

*Strategic Communication in High-Technology Industry*

*How storytelling with a strategic communication approach can be applied in a high-technology environment?*

*A Qualitative Study*

Student Name: Ilektra Chatzopoulou

Student Number: 479153

Supervisor: Dr. Noemi Mena Montes

Master Media Studies, Media & Business  
Erasmus School of History, Culture and Communication  
Erasmus University Rotterdam

20. 08. 2018

## Acknowledgments

*“Storytelling is the essential human activity. The harder the situation, the more essential it is”*

*Tim O’ Brien*

Undoubtedly writing a thesis requires a lot of time, energy and devotion. So, when the time came for me to choose the topic under investigation, I wanted to be sure that for the next six months I will be working on a project of my interest. At this point, I gratefully acknowledge the help provided by my supervisor Dr. Noemi Mena Montes who helped me, realize how I could shape my passion for storytelling into an academic paper. During our first meeting we discussed about the unique nature of high-technology industry, possible challenges high-technology organizations might be encountered with in terms of strategic communication and how those challenges can be solved with the aim of storytelling.

I admit that at times I faced some challenges since I chose to investigate a ubiquitous topic of multiple dimensions, the strategic communication function, storytelling implementation, brand and high-technology industry. Therefore, the creation of a solid theoretical framework proved to be quite a puzzling task. The paucity of academic literature though did not discourage me, on the contrary it made me realize the gap in literature and inspired me to work hard with the intention of providing a clear overview of the multiple roles storytelling could play in high-technology industry. Since the position of storytelling in high-technology industry is still poorly investigated by academia at my supervisor’s exhortation I explored topics related to storytelling where a growing body of literature has been dedicated to and therefore I managed to build a solid theoretical framework.

The second challenge was to reach my population under investigation, as most of the participants hold a managerial position in high-technology organizations and their time is limited. Hence, it was quite perplexing to persuade them to provide an interview for the needs of my research project. Therefore, I would like to thank all the 11 participants for taking the time to discuss with me and whose insights proved to be a valuable source of knowledge. Without their help this project would have never been completed.

These past seven months I have been questioning everything in order to make sure that I would provide a well-thought paper. Finally, I can proudly say that back in December I was just interested in storytelling but now I managed to obtain a clear picture of all the implications of this beautiful and powerful communication technique.

## Abstract

This study reports the results of a qualitative survey of 11 high-technology firms on the practices of corporate communication, especially the links between strategic communication, storytelling and branding, all of them applied in the turbulent environment of high-technology industry. The overarching research question addressed in this paper is “*Strategic communication in high-technology industry: How storytelling with a strategic communication approach can be applied in a high-technology environment?*”.

High-technology firms operate in competitive environments of constant changes (Brown, 1998; Kelly, 1985). They are characterised by eminently skilled employees but also high turn-over rates (Sprague, 2012). Not to mention that the level of complexity of their products and services is usually high, and challenges their possibilities for commercial success (Kelly, 1985; Mohr, Sengupta & Slater, 2010; Rogers & Larson, 1984;). On the other hand, the last decade strategic communication has become the watchword in every organization (Langer & Thorup, 2006). In line with this every organization is awash in stories (Tyler, 2007). The strategic application of storytelling aims to decrease corporate risks and complexities both inside and outside the organization (Argenti, Howell & Beck, 2005; Langer & Thorup, 2006). Therefore, the purpose of this paper is to explore the applicability of storytelling in high-technology environments, through a strategic communication perspective.

By conducting 11 in-depth interviews with communication practitioners from high-technology organizations this paper accentuates the strategic communication imperative within high-technology environments. Storytelling also receives a high status in high-technology organizations for multiple reasons. The most important reasons are linked to familiarization and humanization of technology. The hot button issue of gender diversity in high-technology industry is also addressed. Finally, interviewees agree on the building of a strong brand for employer branding purposes.

Keywords: storytelling, strategic communication, branding, brand awareness, technology, high-technology company

## Table of Contents

Introduction.....	5
2. Theoretical Framework.....	10
2.1 The Culture of High-Technology Industry.....	10
2.2 The Building of a Strong Brand .....	13
2.3 The Strategic Communication Imperative .....	15
2.4 Introduction to Serious Storytelling .....	18
3. Methodology.....	22
3.1. Research Design.....	22
3.2 Sampling .....	23
3.3 Operationalization .....	25
3.4 Data Collection & Analysis.....	25
4. Results.....	26
4.1 Phase 1: The perceived value of strategic communication as stated by communication professionals. ....	27
4.1.2The value of strategic communication within high-technology organizations as perceived by third parties.....	30
4.2 Phase 2: Building of a strong brand.....	32
4.2.1 Communication of company’s values as part of corporate identity.....	35
4.3 Phase 3: The applicability of storytelling in high-technology industry.....	36
4.3.1 The perceived value of storytelling in high-technology industry.....	36
4.3.2 The first definition of storytelling.....	38
4.3.3 Driver of Storytelling.....	39
4.3.4 Storytelling & Gender Diversity .....	43
4.3.5 Storytelling guide.....	45
5. Conclusion .....	52
5.1 Limitations of the Research.....	54
5.2 Recommendations for future research.....	54
Appendix.....	55
References.....	59

## 1. Introduction

“*We are all computer people now*” as Sherry Turkle (2008) states in her analysis about how high-technology influences our way of thinking. Whether it is artificial intelligence, virtual reality, internet of things or big data, high-technology organizations play a major role on the shaping of our everyday lives. Technological achievements though do not always entail a commercial success as well (Mohr et al. 2010). The majority of, high-technology organizations operate in a global scale of immensely competitive markets, they are characterised by a fast rate of change and growth and they produce products and services whose features are usually bewildering to a general audience. Although high-technology companies consider human capital as one of the most important company assets, still the turn-over rates are significantly high (Kelly, 1985; Mohr, 2000; Mohr et al. 2010; Rogers & Larson, 1984;). Furthermore, after being accused several times of female underrepresentation (Statista, 2018) high-technology organizations committed themselves into achieving gender diversity inside the workforce (Undercover Recruiter, 2018). Another bottleneck high-technology organizations need to overcome, is that due to recent scandals the trust levels towards high-technology industry have been decreased significantly. Within the framework of these criteria in mind, high-technology organizations need to find a way in order to achieve or reinstate commercial success and stakeholder engagement. In line with this, strategic communication has become the watchword of every firm and is perceived as a neuralgic department within the organization (Argenti et al., 2005; Argenti & Forman, 2002; Conrad & Terry, 2016; Falkheimer et al., 2017; Langer & Thorup, 2006;). As a response to this, new topics emerged in academia about strategic implementation of communication, among those topics is storytelling (Langer & Thorup, 2006) Storytelling is a value – laden communication tool whose aim is to decrease corporate risks and complexities both internally and externally (Barker & Gover, 2010; Denning, 2002; Gabriel, 2000; Soule & Wilson, 2002). Therefore, high-technology organizations should explore the capabilities of a strategic communication plan with a focus in storytelling. Based on the information provided below the overarching research question in this study is:

- ❖ *Strategic communication in high-technology industry: How storytelling with a strategic communication approach can be applied in a high-technology environment?*

The key elements which guided this research project are strategic communication function, brand and storytelling. The past few years, strategic communication has been acknowledged as an essential apparatus for every company’s welfare (Argenti et al., 2005; Argenti & Forman, 2002; Conrad & Terry, 2016; Falkheimer et al., 2017). In line with this, high-technology organizations need a fuzzy public relations campaign able to attract venture capital. They also need an aggressive sales strategy in order to create a connection between their products and services and the competitive global markets they operate (Sprague, 2012). Furthermore, as stated by Berry (1998) the survival of high-technology organizations who choose to overlook the multiple advantages of a communication plan is at risk. Still

many high-technology organizations choose not to invest in a strategic communication plan due to several factors. Preliminary work in this field suggests that, high-technology organizations focus solely on the development of a competitive technological base. They believe that the high quality of their products and services will encourage market acceptance without having to invest in a costly strategic communication plan (Berry, 1998; Mohr et al. 2010; Mohr, 2000). Furthermore, as previously mentioned high-technology organizations operate in fast-paced environments of constant changes thus the value of a long-term communication plan is questionable (Berry, 1998). Finally, the relationship between communication practitioners and engineers has always been at odds. More precisely it has been stated that engineers and communication professionals have completely different world views, not to mention that, engineers perceive communication practitioners as superfluous, unaware of technology and ready to promise anything to customers just to increase company's sales (Sprague, 2012). Finally, although strategic communication is regarded as a neuralgic department within the organization, communication practitioners still receive a rather low status (Falkheimer, 2017). Based on the information provided above the first sub-question is formulated as below:

- ❖ What is the perceived value of strategic communication within high-technology organizations?

As previously mentioned, strategic communication has become the watchword of every organization and functional area. Therefore, new concepts have emerged in academia in line with strategic communication. Storytelling and corporate branding are among those concepts (Langer & Thorup, 2006). The recent years, the idea of brand has been extended from products to corporate organizations (Argenti & Forman, 2005). According to Tom Blackett (2002) brand is the way an organization chooses to position both its products but also itself. The perks of a dynamic brand and to a greater extend a solid corporate reputation are numerous. Firstly, a unique brand identity offers a sustainable comparative advantage against competitors, serves as a reminder in times of crisis, reassures the company's existence in hostile corporate environments and attracts the most skilful employees (Argenti & Forman, 2002). Although the building of a strong brand has been recognized as an important asset both in the game of differentiation and shaping of corporate reputation, discipline focuses on the application of brand in business to consumers markets (B2C) as business to business markets (B2B) are mostly aligned with organizational purchasing (Lynch & Chernatony, 2002). Of the investigation population 9 out of 11 high-technology organizations operate in business to business markets (B2B). Therefore, the exploration of the relationship between brand and high-technology organizations which operate in B2B markets is applicable. Based on the information provided above, the second sub-question has been formulated as below:

- ❖ Is the building of a strong brand relevant in business to business (B2B) high-technology markets, as part of the strategic communication process?

The idea of storytelling is central to this study; thus, it requires further elaboration. More and more communication professionals add storytelling to their repository of tactical and communication tools. Therefore, the main purpose of this qualitative research project is to explore the applicability of storytelling within high-technology organizations, through a strategic communication angle. Although the value of stories dates back to the ancient times, the strategic implementation of storytelling for advancing organizational goals is in its infancy (Silverman, 2004). For the purposes of this study the concept of *serious storytelling* is introduced. According to Lugmayr et al. (2016) the term *serious storytelling* could be described as “*storytelling outside the context of entertainment, where the narration progresses as a sequence of patterns impressive in quality, relates to a serious context, and is a matter of thoughtful process*”.

The strategic application of storytelling aims to communicate the organizations identity both internally and externally in the form of a *super-story* to interested parties (Thomas & Stephens, 2015). Furthermore, the application of storytelling creates a concept of strategic communication as a *monophony* within the organization (Thomas & Stephens, 2015). More precisely, due to its value laden power and simplicity storytelling facilitates communication activities both inside and outside the organization (Barker & Gover, 2010; Denning, 2002; Gabriel, 2000; Soule & Wilson: 2002). Not to mention that narratives enable coherent decision making in complicated environments, like those of high-technology industry (Oliver & Roos, 2005; Weick & Sutcliffe, 2001). Storytelling depicts every organization’s values and creates a continuous narrative about organizational history, which shows that the company has past, present and future (Barry & Elmes, 1997; Brown, 1985; Soule & Wilson, 2002). In line with this, storytelling narrates the performances of the future based on the scripts of past experiences (Berry & Elmes, 1997). Finally, the reason stories have power over the future of every organization is because they express meanings, values and emotions (Barker & Gover, 2010; Denning, 2002; Gabriel, 2000; Soule & Wilson: 2002). Therefore, the aim of this paper is to shed light on how high-technology organizations could apply the aforementioned characteristics of storytelling in a beneficial way. The third sub-question has been formulated as bellow:

- ❖ How strategic communication professionals from high-technology organizations could benefit from storytelling in their journey to commercial success and stakeholder engagement?

## **1.1. Scientific Relevance**

The key elements of this research project are high-technology industry, strategic communication, brand and storytelling. Although an entire body of literature is committed to the study of each element per se little attention has been given to the link between them. In general, the purpose of the current study is to act as a starting point for further research through its explorative nature.

In the last decade, there is a growing body of literature exploring the strategic communication imperative within business environments (Argenti et al., 2005; Argenti & Forman, 2002; Conrad & Terry, 2016; Falkheimer et al., 2017). On the other hand, over the years many scholars have attempted to obtain a clear picture of the culture of high-technology industry (Kelly, 1985; Sprague, 2012;). Yet there are no relevant studies about high-technology industry from a strategic communication angle. In line with this, this study serves as an overview of the perceived value of strategic communication, in high-technology environments.

Furthermore, in academia storytelling is mainly associated with entertainment and educational purposes. Undoubtedly, books and articles about the strategic implementation of storytelling can be found but they are limited in comparison to the previous two groups (Küpers et al. 2013). Therefore, this study explores the endless possibilities of storytelling from a strategic communication perspective.

Finally, although there are a few studies which comment on the launching stage of high-technology products and services to the markets (Berry, 1998; Easingwood et al., 2006; Mohr et al. 2010) none of them involves storytelling. As a result, this paper introduces storytelling in high-technology industry and explores ways of storytelling implementation for the benefit of high-technology organizations.



## **2. Theoretical Framework**

In this literature review the central dimensions of the research will be elaborated and organized in theoretical framework. First of all, the culture of high-technology industry will be elaborated on. The second section focuses on the justification of strategic communication. Thirdly, the applicability of a strong brand in the area of business to business (B2B) markets will be demonstrated. Last but not least, the idea of strategic implementation of storytelling will be introduced.

### **2.1. The Culture of High-Technology Industry**

In the literature, the broad concept of *technology* tends to refer to the connection of tools and knowledge, mainly that of engineering and science, with the intent of offering solutions to problems. Specifically, *high-technology* answers to a more advanced use of technology, a definition which is likely to change over time. In other words, what was perceived as high-technology in 1980, is considered to be basic technology based on recent standards (Mohr et al. 2010). In general, the idea of high-technology is applicable in multiple areas such as information technology (IT), telecommunication, computer hardware, computer software and consumers' electronics (Easingwood et al., 2006; Mohr et al., 2010; Sprague, 2012).

