of these projects. Given your strategic view, which do you prefer:

2_Q4.1.
Case 4 - Investment in production capacity
Main question

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 4 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q4.1a.
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 2 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1aa
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 1 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1aaa
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 0,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1aab
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 1,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1ab.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 3 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1aba
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 2,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1abb
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 3,5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1b.
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 8 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_Q4.1bb.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 10 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- ◉ Alternative A
- ○ Alternative B

2_Q4.1bbb.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 11 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1bba.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 9 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_Q4.1ba.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 6 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1bab.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 7 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q4.1baa
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 1.	A production facility that is ready for use in year 2.
When?	Year 1	Year 2
Outcome in year 1	**Positive net profit of 5 million EUR**	No profit
Outcome in the following year(s)	No further profits in years 2, 3 and 4	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

r_intro_4

Topic 2 - Investment decisions

Case 4 - The investment in the company's production capacity

Following last year's strategy, your company needs to open a new production facility in another region. At the beginning of this year, there are two different plans for a new production facility. Due to scarcity in the company's resources, you can only choose one of these projects. Given your strategic view, which do you prefer:

This question was not displayed to the respondent.

rQ4.1.
Case 4 - Investment in production capacity
Main question

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 4 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1a.
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 8 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1aa.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 10 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1aaa.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 11 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1aab

Case 4 - Investment in production capacity

sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 9 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1ab

Case 4 - Investment in production capacity

sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 6 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1aba

Case 4 - Investment in production capacity

sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 7 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1abb

Case 4 - Investment in production capacity

sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1b.
Case 4 - Investment in production capacity
sub question 1

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 2 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1bb.
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 1 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1bbb.
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 0,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1bba
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 1,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1ba
Case 4 - Investment in production capacity
sub question 2

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 3 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1bab
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 2,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

rQ4.1baa
Case 4 - Investment in production capacity
sub question 3

	Alternative A	Alternative B
Your action	A production facility that is ready for use in year 2.	A production facility that is ready for use in year 1.
When?	Year 2	Year 1
Outcome in year 1	*No profit*	**Positive net profit of 3,5 million EUR**
Outcome in the following year(s)	**Producing a cumulative net profit of 12 million EUR in years 2, 3 and 4.**	*No further profits in years 2, 3 and 4*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_intro_5.

Topic 3 - Human Resource decisions

Case 5 - A training program for your employees

Depending on the availability during the year, there are several training programs that help to improve the skills and knowledge of your employees. However, the training company is almost fully booked this year. You have to make a decision between a partial training program for a few employees this year or a full program for more employees next year. Which alternative do you prefer:

2_Q5.1. **Case 5 - Training program for employees**
Main question

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- ○ Alternative A
- ◉

Alternative B

2_Q5.1a

Case 5 - Training program for employees

sub question 1

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,5 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1aa

Case 5 - Training program for employees

sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,25 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1aaa

Case 5 - Training program for employees

sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,13 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1aab

Case 5 - Training program for employees

sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,38 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1ab.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,75 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1aba.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,63 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1abb.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 0,88 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1b.
Case 5 - Training program for employees
sub question 1

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_Q5.1bb.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2,5 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1bbb.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2,75 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1bba.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 2,25 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1ba.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1,5 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_Q5.1bab.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1,75 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q5.1baa.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training for 4 employees	A training to 12 employees
When?	6 months (0,5 year)	18 months (1,5 year)
Outcome in year 1	**A net profit of 1,25 million EUR**	*No profit*
Outcome in the following year(s)	*No additional profit in year 2*	**A net profit of 3 million EUR in year 2**
Which alternative would you choose?		

- ○ Alternative A
- ◉ Alternative B

2_nintro_5

Topic 3 - Human Resource decisions
Case 5 - A training program for your employees

Depending on the availability during the year, there are several training programs that help to improve the skills and knowledge of your employees. However, the training company is almost fully booked this year. You have to make a decision between a partial training program for a few employees this year or a full program for more employees next year. Which alternative do you prefer:

This question was not displayed to the respondent.