Having provided the definition of high-technology the next step is to demonstrate all the common characteristics high-technology organizations share. Although business organizations used to be equated with solely money-making machines, in 1980 a new theory introduced the definition of corporate institutions in cultural terms as well. This perception has been welcomed by the academic community with enthusiasm (Brown, 1985). In general culture is acknowledged as a team of people who in total exists, creates, communicates and interprets their rules to new arrivals through verbal and non-verbal communication signs (Brown, 1985). In 1985 communication students attempted to demonstrate the culture of high-technology industry, based on stories narrated by employees of high-technology organizations. During this survey, they collected 58 stories from 38 technology companies in Northern California, Silicon Valley. The sample included prosperous and well-known corporations, such as IBM, and significantly smaller companies like Resonex. The general message obtained from this project, was that the culture of high-tech organizations is the culture of the future (Brown, 1985). The combination of information retrieved from this research project along with the study of literature, presents a few commonalities high-technology organizations share.

First of all, the culture of high-technology industry is unique in many aspects while high-technology organizations often operate in a peculiar way which differentiates them in comparison to traditional companies (Kelly, 1985). The best example, which showcases the different philosophy high-

technology companies share as compared with conventional companies is the conflict between Steve Jobs, the founder of Apple, and John Sculley, former CEO of Apple, which resulted in Steve Job's withdrawal from the company for 11 years. During the documentary about Steve Job's life "*A Million Dollar Hippie*", John Sculley admitted that forcing Steve Jobs to step down was a mistake. Although to his defence, in his former experience from "*corporate America*" where he served as CEO of Pepsi, the case where the board forces the founder to walk away for the commonweal of the organization was a usual phenomenon. This approach though did not work effectively in a high-technology environment. (Gray & Quinn, 2011). Another paradigm, which demonstrates perfectly the "*thinking out of the box*" mentality is the example of a high-tech firm, which with the intention of decreasing maintenance expenses, instead of hiring a professional to mow the lawn, they bought a goat to eat the grass and they moved it per frequent time periods (Kelly, 1985). Secondly, in the literature a surprising number of studies refers to a fast-paced environment of constant changes (Kelly, 1985; Berry, 1998; Easingwood et al., 2006). Nowadays global economy is based notoriously on innovation (Mohr et al., 2010). Therefore, in order to survive against their competitors, high-technology organizations should acquire a culture of change and innovation rather than focusing on maintaining a current status quo (Grove, 1983; Easingwood et al., 2006). Accordingly, several studies focus on the high levels of "*competitive volatility*" as the majority of high-technology products are available to markets worldwide (Kelly, 1985; Berry, 1998; Roger & Larson, 1984; Easingwood, 2006). In line with this, it has been suggested that a way for high-technology organizations to be ahead of their competitors is to invest in human capital. As stated by Sprague (2012) more than 6,000 PhDs and 15,000 millionaires live in Silicon Valley, place which is perceived to be the home of combined education and wealth in U.S. In general, high-technology industry is known for its highly skilled representatives, while the management style of many high-technology organizations tends to be people oriented with a focus on their employees' self-development both personally and professionally (Kelly, 1985; Rogers & Larson, 1984). Workers in high-technology industry are also characterized as *job hoppers* whereas they seem to value their profession more than the organization they are working for (Sprague, 2012). To sum up, high-technology industry is highly competitive, tends to attract the most well-educated, creative and talented individuals, operates in a fast-paced environment with changes taking place constantly and shares only a few common characteristics to other industries. As stated clearly by Deal & Kennedy (1982) the word hard – play hard mentality plays a dominant role in high-technology markets.

The purpose of this chapter is not only to provide a clear overview of high-technology industry but also to broach hot-button issues and challenges high-technology organizations encounter. To begin with, even though, high-technology organizations have a reputation of valuing their workers, they often been accused of the fact that women in high-technology industry are being constantly underrepresented. More precisely, a survey reported by Statista (2018) indicates that only 27% of women hold a c-level position in a high-technology company with the percentage dropping much lower to 17% when it refers to employees with immediate access to technical information, in other words technicians and engineers. The situation is slightly improved when applied to the number of female

employees in the general workforce (35%) but still is far from parity. Judith Whyte (1985) writer of “Girls into Science and Technology” argues that women receive unwelcoming messages from high-technology industry already from high-school and they thus avoid choosing science and technology related courses. Furthermore, a survey conducted by Stanford University revealed that the reason why female STEM (science, technology, engineering or math) graduates are less likely to apply for a position in a high-technology company is because they are demotivated during recruiting events (Inc, 2018). Although, these quota reveal a significant gap between the number of men and women employees, a survey conducted by Undercover Recruiter (2018) indicates that high-technology companies are committed into achieving gender diversity inside the workforce. Secondly, the way high-technology organizations operate influences critically our everyday lives (Turkle, 2008), while high-technology shapes, to a large extend, our global economy (Mandel, 1997; Mohr, 2000; Mohr et al. 2010). The overdependence on technology though also known as *technological slavery* has been the subject of academic critique (Ellul, 1980). An example of technological slavery, is the case of Ibrahim Diallo, known as the first man who has been fired by a machine. One day, Ibrahim Diallo has been registered as inactive in the corporate system and the moment that he tried to enter the building the system though he was an an intruder and order for the security to escort him out, an action rather humiliating. Not to mention that it took three weeks for the administration to solve this unpleasant situation (BBC, 2018). This incident coupled with a series of high-technology scandals resulted in debate whether utopian world high-technology behemoths promised to their audiences is realistically applied. Although people seem to be concerned about the protection of their private data, they are not likely to stop using social media platforms and applications, a phenomenon which is acknowledged as *privacy paradox* (Baruh, Secinti, Cemalcilar, 2017). As stated by Sprague (2012) either technology will digitize people or people will manage to humanize technology.

The mass use of technology though does not necessarily entail a commercial success as well for every new technological trend, since high-technology organizations often overlook the benefits of a long-term strategic communication plan (Berry, 1998; Easingwood et al. 2006; Mohr et al., 2010:). The first reason is because many high-technology companies, especially the small firms which lack the resources required for the development of an effective strategic communication plan, focus solely on the development of a competitive technological base, a strategy which is broadly known as *niche based technological superiority* (Berry, 1998; Easingwood et al. 2006; Mohr et al. 2010). The majority of, high-technology companies strongly believe that high quality products and services will speak for themselves and markets will respond positively, thus a long-term communication plan will hardly bring extra value to the company. Not to mention that the relationship between communication practitioners and engineers has always been tense (Falkheimer, 2017; Sprague, 2012;). It has been stated that, engineers often accuse marketers and sales people for making unrealistic promises to customers, in order to increase the company’s sales. A common joke between engineers, which showcases also the lack of technical knowledge between communication professionals, is that the only difference between a car salesman and a software salesman is that the car salesman knows that he is lying. Furthermore,

as mentioned in the previous paragraph high-technology organizations operate in fast-paced environments of constant changes thus they doubt the effectiveness of a long-term communication plan as they are not sure if today's rules will also apply in the future (Berry, 1998: Mohr et al. 2010). Berry (1998) though insists that the survival of high-technology organizations who keep on rejecting strategic communication as an essential apparatus for their companies' welfare is at risk. The chairman of Dell, Michael Dell, used to say that "*A key part of strategy is communicating it. Communications is key to operations and execution and an integral part of the process*" (Argenti et al., 2005). In business terms high-technology organizations require an ostentatious public relations campaign able to attract venture capital and an aggressive sales strategic plan, in order to create a bond between their products and the demands of immensely competitive niche markets (Sprague, 2012).

Another bottleneck, high-technology organizations should overcome in their efforts for commercial success, is that they operate in an industry whose implications are often being misinterpreted or not understood at all by their target audience (Entrepreneur, 2017). The audience's fear, uncertainty and doubt, known as the FUD factor, prevents consumers from purchasing high-technology products and services because they are not sure if they understood exactly all the benefits offered and therefore if these products and services will answer entirely to their needs (Mohr et al. 2010). As an answer to this, Andy Grove, former chairman of Intel and one of the most influential people in high-technology industry, used to say that "*Railroads are not in the railroad business. They are in the transportation business.*" By that phrase, he wanted to highlight how important is for high-technology organizations to understand the needs, problems and mindsets of their customers (Mohr et al., 2010). Nowadays, big data allow corporations to capture and analyse their audience's personal information in real time, and then provide them with more personalized approaches (Erevelles, Fukawa & Swayne, 2016). After having established a clear picture of their target audience's profile high-technology organizations should focus on preparing the market. This early stage marketing strategy, known as *broadly based market preparation*, explains that in their journey to commercial success high-technology firms should educate their target group by providing the right amount of information about their products' and services' specifications (Easigwood et al., 2006).

## **2.2. The building of a strong brand**

The recent years the area of branding has been extended from products to corporate institutions as a total (Argenti & Forman, 2002). According to David Aaker (1991) a brand can be defined as "*a distinguished name and/or symbol (such as a logo, trademark or package design) intended to identify the goods or services of either one seller or a group of sellers and to differentiate those goods or services from those of competitors. A brand thus signals to the customers the source of the product*

*and protects both the customer and the producer from competitors who would attempt to provide products that appear to be identical”*. In general, a brand depicts how an organization decides to position both itself as well as its products and services. Therefore, the building of a strong brand is aligned with the formation of corporate reputation (Argenti & Forman, 2002). The perks of a solid brand and corporate reputation are numerous. First, a unique brand identity offers a sustainable comparative advantage against competitors, serves as a reminder in times of crisis, reassures the company’s existence in hostile corporate environments and attracts and the most skilful employees (Argenti & Forman, 2002).

Although branding has been recognized as an important element both in the game of differentiation and shaping of corporate reputation discipline focuses on the application of brand in business to consumers markets (B2C) as business to business markets (B2B) are mostly aligned with organizational purchasing (Lynch & Chernatony, 2002). The lack of academic guidance though, results to the neglect of a strategic emphasis in branding from marketing managers of B2B firms. (Honburg, Klarmann & Schmitt, 2009). Yet, research based on more than 300 B2B firms shows that brand awareness increased market performance (Honburg, et al., 2009). According to the theory of information economics, markets are characterized by imperfect and asymmetrical information. Therefore, consumers do not feel confident about their purchasing decisions as they believe that by the time of purchase they would not have possessed all the information needed (Honburg, et al., 2009). Especially, with regards to high-technology products and services which are characterized by high-levels of complexity consumers are even more reluctant to proceed to a purchase (Mohr, 2000; Mohr et al. 2010). The risk related with significant purchases is not narrowed to organizational and financial failures, but it also entails personal risks. Brand awareness is able though to increase market performance by decreasing buyer information cost and buyers’ perceived risk (Erdem & Swait, 1998). IBM recognized that when making major purchasing decisions buyers are looking for peace of mind. This insight led them to the creation of a B2B advertisement where a pillow is embroidered with IBM and a headline which shows *“What most people want from a computer service company is a good night sleep”*. IBM decided to make an emotional connection with their buyers in order to highlight the advantages of choosing a company who is leader in IT sector for big-ticket procurements (Lynch & Chernatony, 2002). Therefore, the element of trust plays a significant role in the environment of B2B markets. In order though to communicate a company’s values externally in a successful manner it is crucial to primarily communicate them internally.

Traditionally branding was portrayed in external terms by communicating brand values to stakeholders such as buyers, market intermediaries and shareholders. Nowadays though, many organizations recognize that successful external communication is based on the perceptions and deep understanding of employees about the values of the company. Internal brand communications are a total of verbal

and written messages about the organization and its products and services. In order to communicate organizations, use a variety of symbols, stories, rituals and jargon. Bergstrom, Blumenthal & Crothers (2002) list three core elements for successful internal branding: efficient brand communication to all employees, commit employees to company's values and relevance and connect every action within the organization to the maintenance of a coherent brand identification.

Finally, new trend in the area of branding has emerged. Apart from B2C and B2B approaches H2H approach, an abbreviation for human-to-human, appeared in business scene. This new perception focusses merely to the human side of business while it supports that business communications is something that takes place between humans (Nummela, 2016). The main idea behind H2H is to make business simpler, more human and more personal. When the approach is more human the business relationship tends to be more personal and the element of trust, whose importance has already evaluated, is more likely to be developed (Kramer, 2014).

### **2.3. The Strategic Communication Imperative**

In the past few years, the strategic implementation of communication has been established as an essential apparatus for every company's welfare (Argenti et al., 2005; Argenti & Forman, 2002; Conrad & Terry, 2016; Falkheimer et al., 2017). Moreover, strategic communication has been demonstrated as a neuralgic constituency which receives reactions from key departments within the organizations (Argenti & Forman, 2002). The increased interest of academia towards strategic communication could also explain the fact that there are plentiful interpretations about this topic. In order, for a clear explanation of this rather ubiquitous area to be provided, the two parameters of strategic communication, management strategy and communication theory, will be clarified. According to Jamison (1981), strategic management is the number of actions, occurred by general managers to coordinate organizations' capabilities, opportunities and restrains in the environment. While Holtzhausen (2002) insists that the role of communication, is to reassure that all the information linked to an organization's actions will be distributed in the interest of the organization. Based on the information provided above strategic communication is *"aligned with the company's overall strategy to enhance its strategic positioning"* (Argenti et al., 2005) and acts as a *"bridging activity"* between the company and their stakeholders (Grunig, 2006).

The perceived value of strategic communication though has not always been appreciated. Positioning strategic implications into the communication area used to be a highly ambitious task, often overlooked by plenty organizations which preferred to act tactically and invest in short term communication plans (Argenti et al., 2005). It has also been suggested that strategic communication has been taken for granted by many professionals who failed to understand the complications of communication and

refused to accept the fundamental role strategic communication plays within the organization (Argenti & Forman, 2002; Falkheimer et al., 2017). To prove, that strategic communication is a powerful mechanism, which should be adopted by every corporation Argenti et al. (2005) conducted a survey, during which they interviewed more than 50 CEOs, CFOs, and communication managers from a wide range of companies (e.g. Dell, Pepsi, New York Times). The findings of this survey along with the literature review showcased that indeed strategic communication is a dynamic ally in the game of differentiation among organizations (Argenti et al., 2005; Argenti & Forman, 2002; Conrad & Terry, 2016; Falkheimer et al., 2017). The aforementioned statement could be perfectly depicted in T. Michael Glenn's, president and CEO of FedEx Services, saying about strategic communication "*Communication is at the centre of everything. You can't execute strategy if you can't communicate about it*" (Argenti et al., 2005).

A strategic communication approach is imperative, due to several factors, both external and internal (Argenti et al. 2005). Firstly, the introduction of Internet welcomed an era of transparency within organizations. Therefore, for purposes of clarity the implementation of a clear communication to the stakeholders is of the utmost importance (Argenti et al., 2005; Forbes, 2015). Furthermore, high-technology organizations realized that consumers now are part of the decision-making process within the organization, a reality demonstrated in literature as *consumer sovereignty* (Argenti et al., 2002; Pitt, Berthon, Watson & Zinkhan, 2002) Secondly, when organizations grow in terms of size and complexity (more markets, employees, products, investors, services, suppliers), they are more likely to become unglued if they do not invest in the creation of a consistent communication plan which will reassure that all the different compartments of the organization will act as a whole (Argenti et al., 2005; Forbes, 2015). In 2010 the idea of *the communicative organization* has been introduced by the Global Alliance in an attempt to explain that companies which communicate efficiently with their internal environment will enjoy a competitive advantage (Falkheimer et al., 2017). Especially in times of organizational change communication executives need to reassure that all the employees are *at the same page*, (Adamson, 2006). Finally, both internal and external corporate scandals along with a major decline in trust towards corporate institutions highlight the importance of organizations to communicate in a way which will increase their credibility (Argenti et al., 2005; Edelman, 2018). Still, even if the value of strategic communication has been recognized by most of the academic community and corporate institutions, communication professionals continue to receive a rather low status within organizations (Falkheimer et al., 2017). It has been stated that, most managers within the organization do not have a clear picture of the role and responsibilities of communication professionals (Falkheimer et al., 2017). France's president, Georges Clemenceau, once said that war is too important matter to be handled by the generals. The president's aphorism is being used by writers who argue that it is best for affairs of the utmost importance not to be controlled by experts. Therefore, if communication

professionals do not act accordingly, strategic communication will soon be perceived as too important issue to be handled by communication practitioners.

Although it has previously been stated that the perceived value of strategic communication within high-technology organizations is questionable (Berry, 1998; Mohr, 2000; Mohr et al. 2010; Sprague, 2012) Dell has been suggested twice as one of the best examples of strategic communication implementation (Argenti et al. 2005; Argenti & Forman, 2002). Although for many years Dell has established a reputation as PC manufacturer they decided to expand their businesses to other areas like those of network computing and storage. Historically, Dell has become known because of the story of its founder, Michael Dell, who used to program computer systems out of his dorm room and initially he became one of the wealthiest people worldwide (Argenti & Forman, 2002). A story which according to Kelly (1985) is a common occurrence in high-technology industry which brims with such Horatio Alger tales. The communication professionals at Dell though acknowledged that it would not be possible to persuade the multiple stakeholders of their repositioning from a PC manufacturer to a service provider only with this story, they needed also an effective strategic communication plan (Argenti & Forman, 2002).

The purpose of this story is dual. It highlights the strategic communication imperative within a high-technology environment and demonstrates the relationship between storytelling and strategic communication. As previously mentioned, strategic communication is the watchword of every organization and functional area (Argenti et al., 2005; Argenti & Forman, 2002; Conrad & Terry, 2016; Falkheimer et al., 2017; Langer & Thorup, 2006). As response to this, new areas emerged in academia to complete the corporate communication perspective. Interestingly enough, one of these areas is storytelling. Although the value of stories is timeless, their application to strategic communication is in its infancy (Silverman, 2004). Therefore, in their recommendations for future research Thomas & Stephens (2015) guide academia towards the role of storytelling in the implementation and development of strategy. The strategic application of storytelling aims to decrease corporate risks and complexities both internally and externally. Additionally, it seeks to communicate organization's identity to the stakeholders in the form of a *super-story* and reassure that every organizational part will reflect as *monophony* (Thomas & Stephens, 2015). Moreover, part of strategy implementation involves narratives which allow an organization to communicate their vision for the future to the stakeholders based on the past and present of this firm (Barry & Elmes, 1997). Moreover, organizational stories are a way of people to interpret organization's reality and communicate their knowledge to third parties (Boje, 1991; Fisher, 1987). Furthermore, storytelling is perceived as an advantageous technique for the implementation of strategic communication because due to its simplicity (Barker & Grove, 2010) it enables stakeholders to understand strategy's content (Mantere, 2008). Finally, narratives enable



coherent decision making in complicate environments (Barker & Grove, 2010; Oliver & Roos, 2005). Discipline about storytelling covers a rich and vast academic landscape, while most of it focuses mainly in storytelling for entertainment and educational purposes. Undoubtedly books and scholar articles about organizational storytelling can be also found but they are significantly limited in comparison to the previous two groups (Küpers, Manter & Statler, 2013). The strategic implementation of storytelling for business purposes broadly characterized as *serious storytelling* (Lugmayr et al., 2016) will be discussed in the next section.

#### **2.4. Introduction to serious storytelling**

In recent years, there has been a growing interest with regards to content creation as an essential communication tool for company's welfare, equally from prosperous and less established organizations. In literature, content marketing is described as the creation and distribution of valuable content across multiple channels (Pulizzi, 2012; Pulizzi & Barrett, 2009). In the past, companies have incorporated various communication techniques, in order to attract and retain prospective customers. The audience under question though refused to respond positively to traditional ways of marketing (Pulizzi & Barrett, 2009; Philips, 2002). As pointed out by Andrea Philips (2012) in her book "*A creator's guide to transmedia storytelling: How to captivate and engage audiences across multiple platforms?*", consumers nowadays will not simply accept to buy a product or a service just because a marketer placed in front of them, they want to hear the story behind the product or service and feel like they are invited in a whole new experience. In his blog founder and CEO of Vayner Media, Gary Vaynerchuk (2013) supports that every company should operate as a media organization by creating and distributing quality content in various media platforms. He also indicates that there is no excuse for any organization not to focus on a content-oriented communication plan provided that the production of media products bares no marginal cost and they are effortlessly accessible by most of the people worldwide. In line with this many authors suggest Coca – Cola to be one of the best company examples on content implementation for their current marketing strategies, especially after the launch of "*Content 2020*" (Pulizzi, 2012; Rose, 2012). More specifically, in August 2011, Coca – Cola released two YouTube videos by the name "*Content 2020*", where they highlight the importance of content creation, they invite consumers to be part of a conversation, they introduce technology and data-oriented decisions as enablers for creativity and finally they welcome storytelling as a common ground of all communities and cultures (We are Cognitive, 2011).

According to Oxford Dictionary, storytelling is acknowledged as "*the ability of writing or telling stories*", while it dates back to the ancient times. Based on Plato the representation of real life events through narratives is known as the process of "*mimesis*" or imitation (Lugmayr et al., 2016). In the area of marketing, storytelling is characterized as the technique which deploys traditional narrative

methods to communicate a company's culture, values, products and services in order to create a potent bond between every corporation and the stakeholders (Dictionary of Marketing, 2016). This study focuses on the instrumental use of storytelling as a mean of advancing strategic communication purposes. In response to this, the most suitable definition of storytelling was given by Lugmayr et al. 2016 who introduced the term serious storytelling *"Storytelling outside the context of entertainment, where the narration progresses as a sequence of patterns impressive in quality, relates to a serious context, and is a matter of thoughtful process"*.

Every company is awash in stories (Tyler, 2007). In general storytelling has already been established by many organizations, as an essential apparatus in areas like change management, internal and external communication, design management, leadership, organizational learning and research design (Barker & Gover 2010; Sander, 2000). As stated by the vice president of a Fortune 500 company *"Stories play an important role in my work. I tell stories, listen to stories and spend time connecting stories. Stories have a positive effect, but I do not know why so I started looking for answers"* (Tyler, 2007). As stated in the previous section there is a growing body of literature which focuses on why organizations choose to use stories in order to communicate both internally and externally. First of all, many scholars underline that storytelling depicts every organization's values and creates a continuous narrative about organizational history, which shows that the company has past, present and future (Brown, 1985; Barry & Elmes, 1997; Soule & Wilson, 2002). In line with this, storytelling narrates the performances of the future based on the scripts of past performances (Berry & Elmes, 1997). The reason stories have power over the future of every organization is because they express meanings, values and emotions (Barker & Gover, 2010; Denning, 2002; Gabriel, 2000; Soule & Wilson; 2002). Part of the storytelling process is the production of emotions and the challenge of human intelligence. Accordingly, there is a positive connection between stories and emotions as they usually tend to end in an unexpected way, which catches audience's attention (Denning, 2002; Soule & Wilson, 2002). Denning's argument could be also associated with the value-laden power of stories as highlighted by Barker & Gover (2010) who support that storytelling enables the exchange of information among employees in a value-laden manner.

Furthermore, it has been argued that each corporation has created its own exclusive story, which, if communicated properly, could provide a unique selling point (USP) in the game of differentiation among organizations and boost company's prestige externally (Kelly, 1985; Pulizzi & Barrett, 2009; Smidts et al., 2001). Moreover, recent studies explain that storytelling enables coherent decision making in complex environments due to its simplicity (Barker & Gover, 2010; Oliver & Roos, 2005; Weick & Sutcliffe, 2001). In line with this, Barker & Grover (2010) in their overview about organizational storytelling explain that due to their simplicity stories enable internal and external

communication while they are likely to position a product or a service in a comprehensive manner. As a result, it is more likely for the stakeholders to get attached to an organization who communicates its agenda through a plain and comprehensive way (Rutledge, 2011; Soule & Wilson: 2002). Although many scholars tend to associate storytelling as a mainly emotional activity Pattern (2015) suggests that stories are also connected to the mind as it is more feasible for our brain to remember something if it is communicated through a story. As indicated in the first paragraph the production of stories is not perceived as extremely costly while Buckner and Rutledge (2011) broached the cost-effective power of stories. The monetary value of stories has been tested in an experiment by the name “*Significant Objects*” designed by Rob Walker and Joshua Glenn. In their opinion although the perception of each individual about stories is subjective stories’ value though can be computationally estimated. Therefore, Rob Walker and Joshua Glenn decided to accompany with a story various items which have been listed in Ebay for sale. The results were quite encouraging as objects whose overall estimated worth was approximately 128.74\$ were sold for the significant amount of 3,616.51\$ (Significant Objects: About). To sum up, effective storytelling enables emotional connection between the organization and its stakeholders, creates a continuous narrative about organizations past, present and future, offers a sustainable competitive advantage between the organizations and its competitors, has computational value, and depicts organizations reality in a simple and value-laden manner. To sum up, the strategic implementation of storytelling as a mean of advancing organizational purposes is generating interest from academia and corporate institutions. Still there is no considerable scholar work which demonstrates the applicability of storytelling in high-technology environments.

As previously stated, high-technology companies often operate in a peculiar way which differentiates them from conventional organizations (Kelly, 1985) Therefore, it is by all means a highly ambitious task to implement strategic communication and to a greater extend storytelling for high-technology companies. Prior surveys argue that strategic communication is continually being ignored by high-tech firms as they are focusing mainly in acquiring a technological comparative advantage (Berry, 1998). Moreover, the implementation of a long-term communication plan, has often been questioned in terms of effectiveness as high-technology organizations operate in a fast-paced environment of constant changes (Berry, 1998; Easignwood et al., 2006; Sprague, 2012;). No to mention that, technological terms which are perceived as interesting and reasonable by IT professionals and engineers could be unfathomable for the general audience (Entrepreneur, 2017; Mohr, 2000; Mohr et al. 2010). The aim of this paper is to introduce storytelling and its numerous potentials to high-technology industry. One of the first steps of this exploratory process is to examine how the capabilities of storytelling which have been established in the third paragraph of this section could also apply in a high-technology environment. First of all, high-technology companies have a reputation of operating in an industry whose practices are often difficult to be comprehend by their general audience (Mohr et al., 2010) while storytelling is known for its ability to convert complex topics to simple ones (Barker & Grover,

2010; Thomas & Stephens, 2015). Therefore, not only by using storytelling high-technology companies would be able to communicate their products and services in an understandable manner but they will also facilitate internal communication practices among their employees. Furthermore, as reported by Edelman trust barometer (2018) the levels of trust towards corporate organizations have been decreased significantly. Not to mention that nowadays individuals are highly concerned about the protection of their personal online space due to recent scandals connected to Big Data, with the most known being associated with Facebook. Many attempts have been made by scholars to associate storytelling with a value laden power, as in their opinion storytelling does not solely facilitate the exchange of information among people but it also connects those information to specific values (Barker & Grover, 2010).

Hence high-technology organizations should focus on a communication process which is able to adapt in every up to date status quo and convert the complicated issues addressed to simple, comprehensible by the public. As stated by Andy Grove, former chairman of Intel, high-technology companies should start taking into account their consumers' needs, problems and also background. In other words, technical people and non-technical customers have to be at the same page and the best way to achieve that, is through stories (Mohr et al., 2009). More precisely, high-technology companies could take advantage of stories in order to generate intrigue and enthusiasm for a new product or service by addressing an everyday problem and provide a solution relevant to their business. According to Chris Wall, former Vice Chairman of Ogilvy & Mather, it is more preferable to describe what a product could offer to the consumer rather than how this product functions. A great example of avoiding complex technological terms and focusing on how this device could facilitate their consumers' lives is the Motorola print ad "*I'M SPOILED*", which narrated the reality of the Internet of Things in two pictures and four words. This advertisement depicts the three parameters communication experts should consider, before they attempt to cooperate with a technology firm, simplicity, focus on problem-solving, avoidance of technology terms.