2_rQ5.1: **Case 5 - Training program for employees**
Main question

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1a.
Case 5 - Training program for employees
sub question 1

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1aa.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2,5 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1aaa.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2,75 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1aab.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 2,25 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1ab.
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1,5 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1aba.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1,75 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1abb.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 1,25 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1b
Case 5 - Training program for employees
sub question 1

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,5 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1bb
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,25 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1bbb
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,13 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1bba
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,38 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1ba
Case 5 - Training program for employees
sub question 2

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,75 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1bab
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,63 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ5.1baa.
Case 5 - Training program for employees
sub question 3

	Alternative A	Alternative B
Your action	A training to 12 employees	A training for 4 employees
When?	18 months (1,5 year)	6 months (0,5 year)
Outcome in year 1	*No profit*	**A net profit of 0,88 million EUR**
Outcome in the following year(s)	**A net profit of 3 million EUR in year 2**	*No additional profit in year 2*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_intro_6.

Topic 3 - Human resource decisions

Case 6- Firing some of your employees

Due to a few number of months with bad sales, it appeared that you don't need all your employees until the end of this year. However, this might not be the case for successive years, following the industry outlook. Which alternative do you prefer?

This question was not displayed to the respondent.

2_Q6.1. **Case 6 - Firing employees**
Main question

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,2 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1a. **Case 6 - Firing employees**

sub question 1

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,1 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1aa. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,05 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1aaa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,03 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1aab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,08 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1ab. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,15 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1aba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,13 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1abb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,18 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1b. **Case 6 - Firing employees**
sub question 1

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,4 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1bb. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,5 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1bbb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,55 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1bba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,45 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1ba. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,3 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1bab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,35 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_Q6.1baa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Fire 10 employees	Don't fire any employees
When?	Year 1	Year 1
Outcome in year 1	**You save personnel costs. Hence, adding 0,25 million EUR to your profits in year 1.**	None specified
Outcome in the following year(s)	None specified	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**
Which alternative would you choose?		

This question was not displayed to the respondent.

2_r_intro_6.

Topic 3 - Human resource decisions

Case 6- Firing some of your employees

Due to a few number of months with bad sales, it appeared that you don't need all your employees until the end of this year. However, this might not be the case for successive years, following the industry outlook. Which alternative do you prefer?

2_rQ6.1. **Case 6 - Firing employees**
Main question

	Alternative A	**Alternative B**
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,2 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_rQ6.1a. **Case 6 - Firing employees**
sub question 1

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,4 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_rQ6.1aa. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,5 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_rQ6.1aaa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,55 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

- (•) Alternative A
- ( ) Alternative B

2_rQ6.1aab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,45 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1ab. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,3 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1aba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,35 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1abb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,25 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1b. **Case 6 - Firing employees**
sub question 1

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,1 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1bb. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,05 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1bbb. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,03 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1bba. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,08 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1ba. **Case 6 - Firing employees**
sub question 2

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,15 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1bab. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,13 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

2_rQ6.1baa. **Case 6 - Firing employees**
sub question 3

	Alternative A	Alternative B
Your action	Don't fire any employees	Fire 10 employees
When?	Year 1	Year 1
Outcome in year 1	*None specified*	**You save personnel costs. Hence, adding 0,18 million EUR to your profits in year 1.**
Outcome in the following year(s)	**You create a cumulative, net profit of 0,6 million EUR in years 2, 3 and 4.**	*None specified*
Which alternative would you choose?		

This question was not displayed to the respondent.

Embedded Data

mTurkCode: 5727844303

Scoring Results

long-term score

Mean Score:	0.00
Weighted Mean of Items:	0.00
Weighted Standard Deviation of Items:	0.00
Items:	0.00

Location Data

Location: (49.138595581055, 9.1954040527344)

Source: GeoIP Estimation