The purpose of the section Corporate Storytelling is not only to provide a clear overview on the position of storytelling in corporate world and how high-technology companies could benefit from it to the fullest but also explore how storytelling could benefit from the evolution of technology in the area of communication. Although this approach is interesting, it has been poorly investigated by academia while the most of the literature has focused on the association of digital storytelling and how it could be implemented in the sector of education. The revolution of Big Data though welcomes a new approach which encourages the creation of more personalized stories (Guardian, 2013). More information on this topic will be provided in the sub-section *4.3.5 Storytelling Guide/Know your audience*.

### **3. Methodology**

The purpose of this chapter is to provide a sufficient description of the qualitative approach and to a greater extent the measures which have been selected to answer the research question “*Strategic Communication in High-Technology Industry: How storytelling with a strategic communication approach can be applied in a high-technology environment?*” and the sub-questions. More precisely, it states the method which has been used, as well as detailed information of the sample and the sampling technique. Additionally, the operationalization process and the analysis of the data will be covered.

The research was guided by these 3 research questions:

- ❖ What is the perceived value of strategic communication with high-technology organizations?
- ❖ Is the building of a strong brand relevant in business to business (B2B) high-technology markets, as part of the strategic communication process?
- ❖ How strategic communication professionals from high-technology organizations could benefit from storytelling in their journey to commercial success and stakeholder engagement?

#### **3.1. Research Design**

This chapter is designed to state and justify the selection of research method, with regards to provide suitable answers to the research question and sub-questions respectively. The aim of this paper is to explore the motives and best practices of high-technology organizations towards strategic communication and to a greater extent storytelling. Since the character of the study is rather explorative with no intention of proving certain hypotheses a qualitative research method seems to be more appropriate in comparison to quantitative (Argenti & Forman, 2002). To begin with, a qualitative approach brings out the depth and richness of data retrieved while offers a thorough understanding of the topics under investigation (Duffy, 1986; Patton, 2002). Furthermore, due to the flexibility of a qualitative method it will be easier to include newly added insights from the interviews in the theoretical framework (Duffy, 1986).

This research project examines the perceptions of employees of high-technology companies by exploring the why and how behind the most common practices of high-technology industry. From a strategic communication angle. According to Patton (2005), interviews enable the research to detect the motives behind specific behaviours and actions. A semi-structured qualitative interview is a unique way for exploring the experiences, motives and points of views of the population under investigation. Such a method can also highlight how employees in high-technology organizations perceive

storytelling in their own words (Kvale, 2007). Moreover, the current study focuses on the interpretation rather than the measurement of certain attitudes (Patton, 2002; Ross & Matthew, 2010). Hence, an in-depth conversation under the form of interviews will be applied.

### **3.2. Sampling**

Data gathering is central in research process, as the data retrieved are meant to provide a deeper understanding of the theoretical framework (Bernard, 2002). Qualitative research has often been accused of catering biased results (Bryman, 1988; Yin, 2009) thus the selection of a well-defined study population is crucial for the outcome of the study (Carr, 1994; Goodrick, 2014). The population under investigation was selected and recruited with the help of purposive sampling. This non-random technique is able to provide interviewees, who are in a position to share the information the researcher is interested in, by virtue of their high levels of knowledge or experience (Bernard, 2002).

According to Elliston et al. (1985) organization is the most suitable unit of analysis for explorative studies. For the purposes of this study the area of high-technology instead of information technology has been chosen as it is a broader concept, with a wide range of industries and allows further flexibility in terms of company selection. The selection criteria have been formulated based on the characteristics of high-technology industry as given by Roger & Larson (1984). High-technology industry is known for a. its skilled employees b. a worldwide market to distribute its products and services c. high levels of change and innovation within the organization. Although according to Sprague (2012) computer and semiconductor industries are the centrepiece of high-technology, the majority of scholars argue that the range of high-technology is no longer limited to computers but is applicable in multiple areas such as information technology (IT), telecommunication, computer hardware, computer software and consumers' electronics (Easingwood, 2006; Mohr, 2000; Mohr et al. 2010). The reality of high-technology industry being present in the area of telecommunication justifies the choice of Vodafone to be included. Finally, the selection process has been influenced critically by the unforeseen challenges of recruiting process and the quality of interviewees per se. The selection of companies includes some of the largest international high-technology organizations (Cisco, Microsoft, Amazon, Signify, NEC, Vodafone), smaller specialized companies (Rambus, Logica) and two unsung heroes whose technological achievements have not led yet to a massive commercial success (Vonq, Apifon, Prognosis). The selected companies are also in harmony with the 3 criteria of case selection provided by Eisenhardt (1989). Based on these criteria, a case under review should be able to present economic growth, operate either in U.S or Europe and is already, even to a small extend, recognizable. In qualitative research, to ascertain a sufficient sample size the process is less standard (Malterud, Siersma

& Guassora, 2016). Eisenhardt (1989) supports that the ideal number of participants should be between 4 and 10, because less than 10 interviews are unlikely to assure representativeness while more than 10 complicate the study process. On the other hand, Guest et al. (2006) indicates that, in cases of homogenous groups, 12 interviews are adequate to reach saturation. For this project 11 participants for a semi-structured interview either via phone and Skype or face to face were recruited. The use of camera was mandatory in every case, except for the phone interviews so that signs of non-verbal communication would be detected. This number has been determined, due to a combination of available resources and time. Organizational informants occupy various positions within the scope of communication function (marketing, branding, content writing, client service and sales) while most of them are likely to influence the decision-making process within the organization. Provided that the sample was selected on the basis of industry, that of high-technology, and the department, that of communication related, demographic questions have been excluded from the sampling process as they are not considered of extra value for the outcome of this specific study. It is quite interesting though to observe that the number of men and women who agreed to provide an interview is merely equal (5 men and 6 women). These findings are in contradiction with previous literature which argues that the field of corporate communication is mainly occupied by women (Ryan & Haslam, 2005). Finally, the association between the position and the candidate's age is worth mentioning since 6 interviewees belong to generation X and 5 are millennials. This substantiates previous findings about ageism in high-technology industry (Business Insider, 2015). At this point I would like to clarify that both Herma Volwater and Eva Zahrawi Ruiz no longer hold a managerial position in Logica and Vodafone respectively, as they work as communication consultants although. Their life long experience in the sector of high-technology and their insights from their previous positions though, rendered them as suitable candidates for this research project. An overview of both organizations and interviewees is available in Appendix under *Table 2: Companies Overview & Participants' Information*

Due to the fact that, most of the participants hold a managerial position in the company and their time is limited an impersonal approach through e-mails and LinkedIn messages proved to be ineffective. Therefore, the recruitment process was mostly based on networks of acquaintances and referrals, an approach which is common in methodology as snowball sampling (Browne, 2002). More precisely, the researcher relied on her professional contacts from Erasmus University, Right Brains and Signify while in some cases asked for a referral through mutual acquaintances. The recruiting process has also been facilitated because most of the participants were genuinely interested in the topic of the survey and therefore willing to contribute. For clarity purposes an example of the message which was sent to the prospective candidates after the first introduction can be found in Appendix under *Table 3: Sample of Interview Invitation*.

### 3.3. Operationalization

The operationalization process is a reflection of how the theoretical framework has been applied through the various stages of the survey. An interview guide was designed to cover key areas of this study (i.e., high-technology industry, strategic communication, brand, storytelling). Because of the explorative character of the study a semi-structured style is provided. According to Bernard (1988), a semi-structured interview guide allows the researcher to prepare the interview questions beforehand. Furthermore, interviewees are free to express their opinion in their own terms (Bernard, 1988). Therefore, the interviews were articulated in advance, but often veered from the initial design. Although key questions have been raised for relevant topics to be investigated, the wording and sometimes the order of questions were ad hoc (Kvale, 2007; Patton, 2002). The lead of the interview was offered to the interviewee, who was allowed to rule the length and direction of conversation based on his area of expertise and interests. Thereby, the participant would feel more comfortable and would participate actively in the interview process (Longhurst, 2003). Furthermore, a semi-structured interview offers extra space for the serendipitous (Argenti & Forman, 2002).

During the introduction and with the purpose of creating a more intimate atmosphere the interviewees were asked to introduce themselves while they were also informed of the interview process. The first set of questions is focused on the value of strategic communication as perceived by communication professionals and third parties. The second set of questions explores the motives and ways of acquiring brand awareness within a high-technology business to business (B2B) environment. Finally, in the third set of questions the idea of storytelling is introduced, and interviewees are asked for their definitions and further observations on that phenomenon. Since the idea of storytelling is central to this study it merits more discussion. The interview guide is also available in Appendix under *Table 1: Interview Guide*.

All the interviews were conducted in English except one which was conducted in Greek and has been translated to English. The average time of interviews is 40 minutes, while the shortest interview lasted 29 minutes and the longest 54 minutes. All interviews held during April and 2 of them on May while all the participants were aware of the confidential character of the survey. In all cases participant's consent to be recorded was obtained.



### 3.4. Data Collection and Analysis

After the completion of transcription verbatim, the next step of the study process is the analysis of the retrieved data. The process of data analysis is central to qualitative research (Maguire & Delahunt, 2017). The process of data analysis is central to qualitative research (Maguire & Delahunt, 2017). The methodology approach finds itself within the tradition of thematic analysis, which is perceived as the most relevant applied method of analysis in qualitative research (Braun & Clark, 2006). The flexible character of thematic analysis allows the researcher to focus on specific concepts within the data and facilitates the classification process of the recurring themes (Braun & Clark, 2006). Moreover, thematic analysis enables the transformation of plain information to valuable findings, based on the literature review (Boeije, 2010; Braun & Clark 2006). A theme is described as an abstract unit which offers identity and meaning to a specific experience and pattern (Braun & Clark, 2006). In order to make the most of thematic analysis Owen's criteria of theme definition have been applied: repetition, forcefulness, recurrence (Sapleton, 2013).

In this paragraph the process of data analysis will be demonstrated based on the framework of 6 steps provided by Braun & Clark (2006). The first step of data familiarization was accomplished due to the repetition of questions during the interview process and during the period of interviews' verbatim transcription (Braun & Clark, 2006). The second step incorporates the transformation of raw data to specific codes. Line-by-line coding has been applied in order to analyze, compare and categorize the findings (Boeije, 2010). During the process of themes' identification, the interviewees' observations, approaches and experiences were gathered. Once a specific set of themes has been raised the processes of themes' classification commenced. The final step of analysis and report creation can be applied after the complete development of all the recurring themes. At this step, verbatim quotation from the interviews will be incorporated in the final report in an attempt to provide further understanding on certain topics and a sense of liveliness.

In terms of *validity*, the themes chosen, provide a sufficient demonstration of this research's findings. *Authenticity* had been accomplished by documenting the viewpoints and observations of people who work in high-technology environments (Neuman, 2014). Finally, *reliability* focuses on the avoidance of repetitive patterns among the interviews (Newman, 2014). As a result, the thematic analysis offers a coherent, succinct and well-structured approach across the themes.

## 4. Results

Before interpreting the data retrieved from the interviews it would be helpful for the reader to restate the main objectives of the current project. This paper introduces the concept of storytelling in high-technology industry from a strategic communication angle. The findings are retrieved from in-depth interviews. In total, eleven communication professionals from high-technology organizations were interviewed about their individual journey within the company with regards to strategic communication, branding and storytelling.

The last decade strategic communication has become the watchword for both business and academic community (Argenti et al. 2005; Argenti & Forman, 2002; Falkheimer, 2017; Langer & Thorup, 2006). In line with this, branding and storytelling emerged as two new concepts to complete the idea of strategic communication imperative (Langer & Thorup, 2006). Therefore, a process approach of three phases has emerged from the interview findings. The first phase focuses on the perceived value of strategic communication both by communication practitioners and third parties within the organization. The second phase explores whether the building of a strong brand is feasible especially in the area of business to business (B2B) markets. After having acquired all the information needed about strategic communication and branding in high-technology industry it is now time to explore specifically the applicability of storytelling within high-technology organizations. More precisely, the third phase explores the general attitude towards storytelling, how familiar are the interviewees with the concept of storytelling, storytelling drivers, storytelling best practices and the hot-button issue of storytelling and gender diversity within high-technology industry.

### **4.1. Phase 1: The perceived value of strategic communication as stated by communication professionals.**

The past few years, strategic communication has been established as an essential apparatus in the game of differentiation between organizations (Argenti et al., 2005; Argenti & Forman, 2002; Conrad & Terry, 2016; Falkheimer et al., 2017). This is in complete agreement with the findings of this study as 11 out of 11 interviewees acknowledge that strategic communication is of the utmost importance within a company, especially in their journey to commercial success *“No matter how good is the product somebody has to buy it. Therefore, marketing and strategic plan of communication are essential” (Chris Stergiopoulos, Marketing Manager, Apifon).*

i. Strategic Communication Drivers

The findings of the research also provide a detailed explanation of the reasons why high-technology organizations should focus on strategic communication. First of all, due to the massive Internet culture in the 90s and 00s people started getting better familiarized with technology. In line with this high-technology organizations realized that consumers now are part of the decision-making process within the organization, a reality demonstrated in literature as *consumer sovereignty* (Argenti et al., 2002; Pitt et al., 2002). According to one interviewee, the last 40 years those changes highlighted the importance of adopting customer related approaches *"There have been so many changes in the technology field in the last 40 years and it became so much more central to people's lives, that high-tech companies need to have a strategy to communicate with customers, so that customers would understand who they are, what they do and what benefits they offer"* (Jonathan Weinert, Technology Writer, Signify). Secondly, as previously stated in the literature, growing organizations also develop in terms of complexity, therefore they need a clear communication plan which will be transmitted to all the company's stakeholders (Argenti et al., 2005; Forbes, 2015) *"The suppliers would need to change their message so that someone who is not an IT professional but the CEO of a mid-sized transport company or a mid-sized production company would understand their message"* (Herma Volwater, former Marketing Director, Logica). Finally, consumers sometimes hesitate to buy a high-technology product or service as they are not entirely sure if they understood correctly the benefits of this product or service (Honburg, et al., 2009; Mohr, 2000; Mohr et al., 2010). Therefore high-technology organizations should communicate their products in a way that perspective customers will understand the extra value this product or service will bring to their lives *"The importance of strategic communication is crucial to make sure that the value of such technologies is being described in such a manner that the potential customers understand the value of certain technologies"* (Ronald Schapendonk, Marketing Director, NEC). More specifically, the majority of interviewees realizes that they operate in an industry whose products and services are either completely unfathomable to the general public or at least difficult to be understood. Thereupon, there is an imperative need for the creation and implementation of a consistent communication plan in order to reassure that their target audience is in a position to understand, if not everything the main applications of their products and services. *"Yes! I think they definitely value that because you need to make your message understandable for the consumers, especially for your target group and often high technology companies have high tech products or high technology services which can be very complex and you need to make sure that people can easily understand what is offering and why they should buy it and especially highlight the benefits of the product or the service but in an easy to understand way"* (Rinske Lichtendahl, Marketing Support, VONQ). Issues discussing the complications of high-technology industry and how strategic communication could be applied will be further elaborated in the sub-section 4.3.3 *Drivers of Storytelling*.

ii. Strategic Communication Imperative: A critical overview

Despite the overall positive attitude towards strategic communication, during the interviews the reasons why high-technology tends to neglect strategic communication have been demonstrated as well. This is consistent with 5 out of 11 participants who are in favour of strategic communication, although they perceive the overall likeliness towards strategic communication in a more critical manner. To begin with, as put forward by Berry (1998) the evidence emerged from the data confirmed that high-technology companies would focus solely on how to create a competitive technological base and they usually forgot to communicate about it. Moreover, in their point of view, building a quality product was good enough and the markets would respond positively even without a strategic plan of communication. *"In the past we believe that when we make a kick ass product the market will speak for itself, the market will see the value for itself. It wouldn't actually have to sell it. We don't have that anymore, no matter how kick ass our product is, we will still have to sell it"* (Cathy Boers, Global Client Service Manager). Secondly, high-technology organizations often question the effectiveness of a long-term communication as they operate in an industry of constant changes (Berry, 1998). As stated by one interviewee preparations carried out for months were suddenly completely useless as a new feature has been introduced in the market. *"I was at Vodafone at the time where suddenly WhatsApp started and that transformed our whole industry and our whole company. The business model I have been you know data phone and text you know SMS, and suddenly from one day to another the whole SMS end of the business was kind of gone, WhatsApp came in"* (Eva Zahrawi Ruiz, former Brand Director, Vodafone). Finally, small and mid-sized high-technology organizations do not have the resources to invest in a communication plan from the beginning (Berry, 1998). It has also been suggested that the implementation of a coherent communication plan is never part of the founding process of a new company, but it is included in the next steps of their business plan, provided that the newly born organization is able to support every possible communication proposal financially. *"Most of the money are being invested in marketing after the company has already solved other problems and became viable"* (Christos Stergiopoulos, Marketing Manager, Apifon). As previously mentioned the culture of high-technology industry generates considerable academic interest, while most of these articles date back to 1980 and 1990. What is more interesting though is those papers' findings are still relevant with today's standards.

The positive behaviour towards the importance of strategic communication of the study population should not come as a surprise as the subjects under investigation operates communication related departments within the high-technology organizations which have been selected for this project. Therefore, further investigations are needed in order to explore how various departments within high-

technology organizations perceive strategic communication. This aspect will be dealt with in more detail in section 5.2 *Recommendations for Future Research*.

#### **4.1.1. The value of strategic communication within high-technology organizations as perceived by third parties**

##### **i. Communication Professionals vs. Engineers**

One of the main characteristics of high-technology industry is the high-levels of skilled employees (Roger & Larson, 1984) while according to Sprague (2012) a conflict between engineers and marketers or sales people is inevitable. The aforementioned statement, is in complete agreement with the study's findings as of the study population 6 participants reported that the department which values the least strategic communication is the Research & Development section. The generally accepted use of the area Research & Development usually refers to engineers and web developers. There are several possible explanations for this outcome. As indicated by Berry (1998) most of the employees in high-technology industry strongly believe that the development of quality products and services is good enough to create customer favourability towards a company. This concurs well with the opinions of the interviewees. *"In Dutch we have a quote which says "Good wine does not need to be dressed up, it sells itself" and product engineers or technical engineers believe that what they do is good enough...it sells itself... (Herma Volwater, Marketing Director, Logica)*. The other reason is that the Research & Development department is not exposed to any communication procedures with potential customers, and therefore they underestimate the value of strategic communication. According to Cathy Boers, Global Client Service Manager for Cisco Systems, this should not be an issue as *"we do not expect developers necessarily to have a really good market story, we expect them to create a kick ass product so we can sell it to the market"*. Sprague (2012) also states that engineers often accuse marketers and sales people for making unrealistic promises to customers in order to increase the company's sales *"Sales is dirty...communication is dirty...marketing is dirty or manipulation, they really don't understand it"(Herma Volwater, Marketing Director, Logica)*. Another possible explanation for this outcome is that the creator of a product or a service has a sense of ownership towards it. As a result, they can be rather sensitive on how this product or service will be communicated externally by the communication departments. *"When you have created a product or a service and you have been busy with it for a year or two and then you have to sort of give it in the people that are going to be doing the communications is very difficult for them because it's their baby and now I am giving it to you and then you will give it a face and maybe that's not the face that they imagined."* (Eva Zaxrawi Ruiz, Brand Director, Vodafone).

Finally, when the topic about strategic communication receiving a low status within the organization has been broached it was interesting to observe that all the interviewees developed a defensive attitude towards their profession. The raise of voice and use of *we* and *us* are characteristic signs of this behaviour.

ii. All employees should have the same voice

Interestingly 3 out of 11 respondents refused to name a specific department as in their point of view every department within the company should be treated equally. *I do not think that there are departments which do not value strategic communication. We are a team and we have the same purposes (Christos Stergiopoulos, Marketing Manager, Apifon)*. The most striking observation to emerge from the data is that every employee within the company is also a communicator of the organization externally. Therefore, the Research & Development department should value strategic communication as it is also their responsibility to act as organization's ambassadors to the multiple stakeholders. *"I don't think that any department questions the investments in strategic communication because communications and marketing are not solely at the marketing or sales department it's a responsibility for the entire organization. Besides every employee is ambassador and communicator of the company's message" (Ronald Schapendonk, Marketing Director, NEC)*. This is consistent with a survey conducted by the Weber Shandwick and KRC Research (2014) which argues that satisfied employees are company's best advocates in the external world. Remarkably 2 of the participants suggest that it would be useful for the whole organization both externally and internally if the members of Research & Development department got exposed to communication training courses *"If anybody is standing in front of a customer for any reason, they need to understand what the communication strategy is. Then they need to have some if not training at least experience in coaching how do to that properly"* (Jonathan Weinert, Technology Writer, Signify). This concurs well with Darling and Dannels (2003) who support in their paper that engineers have asked for educational assistant from communication specialists. It has also been occurred that the lack of communication skills from the side of engineers can lead to fewer business deals as the customers are not entirely aware of engineers' level of knowledge. *"Many organizations do not know how capable our engineers are so they are not willing to pay a lot extra and they say we can manage on our own we do not pay for this benefit for the extra knowledge of the engineers we solve the problem on ourselves and then the engineers of the companies have to take weeks and weeks to find the solutions of the problem they are looking for and one of my colleagues knows it in one hour for instance"*(Symonne Swaag, Client Service Manager, Microsoft). As the aforementioned topic has been explored only by a limited body of literature, the relationship between mainly engineers and communication should be further validated by academia. More specifications will be given in section 5.2 *Recommendations for Future Research*.

iii. Strategic Communication can be costly

Interestingly a small minority, 2 out of 11 interview participants, indicated that the department which values the least strategic communication is the finance team. Undoubtedly, the finance department is among the most essential apparatus within the organization as they are responsible for acquiring the funds every organization needs and managing the revenue and expenses of the firm. On the other hand, the communication and especially the marketing department are focusing on actions (campaigns, case studies, PR events, social media, press releases etc.) which require a specific budget to be approved by the finance team. *"Probably finance because you have to invest in marketing and campaigns and finance don't like that"*, (Rinske Lichtendahl, Marketing Support, VONQ). This statement is in agreement with literature which states that high-technology organizations, especially the small ones, often lack the resources to invest in a long-term strategic communication plan (Easingwood et al. 2006). Therefore, it makes sense for some finance departments to be overprotective on the expenses of the firm. Not to mention that VONQ, belongs in the middle-sized firms of the sample therefore spending money of strategic communication plans can still be an issue within the organization.

**4.2. Phase 2: Building of a strong brand**

Discipline argues that brand is an important asset for organizations which operate in both B2C and B2B markets (Argenti & Forman, 2002; Lynch & Chernatony, 2004). Contrary to expectations though, half of the interviewees are not entirely convinced of the extra value a brand can bring to a company which operates in a B2B environment. *"A lot of people think of FONQ with an F, which is like a company for furniture (laughing) so they are like "You are FONQ, I know that. No, the other one, the one that no one knows" Yeah that's it because we are only focusing to B2B markets, so consumers don't know, also it is not what we want to reach because that is not necessary"* (Rinske Lichtendahl, Marketing Support, VONQ). In general, they believe that it is not necessary to invest corporate sources such as time, personnel and money to communicate their products in a broader audience who is unlikely to be interested in the first place. As stated by one of the interviewees in every communication process there is a sender and a receiver, so if the sender decides to send a message which is of minimum interest to the receiver, the receiver will never accept it. *"They understand as a sender that if they send you a message about technology about products it wouldn't arrive because your interest in this field is minimum, and they understand I suppose, so why they would at all try it"*, Herma Volwater, Marketing Director, Logica). It is interesting though to observe that 2 of the respondents who doubt that brand awareness will bring extra value to the company, operate in B2C markets. Notably, one individual highlighted the different communication approaches companies which operate in B2B and B2C markets should follow. More precisely, it has been stated that although the majority of B2C organizations is focusing in mostly emotional marketing and highlighting how their products will

facilitate people's lives, B2B companies are paying more attention into highlighting the product specifics, and the technology under which the products have been built. *"In B2C you have to convince the customer to buy your product in order to have a better quality of life. While in B2B you have to focus more on company specifics. In B2B we focus more on the product and less on the story, because there is more cash flow between the companies"* (Dimitris Iakovakis, Founder, Prognosis).

i. Drives of brand awareness in business to business markets (B2B)

On the other hand, nearly 50% of the interviewees would consider brand awareness as equally important for both organizations which operate in B2B and B2C markets. This point of view is consistent with previous academic literature which abolishes the classification between B2C and B2B approach (Lynch & Chernatony, 2002; Honburg, et al., 2009). Interestingly, a closer look at the data retrieved from the interviews raised question of the *type* of brand awareness high-technology companies which operate in B2B markets would be interested to. Based on the data yielded by this observation 3 different types of brand awareness have been emerged. Firstly, there is a connection between brand awareness and the mission of high-technology organizations in terms of Corporate Social Responsibility (CSR). *"A business mission and CSR practices should be communicated even if the company operates in the B2B market. I think now it's really a combination of having great products but also having some kind of social conscious"* (Jonathan Weinert, Technology Writer, Signify). As Du et al. (2010) point out stakeholders' behaviour tends to be more positive when they are completely aware of the organizations CSR activities. Especially millennials, who are perceived to be an extremely socially aware generation and whose purchasing behaviour is also being influenced by the level of commitment in social and environmental topics CEOs of large organization are engaged to, a newly appeared phenomenon, known as CEO activism (Weber Shandwick, KRS Research, 2016). *"It's super relevant when you have for example Social Corporate Responsibility on your website or you have gender equality policy on your website"* (Lyubima Petrova, Marketing Specialist, Rambus). Provided that high-technology organizations are in a position to impact meaningfully our everyday lives and offer solutions to various difficulties (Mohr et al., 2010) the CSR policies of high-technology companies coupled with the reality of their CEOs speaking out (e.g. Tim Cook CEO of Apple and Jeff Bezos founder and CEO of Amazon) should be further explored by academia. More details on this subject will be provided in section 5.4 *Recommendations for Future Research*. Secondly, there is a connection between brand awareness and employee engagement. In a constant search of new talented human capital for high-technology companies, employer branding and Human Resources marketing management are perceived to be among the most prevalent strategies in employment sector (Gaddam, 2008). *If you were looking for a job you would be interested in their image in the market, you want to know if it is a stable company, or a start-up or whatever, you want to know about let's say about the culture and about the way people grow up there, their career development, you want to know about*



*their salaries (Herma Volwater, Marketing Director, Logica).* Finally, a small minority suggest that the products and services of high-technology organizations who operate in B2B markets should also be communicated widely due to the importance of a deal in B2B world where the stakes are much higher *“In the B2C world one deal could be 1 phone while in the B2B world one deal could be 10,000 phones”.* (Cathy Boers, Global Client Service Manager). As stated in literature the risks of buying behaviour in business to business (B2B) markets are significantly higher in comparison to business to consumers (B2C) approaches (Lynch & Chernatony, 2002). One possible way for companies to achieve brand awareness through their products is to start engaging with their audience through educational material. In other words, become thought leaders in a specific topic. *“That is why are creating those guides and we are educating people in our products, because at some point maybe they will be also part of a company and at this case it is possible to want to cooperate with us.”* (Lyubima Petrova, Marketing Specialist, Rambus). In general, approximately half of the interviewees are highly concerned on how to become thought leaders in their sector and words such as *thought leadership program, top of the mind, educate your audience and use white papers* have been detected during the transcription process. This also lends support to previous findings in the literature, Frederick Reichheld and Phil Scheffer (2000) showcased the example of Vanguard Group, a mutual fund company which spent more than 100 \$ million to develop their website in order to provide valuable educational information to their customers instead of solely advertising their products. Moreover Easingwood et al. (2006) introduces the concept of *broadly based market preparation* as an early stage communication process for educational purposes. In general, approximately half of the interviewees are highly concerned on how to become thought leaders in

The single most striking observation to emerge from the data and which has been pointed out only by one participant is the introduction of a new branding approach that of human to human (H2H) *“I don’t believe in the separation between B2B and B2C a responsible person, a decision making person in the business is also a father and is also a person the whole day so why are we only addressing them as business people (Eva Zahrawi Ruiz, former Brand Director, Vodafone).* This statement has been confirmed by previous findings in the literature. More specifically, apart from B2C and B2B approaches H2H, an abbreviation for human-to-human, appeared in business scene. This new perception focuses merely to the human side of business while it supports that business communications is something that takes place between humans (Nummela, 2016). The main idea behind H2H is to make business simpler, more human and more personal. When the approach is more human the business relationship tends to be more personal and the element of trust, whose importance has already been evaluated, is more likely to be developed (Kramer, 2014).

#### 4.2.1. Communication of company's values as part of corporate identity

As a response to corporate scandals which took place during the 80s, many corporations started writing ethical codes, in order to make widely known their ethical virtues and to create a new moral image (Stevens, 1999). According to Betsy Stevens (1999) every organization's ethical expectations should be clearly communicated both externally and internally. Furthermore, many scholars support that by publicizing their mission organizations tend to generate more favourable actions by the stakeholders, by creating corporate relationships based on trust (Du et al. 2010). Needless to remind that the building of a solid brand based on company's values acts as a reminder in times of crisis (Argenti & Forman, 2002). These findings in academia concur well with the data retrieved from this question as 11 out of 11 interviewees consider the communication of company's values as a crucial part of the communication process. *"It's all about the values they bring to the companies with their products"* (Symonne Swaag, Client Services Manager, Microsoft).

The evidence retrieved from the interviews highlighted three reasons why high-technology companies should publicize their values. First of all, on May 25<sup>th</sup> General Data Privacy Regulations (GDPR) went into effect and reinstated consumer's control over their personal information (<https://www.eugdpr.org/>). The recent GDPR regulations coupled with the recent Facebook scandal are welcome news for the general audience who was highly concerned of the threats of *"data extractivism"* (Guardian, 2018), but they can also be quite challenging for the welfare of high-technology firms (Forbes, 2017). Hence, in times of trust crises, a huge trust drop has been reported for 2017 (Edelman, 2017), it is of great significance high-technology behemoths to take a step back and remind to their audience the values which encouraged them to believe and choose those companies in the first place. *"Although the industry is represented as idealistic the traditional values of high-technology industry are being question especially due to recent scandals therefore, communicating their values is very very important nowadays"* (Jonathan Weinert, Technology Writer, Signify).

Secondly, in a high-technology environment of constant changes customers usually struggle to follow all the developments because of the innovation dynamism (Acker & Jacobson, 2001; Berry, 1998). As an answer to the fast-paced environment of high-technology industry, many researchers argue that the timeless value of a brand name renders it a relevant asset for every high-technology organization (Acker & Jacobson, 2001; Leslie de Chernatony, 2002:). In their analysis, Joanne Lynch and Leslie de Chernatony (2002) support that brands which are based on intangible characteristics like trust, reputation, reassurance and responsiveness are more likely to last longer and avoid competitive erosion. Therefore, in the game of differentiation among high-technology organizations the creation of a strong brand name with clear values to be communicated would act as a meaningful bond between

the organization and their consumers. In the flow of discussion about the importance of values' communication both internally and externally words like *trust* and *legacy* have been expressed by the interview candidates. *"Through their values companies create a legacy and this is what truly connects them to their consumers"* (Dimitris Iakovakis, Founder, Prognosis). The correlation between trust as an intangible characteristic of a strong brand name and the value-laden power of storytelling will be further evaluated in sub-section 4.4.3 *Reasons behind the adoption of storytelling*.

Finally, a closer look at the data retrieved from the interviews, revealed how important is for high-technology companies to communicate externally the human element who is responsible for the creation of such innovative products and services. *"We initially want to communicate the human side of the company and then the product"* (Chris Stergiopoulos, Marketing Manager, Apifon). In other words, in the impersonal world of high-tech behemoths it is of great significance for people to know that talented, passionate and creative individuals are working together to make the world a better place. *"Yes, I think it can help to be more personal to the target audience"*, (Rinske Lichtendahl, Marketing Support, VONQ). The communication of human presence in high-technology industry has also been reviewed by previous academic papers, although not to a great extent (O' Connor & McDermott, 2004).

### **4.3. Phase 3: The applicability of storytelling in high-technology industry**

As already mentioned in the previous sections this paper serves as an introduction of storytelling in high-technology industry and to a greater extent seeks to address how high-technology companies and storytelling could join hands in a mutually beneficial way. Although both the sections referring to strategic communication and brand awareness in the area of high-technology are crucial for the completion of this study the most important part is dedicated to storytelling. To begin with, the perceived value of storytelling is tested. Since a positive attitude has been noted it was feasible for dive deeper and investigate more specific topics such as the level of storytelling knowledge, the reason behind storytelling welcoming attitude, the association between storytelling and gender diversity and finally list a number of suggestions for an improved storytelling usage.

#### **4.3.1. The perceived value of storytelling in high-technology industry.**

Nowadays, storytelling is among the most commonly discussed topics (Raugust, 2014; Schoppe, 2016). In response to this, the aim of this paper is to serve as an overview of the relationship between storytelling and high-technology organizations. Before the they why and how high-technology organizations would be interested in storytelling are answered it is important to clarify if high-technology organizations would be interested in storytelling in the first place. Therefore, although the

design of the interview guide is based on open ended questions a closed-ended question is also included *"Would you be interested in storytelling as a company?"*

Although an entire body of literature is dedicated to the study of high-technology industry, including the strategic implementation of communication (Berry, 1998; Easingwood et al., 2006; Mohr et al., 2010; Sprague, 2012) the case of storytelling in high-technology industry has been given little attention. Therefore, this paper serves as the backbone of a growing body of academic literature about storytelling in high-technology industry.

The answers emerged from the data are quite positive as 10 out of 11 interviewees responded that they would be interested in storytelling, while many of them explained that storytelling is already a central part of their day to day activities. For a better demonstration of employees' of high-technology organizations perception towards storytelling, the most characteristic answers given are provided below:

*"Yes, we do it at Microsoft, but I think we have to do it more so that we tell the story right not because we have to learn how to do storytelling but how to become top of mind" (Symonne Swaag, Service Delivery Manager, Microsoft)*

*"We believe in the value of storytelling because it is also cost efficient since the ROI will be huge in terms of what we initially spent" (Chris Stergiopoulos, Marketing Manager, Apifon)*

*"I think actually storytelling plays a big part in every priority" (Rinske Lichtendahl, Marketing Support, VONQ).*

*"Yes, and they are all doing that" (Ronald Schapendonk, Marketing Director, NEC)*

The welcoming behaviour towards storytelling could not be considered as ground breaking news since the subjects under investigation operate in communication related departments within the high-technology organizations which have been selected for this project. Therefore, as already mentioned in previous sections, further investigations are needed, in order to investigate how various departments within high-technology organizations perceive storytelling. This aspect will be further elaborated in section 5.3 *Recommendations for Future Research*.

Since the position of storytelling has already been established in high-technology industry my next step is to provide a specific storytelling definition, based on all the characteristics storytelling has been associated with during the interview process.

#### 4.3.2. A first definition of storytelling

Although most of the interviewees welcomed storytelling they were unable to provide a clear definition of this topic. More precisely interviewees confirmed that they are aware of the term storytelling but when they were asked to describe it, they seemed hesitant, talked with stutter and provided rather vain explanations. No to mention that while transcribing the interviews words such as *aaa... eeemmm.... well... let me think... how should I phrase it...* have been detected.

In recent years there has been a growing interest towards storytelling by multiple business organizations. Storytelling has been characterized as *recent trend* and *business buzzword* while it is one of the most popular discussion topics among TED talks (Raugust, 2014; Schoppe, 2016;). The general perception of storytelling as a communication panacea led many organizations to rush into adopting storytelling (Carr & Ann, 2011; Graham, 2017). The excitement though towards storytelling can be distractive and challenge organizations on how to use storytelling in a beneficial way (Schoppe, 2016)

*“People are not watching television, are not listening to the radio anymore, they are on social media. Ok what works in there? Stories! What are we gonna do? Stories that are beautiful, that touched the heart. Then they are gonna think actually we are going to clear our reputation. We people have a very bad opinion about big companies right? So how are we going to convince them, that we are actually good? Storytelling! Yeah and then it seems indeed like the panacea. Everybody has discovered now the golden key exactly this is the thing. Storytelling! (Eva Zahraui Ruiz, former Brand Director, Vodafone).*

Further observation of the data retrieved revealed that each interviewee perceives storytelling in a different way. First of all, 2 candidates indicated that they have received specific training on storytelling during their studies but also during their working experience. *“Yes, sure so I did a master in change management and consultancy which really focuses on story-based consulting. So, for me storytelling would be using examples, values going away from facts but really personalizing a certain story to sell your product, sell your services so whatever you want to sell” (Cathey Boers, Global Client Service Manager, Cisco Systems).* Whereas others associated storytelling with content marketing which is partially correct, although storytelling is perceived to be a content marketing technique. *“I think storytelling is about to create a solid story about your company in terms of your marketing effort, doing a lot of content marketing as well as writing white papers, blog posts and you need to make sure that the story line is very strong, strong beginning and convincing middle”. (Rinske Lichtendahl, Marketing Support, VONQ).* Some of the candidates instead of explaining what is a story they

connected storytelling to specific characteristics and explained the perks of storytelling usage, which is again partially acceptable. *“Storytelling of course is a way of how you utilize content to make sure that your stories are powerful and effective as a communication tool” (Ronald Schapendonk, Marketing Director, NEC).*

Despite the welcome behaviour towards storytelling both by the academic and business communities, previous scholars have failed to provide an efficient explanation of what corporate storytelling actually is. In my opinion the mass adoption of storytelling raised some complexities in a rather simple topic. Therefore, in order for the researcher to provide a clear definition about corporate storytelling they first have to explain what a story actually is and then create a bond between storytelling and the corporate world. The most striking definition to emerge from the data explains the elements of what a story consists of. *“Storytelling has been of all ages at all time it is a way in which...e... a message it’s transmitted to an audience that’s the only thing story is it has a hero or a heroine, it has a goal, there are stabling blocks on the way there are difficulties there are all sort of things there’s a bit of a thrill or tension in there it should be made attractive but storytelling was around when...when... you when there was no written word that’s the way the elders told the youngsters about the tribe so storytelling has been around a long time” (Herma Volwater, former Marketing and Sales Consultant).*

Despite the gap in literature these findings add substantially to a deeper understanding of storytelling. Therefore, in an attempt to provide efficient explanation about the concept of storytelling, all the definitions given by the interviewees have been gathered and unified. Therefore, according to this study’s interviewees storytelling is *“the art of narrating stories. A story has a hero or more, possibly a villain (beginning) some challenges (middle) and a goal (end). In day-to-day business activities storytelling can be an everyday story, an example and a narration about a role model while it can be applied in social media, blogs, newsletters, white papers and case studies. Storytelling can be taught and it would be quite helpful in areas such as internal and external communication, content marketing, sales, consulting and change management.”*

### **4.3.3. Drivers of Storytelling**

One of the perks of a semi-structured interviewee is that it offers extra space for the interviewees to delve more into a topic of their interest or provide extra knowledge (Argenti & Forman, 2002). For example, in the flow of discussion interviewees associated storytelling with certain characteristics and explained why they perceive it as a valuable communication technique without being asked to. For purposes of clarity all the characteristics have been gathered and listed as below:

i. Familiarization with technology

One of the key characteristics most high-technology organizations share is that they produce complex products and services which are usually incomprehensible to their target audience (Acker & Jacobson, 2001; Entrepreneur, 2017; Mohr et al. 2010). Consumers in both B2B and B2C markets do not feel comfortable with their purchasing decisions because they are not sure if they understood exactly all the benefits offered and therefore if these products and services will answer entirely to their needs (Mohr et al. 2009). As a result, all the interviewees agree that if consumers are in a position to understand if not all at least most of the benefits a product or a service has to offer they are more likely to buy that product or service. *"I think they'd be more willing buyers when they understand what the value of it purchasing a particular piece of technology will give them"* (Jonathan Weinert, Technology Writer, Signify). As a response to this challenge, Barker & Grover (2010) in their overview about organizational storytelling explain that due to their simplicity stories enable internal and external communication while they are likely to position a product or a service in a comprehensive manner.

ii. Humanization of technology

Undoubtedly, high-technology organizations influence critically our everyday lives (Turkle, 2008). In line with this, the overdependence on technology also known as *technological slavery* has been the subject of academic critique (Ellul, 1980). The case of Ibrahim Diablo (BBC, 2018) coupled with a series of high-technology scandals resulted in debate whether utopian world high-technology behemoths promised to their audiences is realistically applied. Although people seem to be concerned about the protection of their private data, they are not likely to stop using social media platforms and applications, a phenomenon which is acknowledged as *privacy paradox* (Baruh, Secinti & Cemalcilar, 2017).

*"People's personal information and their financial information is hacked and yet people still go on online and I think that it's, I don't think there is no returning back now so people are going to continue to use the internet, social media the way they have up until now because is the way like this is constructed now. So I don't know I think that they are maybe more. They maybe more questioning what is happening but yeah I don't think that people are...I think there's a very few people who are saying I've had enough of that, this is not for me I'm going to go (...) and just use cash I mean there*

*are people like that but I think they are the minority, the fringe.” (Jonathan Weinert, Technology Writer, Signify).*

On the other hand, many scholars support that technology is neither oppressive nor dangerous (Sprague, 2012) in fact high-technology organizations have the power to meaningfully change people’s lives by equalizing decision-making processes and making information globally available (Ellul, 1980).

*“Technology as a force for good. When I became the brand director for Vodafone, I believed that technology and telecommunications could have a very big role in doing good for people. I wasn’t making sunglasses or milk I was in an industry that could really have a good effect on people so I started to create that story. If I want to tell the story that I wanted to tell it would be about the beauty of technology, instead of the negativity of technology. The technical bits of technology... no I wanted to look at the beauty of it and how doing and being good actually could be very good for the business. (Eva Zaxrawi Ruiz, former Brand Director, Vodafone). A notable example of this, is the choice of one interviewee to showcase a specific product of their company, known as Pivothead Smart Glasses, through a story. “we now are developing apps for blind people in glasses where they can put glasses touch the glass hear in their ear at the other side of me sits a nice young woman she has blue shirt and she is smiling. The glasses tell a blind person who is sitting in the other side if somebody is walking and wears a yellow jacket or...” (Symmone Swaag, Client Service Manager, Microsoft). Therefore, storytelling’s value laden power (Barker & Gover, 2010; Denning, 2002; Gabriel, 2000; Soule & Wilson, 2002) could enable high-technology industries regain their users trust and remind why they used to support them in the first place. “The element of trust is present in every storytelling process”, (Herma Volwater, Marketing and Sales Consultant).*

These insights though are significant only if storytelling is aligned with actions which prove that high-technology companies are genuinely interested in retrieve their customers’ trust and loyalty. More information on the relationship between stories and actions will be provided in the sub-section 4.3.5 *Storytelling Guide*.

### iii. Stories are memorable

It has been stated that high-technology industry is a highly complicated with products and services often unfathomable to the general public (Entrepreneur, 2017; Mohr, 2000; Mohr et al., 2010) In response to this, the simplicity of stories has been highlighted many times in this paper both by scholars (Barker & Gover, 2010) but also by the interviewees. Stories are simple they have a clear structure and as a result they are easy to remember. This connects favourably with Pattern (2015) who indicates that



stories are attached to the mind. In more detail, our brain is more likely to remember something if it is attached to a story. *“Storytelling is the creation of a concept and a story in order to explain in a proper way to a proper audience a product or a service. Stories are memorable”.* (Chris Stergiopoulos, Marketing Manager, Apifon).

iv. Stories create empathy

The positive relationship between stories and the development of empathy among others has been suggested by two of the candidates. This is in good agreement with previous papers published in academia which argue that through stories people are in a position to experience the lives of other people (Ballester & Fernandez-Sabiote, 2016; Singh & Sonnenburg, 2012). *“Yes, because you, when you want to communicate with someone, you want to say something about how a product or a service will improve your daily life or your general quality of living, you have to give them an example that will make them, being in the shoes of someone who will get a better treatment in general when using our product. So, yes it’s an important thing”.* (Dimitris Iakovakis, Founder Prognosis). It is worth noting that both the two interviewees who indicated the element of empathy operate in areas of high-technology which provide solutions in the health sector. This should not come as a surprise as the value of compassion is typical in the communication between health professionals and patients (Monica, 1979).

*This moment I am at health care sector and I use other stories of other people, or other hospitals, health companies which use products from how they develop their products and how they can benefit of the hardware or software or whatever and that stories I take to my customers in order to let them decide if the solution another customer has made could be also a solution for them. give them a kind of OUAOU idea, is that possible techniques and all never thought of that, because when you are looking of a tech you think a kind of innovation you making and not every company what’s possible with technology. So we have to help them to give them an idea of what already has been made possible and also to help them create their own solution.* (Symonne Swaag, Client Service Manager, Microsoft).

In high-technology industry, consumers often doubt their purchasing decisions as they are not entirely sure if this product or service will add extra value to their everyday life (Mohr et al., 2010). Therefore, the element of empathy is more likely to facilitate the process of purchase if consumers can relate to other people who chose that product or service.

#### 4.3.4. Storytelling & Gender Diversity

Although high-technology organizations value their personnel and are in a constant search of advanced employees, women in high-technology industry are being constantly underrepresented (Statista, 2018). As a response to these quota companies announced that they are committed into achieving gender diversity inside the workforce (Undercover Recruiter, 2018). The aforementioned statement is in complete agreement with this research's results as 11 out of 11 interviewees embrace gender diversity within their organization. *"If somebody comes to our offices he will see that we are fighting gender diversity"* (Chris Stergiopoulos, Marketing Manager, Apifon).

The aim of this section is to investigate how high-technology companies could use storytelling in order to achieve gender diversity within the organization. In literature the reasons why, women are being underrepresented in high-technology environments have been elaborated. The first reason is because women start receiving unwelcoming messages from high-technology industry already from a young age. This is consistent with 3 out of 11 interviewees who argue that the *"problem"* starts even sooner at the age of 6 where most of the gender stereotypes are being formed, and boys and girls are connected to specific characteristics according to their gender. *"The problem starts when there are not too many female technology students"* (Herma Volwater, Marketing and Sales Consultant). A good idea is for female employees of high-technology organizations to visit schools and talk to little pupils about their everyday lives in technology industry in order to overcome specific stereotypes. More information will be provided in the next paragraph. *"Sometimes I go to schools to meet and greet with students with little children to tell them about my role why I like why it is good and you always see that little girls don't even think about techs and they always think tech is something for male they are convinced they can not do programming. It is not difficult to program your own games so much easier these days and fun"* (Symonne Swaag, Service Delivery Manager, Microsoft)

During the interview candidates have been asked to connect storytelling with the promotion of gender diversity within high-technology organizations.. Based on the information retrieved, 3 out of 11 interviewees focus on reshaping the perception of little girls about the world of high-technology industry. They also argue that one of the first steps of facing the *"problem"* of gender diversity is to *"normalize"* the position of women in high-technology industry in the eyes of little girls. This lends support to rhetoric of *"Girls who Code"*, a non profit organization whose aim is to offer computer-science education to girls between the age of 6 and 12 (<https://girlswhocode.com/about-us/>). In line with this one interviewee talked about a video they are preparing where they broach the topic of gender diversity within high-technology industry. *"We are creating a video where we ask small children about what is right and what is wrong in order to see that children of a specific age they*

*don't think that there is difference between them but the moment they grow, the world is telling them that there is difference and that the men are being put on a petal stone and the woman is a little bit behind them.*" (Lyubima Petrova, Marketing Specialist, Rambus) Furthermore it has also been suggested to even invite little girls to their offices in order to introduce them to the world of high-technology. *"Once a year we have Girls Day where we invite the little from 6, we organize making your own games and so that's one of the things we did, we had an event we had a disk jockey and well we tell them what we do at Microsoft and how nice it is to work in tech",* (Symonne Swaag, Service Delivery Management, Microsoft).

The findings suggest that storytelling approach could be also useful when showcasing the stories of female employees within high-technology organizations. Through those stories female employees can talk about their academic background, possible challenges they might have faced and explain what they like the most about working in high-technology industry. By sharing stories of their female employees high-technology organizations are likely to debunk myths about high-technology environments where only left brained men can survive. They will also create a *"If you can do it, I can do it"* feeling among women who are also interested in pursuing a career in high-technology industry. Driven by this philosophy Geke Rosier, founder of RightBrains, decided to interview female role models who succeeded professionally in high-technology sector, she collected their stories and published them for "RightBrains Career Guide" in order to inspire more women to pursue a career in high-technology sector. (<https://rightbrains.nl/>). *"I think that technology companies are more attractive to women and I use myself as an example. In Cisco Systems the lack of gender diversity is solely based on the fact that they are using storytelling."* (Cathy Boers, Global Client Service Manager, Cisco Systems)

In addition, since the war for acquiring talented candidates can be fierce, 4 out of 11 interviewees claim that, in order to attract more female employees they should strengthen their employer brand in total. By focusing on communicating their values and story they create an image of a respected company and a pleasant environment to work. These insights are in complete agreement with academia (Gaddam,2008) and further support the idea of focusing on employer branding the same way we focus on consumer and corporate branding. *"I believe so because it is also related to your brand and if people men and women see certain elements and values in the storytelling of a company it will definitely attract or distract people to that brand."* (Ronald Schapendonk, Marketing Director, NEC). Interestingly one candidate associates the values of high-technology organizations with the decrease of gender diversity. *"I think this part is really important to communicate the values of your company and the story of your company to make sure your target audience in terms of your potential candidates get to know your company better and show that it is not only about high tech but also working together*

*or a certain mentality that appeals to people and when you make that attractive for men and women I think you can easily attract more women as well" (Rinske Lichtendahl, Marketing Support, VONQ).*

The most interesting result to emerge from the data is that only 1 out of 11 interviewees connected the lack of gender diversity in high-technology industry with the fact that high-technology companies are perceived to influence significantly the way we live. More precisely, 73% of men hold c-level positions (Statista, 2018) in high-technology organizations and high-technology products and services are in a position to shape our everyday lives to a great extent, then the way life is formed is measured mostly by men. *"Technology is what is driving our live and it is so male dominated then that is a potential risk because the big decisions of technology how are lives are going to evolve or develop are pretty much controlled by men. That's why I think the bigger question is the bigger question is that we are so dependent in technology that if only men or 90% of it's men then where are the concerns and the female view in the way that our lives are going about"*(Eva Zahrawi Ruiz, former Brand Director, Vodafone).

#### **4.3.5. Storytelling Guide**

One of the perks of semi-structured style interviews is that interviewees have the freedom to provide extra information if applicable. Therefore, in the flow of discussion many interviewees proposed multiple ways of developing the strategic implementation of storytelling within high-technology organizations. In the literature review the strategic implementation of storytelling for advancing organizational purposes has been introduced. In line with this one of this paper's goals is to provide a set of storytelling guidelines for communication professionals. Therefore, all the recommendations detected during the transcription process were gathered for the purposes of this storytelling guide. Although the aim of *"Storytelling can be extremely powerful if used correctly (Eva Zahrawi Ruiz, former Marketing Director of Vodafone)"*

##### **i. Know your audience**

It previously been stated that storytelling receives a rather high status between communication professionals. Further replications though, revealed that even if the populations under question is interested in storytelling they are still concerned on the type of stories which will enable their audience's engagement. This is in good agreement with previous findings in the literature review which broach the situation of Big Data and how traditional marketing approached have been influenced

by this reality. With the emergence of media digitization new possibilities to narrate stories have emerged (Erevelles et al., 2016). More specifically, thanks to consumer analytics corporations are in a position to capture and analyse their audience's personal data in real time, and provide them with more personalized approaches in the aftermath (Erevelles et al., 2016).

Therefore, the data obtained from the interviews are highly consistent with the major trend of Big Data and how interactive technology is in a position to transform storytelling (Guardian, 2013). In overall, 11 out of 11 interviewees agree that it is of great significance be aware of your audience's special characteristics needs and wishes in order to provide them with more personalized solutions. *Make sure to target your audience. In B2B companies it is possible to take interviews from your existing customers. In that case you receive the information you need straight from the source. (Ronald Schapendonk, Marketing Director, NEC).*

Additionally, as proposed by one candidate every communication process consists of two parts, the sender and the receiver. For this specific study the sender is perceived to be high-technology companies and the receiver is their audience. In order for a two-way communication to be considered successful, the receiver should not only be aware of the messages coming from the sender but also evaluate it and accept. In the business world the sender is always the one who is responsible for the outcome of every communication process. Therefore, the sender should modify their message in a way that it will be appreciated by the receiver and lead to a possible business transaction. *Because as you know in communication you have a sender and a receiver and there is message that a sender wants to send to the receiver, if the message does not arrive then the sender has to adopt it, the receiver can not adopt it they do not know that message is coming. (Herma Volwater, Marketing & Sales Consultant).*

Surprisingly very few participants suggested that any kind of business approach should be user oriented and not the company oriented.

ii. Have a deep understanding of your products and services

In the literature several theories have been proposed to explain the power of storytelling to simplify complicated topics. (Barker & Gower, 2010) Although, in order to provide a story which is in a position to transform all the complexities of a specific service or product the storyteller should have previously dove into and comprehend sufficiently all those complexities. Acquiring a deep understanding of a specific product, service, or even a whole industry is what renders an organization as thought leader in a specific topic. As already been reported in section 4.2 *Phase 2: Building of a Strong Brand*, organizations provide free educational material through blogs, white papers, videos and case studies

in order to be perceived both by a wider audience but also from the industry they operate as specialists in specific topics. *In order to simplify a product through storytelling you have to be a thought leader in this sector (Jonathan Weinert, Technology Writer, Signify).*

Further analysis of the interview insights revealed that the association between effective storytelling and deep knowledge would only partially contribute to the creation of a great story. As reported by one candidate the production of a great story is also related to how obsessed is the company and to a greater extent their employees about their mission. The candidate also talked about Patagonia, Tesla and Apple as great examples of companies who have a specific cause to deliver and add extra values to the lives of people and they are obsessed about it. These companies associate specific ideas and values to their products in order to create a bigger picture and elaborate efficiently how they contribute on making the world a better place. Tesla for example is not just selling cars, but they have a vision to transit world into sustainable energy (<https://www.tesla.com/about>). *What you want to have is a company that is obsessed about something. Patagonia is to protect the environment and they are obsessed about it, Tesla the same thing, Apple the same thing all the companies that we know are so good at that storytelling is because there is an obsession about something. We want to make the most beautiful design product in the world or be the environmental activist. There is an obsession and if you find that then you will build your story around and then you get everybody to believe in something. That for me is way more important than doing advertising. (Eva Zahrawi Ruiz, former Marketing Director of Vodafone)*

Despite the fact that, there is a wide range of articles (e.g. Forbes, Inc, Business Insider) which argue on how important is for companies to be obsessed with their products and services there is a significant gap in academic literature. Therefore, further research should be undertaken. More details on this will be given on section 5.1 *Limitations of the Research*.

### iii. Be Authentic

As outlined in the literature review, marketers are facing difficulties to attract and retain a loyal audience as consumers nowadays will simply refuse to buy a product just because a marketer placed it in front of them (Andrea Philips, 2012; Joe Pulizzi, 2012). On the other hand, they will appreciate and engage to stories. Although if customers are exposed to 4,000 or even 10,000 advertising commercials daily (Forbes, 2017) how is it possible for a specific story to stand out among so many others? In order for a corporate story to distinguish in the war of differentiation, it should be at least honest and to a greater extent original. *“I would never use actors in my stories, they need to be real they need to be actual and they need to be relevant”.* (Eva Zahrawi Ruiz, former Marketing Director of Vodafone). This is clear in the research as another candidate indicates that consumers will not engage

with replicas of other stories. *“So and I also believe that storytelling it is important that it needs to be authentic so it needs to be your story and if you are able to create your own your own authentic story and also with your company and brand it will bring and and create more impact more meaningful instead of a copy paste story because nobody will believe it.”* (Ronald Schapendonk, Marketing Director, NEC).

iv. All employees should tell the same story

A number of studies have found that, both human capital and brand equity are perceived to be important assets within the organization (Aaker 1991; Backhaus & Tikoo 2004). Besides, successful internal communication sends a clear message to the stakeholders about organization’s consistence (Smits et al., 2001). The current though raises some question with regards to the understand of company’s area of activities by its employees. More precisely the majority of employees who have been asked to describe what they are doing as a company in a sentence admitted that this request is quite challenging while some of them simply read the company’s headline. Possibly the reason for this rather contradictory result is because most of the interviewees are working for huge tech behemoths with hundreds of different products and services therefore they find it extremely difficult to include in two sentences all the range of different activities an organization that big is involved to. Still according to one participant it is of vital importance for all the employees within an organization to be able to provide those sentences. *If I come to your company and I ask you what is this company about, what’s your reasons for being then you would be able to give me two sentences we are here because we deliver products that are going to transform people’s lives and we do that every day.* (Eva Zahrawi Ruiz, former Brand Director, Vodafone)

The same interviewee narrated also a story, which in her opinion is the most remarkable example of employee engagement to the purpose of the organization is the story about the president of United States, John F. Kennedy and a janitor who worked for NASA. By the time John F. Kennedy visited the NASA space center he walked into a janitor who was mopping the floor and he asked him what he was doing there *“I am helping to put the man to the moon Mr. President”* (Huffington Post, 2017).

v. Be realistic

The literature on storytelling proposes that stories entail the element of myth and at sometimes the element of exaggeration, where symbols and emotions predominate over expedience and rationality (Gabriel, 1991). In the case of business storytelling though, accompanying your story with numbers, facts, examples and an actionable business plan is highly recommended.

There is good match between feasible business storytelling and the commercial of Triodos Bank Nederland, by the title "*Buy the Change*". The idea behind this video is to create a conscious buying power who is likely to spend their money in a way that will be positive for the society. Therefore, they created a platform which connects consumers and social entrepreneurs in order to offer to the consumers an opportunity to spend their money differently. This commercial is a great example of a balance between storytelling and a specific business plan accompanied with actions.

On the other hand, Rabobank published in October 2017, a video by the title "*Growing a Better World Together*". In this video they commit themselves to address food problems in 6 continents and solve eventually the world hunger. According to the Advertising Code Committee though, is obliged to remove "*false promise*", of the commercial. It is one thing to dream of a better world, where hunger and war conflicts will not exist, and a completely different thing to actually promise that you will be the one to change that. Especially if nor the video under question, neither bank's corporate website provides a specific plan of action (Adformatie, 2017; NOS, 2017:).

vi. From storytelling to story-doing

As reported by Eva Zahrawi Ruiz, former Marketing Director for Vodafone, the correlation between storytelling and story-doing is interesting. More precisely the interviewee argues that only producing storytelling related material in order to create a positive image of your corporation to the stakeholders is simply not enough. It is of great importance to engender a balance between company's actions and stories. Preferably actions should take precedence and then stories will have to follow. Or if the company primarily publicize a future plan, it is of major importance to provide along with the plan a detailed list of follow up actions in order to persuade the stakeholders of its feasibility (e.g. Triodos Bank Nederland).



*For me storytelling is not enough so we need to be able to move from storytelling to story- doing. We need to do something that is real, something that means something, something that is tangible and then talk about it. And that's the difference with what you saw about the story of the deaf girl. It is beautiful and it touched everybody. But what's the point? It is just a story there is no link there to the business or to whatever so that's why I moved from that and then all the other campaigns that you saw those are story doing. We created a survey we made the jacket we created the app we did something that exists, that is tangible that people can use and then we tell the story. (Eva Zahrawi Ruiz, former Brand Director, Vodafone).*

The interviewee is referring to a campaign created by Vodafone which helps people try things for the first time with the help of technology. In 2014 Vodafone in cooperation with Kytteman Orchestra, offers the opportunity to Vera van Dijk, a deaf girl from Netherlands the opportunity to enjoy her first concert. Below we may review two cases of storytelling related campaigns (Entertainment-focus, 2014).

The first case is referring to the “*Fearless Girl*”, a statue created by State Street Global Advisors an investment firm as part of a global campaign in order to empower women presence in c-level positions within the company (Washington Post, 2018). *The biggest piece of storytelling case that's been done in the last years obviously is the “Fearless Girl”, unbelievable, unbelievable, unbelievable piece of passion and story-doing. It taps into a movement, it taps into a discussion it was well timed, it went out on Women's Day on the 8<sup>th</sup> of March. There was a whole discussion going on about diversity and inclusion and female empowerment etc. which they did is going to invest in funds that have a good representation of females on the board that's tangible, and then they told the story and then what they did is they just put this little statue of this girl in front of the Bull of Wall Street and became this global phenomenon. (Eva Zahrawi Ruiz, Brand Director, Vodafone).*

On the other hand, the way Pepsi decided to use storytelling was disastrous. More precisely in an attempt to attract more millennials Pepsi created a video trying to create awareness over Black people while in the same time they hired Kendall Jenner to be part of it. The audience though did not welcome this commercial and after millions of negative comments Pepsi decided to publicly apologize and pull over the video. *Then you have the story of Pepsi, a PR disaster when they use Kendall Jenner in a commercial that was kind of referring to the black lived matters and where she goes to the police. What Pepsi was saying is that this is a message of peace, unity and understanding. So that was what Pepsi is about, piece, unity and understanding, no of course not. Pepsi trying to use storytelling with a message of peace, unity and understanding totally wrong because that is misusing storytelling to try to address something else which is a business problem try to convince people with this beautiful story*

*as that is going to make people be convinced that Pepsi is such a great company, that is here and dedicated to the planet for peace and understanding. Completely wrong! (Eva Zahrawi Ruiz, former Marketing Director, Vodafone).*

vii. Storytelling can be costly

In contradiction with earlier findings (Pulizzi: 2012; Vaynerchuk, 2013) which argue that content production and distribution is of low cost evidence retrieved from the interviews suggest that the creation of *high-quality content* could be costly. More precisely, one candidate reported that the production of high-quality stories requires a lot of time and experienced content writers therefore it may seem that storytelling is not costly but it actually is. *“It costs a lot of time and of course new people cost more money and in terms of I think it’s really cost other marketing efforts like events and yeah things like that cost also money. I think it’s kind of equal. And sometimes you want to do new things, we want to make a video but it also costs money” (Rinske Lichtendahl, Marketing Support, VONQ).*

## 5. Conclusion

The aim of this paper is dual. It serves as an introduction of strategic communication in high-technology industry and explores the applicability of storytelling in a high-technology environment. The findings of this study strengthen the position of strategic communication as an important apparatus within the organization (Argenti et al. 2005, Argenti & Forman, 2002) and introduce a new area of application, that of high-technology industry. The main reasons behind the adoption of strategic communication by high-technology organizations are elaborated on. The first reason is due to the mass Internet usage, a reality which raised issues with regards to *consumer sovereignty* (Pit et al. 2002) and transparency (Argenti et al. 2005). Secondly, interviewees realize that they operate in an industry whose implications are usually incomprehensible to their target audience. Therefore, a solid communication plan with the intent of eliminating the communication processes both externally and internally is needed (Mohr et al., 2010). During the interview process, the shade relationship between communication practitioners and engineers (Sprague, 2012) has also been broached and justified. All in all strategic communication has been acknowledged not as the most important department within the organization but as a function of equal importance with the rest of the departments.

Although brand has been established as an important asset in the area of corporate reputation (Argenti & Forman, 2002; Lynch & Chernatony, 2004) half of the interviewees are not entirely convinced to creation of a strong brand will be of added value within organizations which operate in a B2B market. It has been suggested though, for all organizations to focus on communicating externally their policy towards employee engagement, corporate social responsibility as well as company's history and values. Therefore, the building of a strong brand in business to business high-technology environments is applicable in specific areas, like those which were primarily described. It has also been stated in literature that the building of a solid brand acts as a reminder in times of crisis. Due to various scandals the trust levels towards high-technology organizations have been decreased significantly (Edelman, 2018). Therefore high-technology corporations which operate in business to business markets should also focus on creating a strong brand in their journey to reinstate their stakeholders' engagement. A new approach that of human to human H2H has also been introduced (Kramer, 2014; Nummela, 2016;).

The idea of storytelling is central to this study and thus it merits further discussion. Storytelling has been established by the interviewees as an essential element in the game of differentiation among high-technology organizations. The superficial excitement towards storytelling though can be distracting and challenge organizations on how to use storytelling in a beneficial way (Schoppe, 2016). In line with this, even if the practice and art of telling stories is eternal, the strategic application of storytelling

is in its infancy (Silverman, 2004). During the interview process storytelling usage has also been justified. With the intention of creating a potent bond between high-technology organizations and their target audiences, interviewees focus on the process of technology's familiarization and humanization through the simplicity and value-laden power of stories (Barker & Gover, 2010). Furthermore, the hot-button issue of gender diversity in high-technology industry has been elaborate as well. Finally, in an attempt to provide sufficient guidelines to communication professionals a storytelling guide has been constructed.

To sum up, this project explores the perceived value of communication, whether it is strategic, communication, branding or storytelling in the area of high-technology industry. The results emerged from the data welcome a positive attitude towards communication practices which enables further storytelling usage. Still an *if* was present during the interview process, especially from the older interviewees. Perceiving communication though and to a greater extend storytelling in a positive yet critical manner rather than an overall enthusiasm is good news. Because in that case preparation will precede action.

### **5.1. Limitations of the Research.**

This study clearly has some limitations. Firstly, the quality of research is dependent on the analytical skills and idiosyncrasy of the individual since the researcher is responsible for measuring and interpreting the data retrieved (Anderson, 2010). As a result, possible biases have been taken into consideration when assessing credibility (Neumann, 2014). Secondly, due to the small size of the data and as the collection techniques could not bolster representatives of all high-technology organizations, results' generalization to all the high-technology organizations is not applicable. In respect of, the time-consuming process of data analysis and the unexpected recruitment adversities, conducting more interviews was unrealistic.

Finally, although a complete discipline is dedicated to the study of high-technology culture (Kelly, 1985; Rogers & Larson, 1984; Sprague, 2012.), only a few scholars payed attention to the connection between storytelling and high-technology industry. Therefore, related theoretical topics such as marketing of high-technology products (Easingwood et al, 2006; Mohr et al. 2010;) and strategic planning in high-technology companies (Berry, 1998), were applied while the research has been guided by the key terms of strategic communication, reputation and brand.

## **5.2. Recommendations for future research**

This explorative qualitative research approach may set the groundwork for follow-up research, through multiple dimensions. For instance, based on this study's interview design the research could be applied to a larger number of high-technology organizations. The sample under investigation was communication practitioner in high-technology organizations. However, future research should focus on more engineering related departments and their perception of strategic communication and storytelling, provided that, communication practitioners and engineers have contradictory point of views (Sprague, 2012). Accordingly, internal communication is growing to be one of the most important tasks of corporate communication departments (Argenti & Forman, 2005). Therefore, a potentially interesting perspective would be to search for ways of facilitating the internal communication between the marketeers and engineers of the organization. Finally, the purpose of this paper is to explore the multiple roles of storytelling within a high-technology organization while future research should focus on the best practices of storytelling in high-technology industry, a topic which have been investigated slightly during this study.

As the follow-up research agenda proposes, this study established more issues than it answered. Hopefully, scholars will begin to shed light upon this relatively unknown area and deliver a communication perspective on a total of questions which have been insufficiently addressed.

## Appendix

Table 1: Interview Guide

Introduction
<p>My name is Ilektra Chatzopoulou and I am a graduate student in the program Media and Business offered by Erasmus University Rotterdam. For the needs of my MA thesis project I decided to conduct interviews to review:</p> <p><i>“Strategic Communication in high-technology industry: If storytelling is the new black how high-technology companies and storytelling could join hands to overcome major communication issues?”</i></p> <p>Before we proceed with the interview I would like to clarify that the information provided by you are confidential and will be used solely for research purposes.</p>
Interview Questions
<ul style="list-style-type: none"><li>➤ Introductory Questions<ol style="list-style-type: none"><li>1. Would you like to introduce yourself?</li><li>2. Could you please talk a bit about your role in the company?</li></ol></li></ul>
<ul style="list-style-type: none"><li>➤ The relationship between high-technology companies and strategic communication.<ol style="list-style-type: none"><li>1. Do you believe that high-technology companies value strategic communication as an essential tool for company’s welfare? Please specify your answer.</li><li>2. Do you believe that high-technology companies should value strategic communication as an essential tool for company’s welfare? Please specify your answer.</li><li>3. Do you believe that high-technology companies should focus on communicating also their story and values? Please specify your answer.</li><li>4. Do you believe that high –technology companies which operate in B2B markets are interested in creating brand awareness?</li><li>5. In your opinion if there is one department that values the least strategic communication which would it be? Please specify your answer.</li></ol></li></ul>
<ul style="list-style-type: none"><li>➤ The role of storytelling in high-technology industry.<ol style="list-style-type: none"><li>1. Are you familiar with the term storytelling?</li></ol></li></ul>

2. High-technology industry is a highly complicated area with products and services usually incomprehensible to the average user. Do you believe that storytelling could enable high-technology firms simplify their agenda?
3. Do you believe that if consumers acquire a clearer view of a high-technology company's products and services will be more willing to buy their products and services? Please specify your answer.
4. Nowadays gender diversity in high-technology industry is a hot button issue, while many high-technology organizations claim that they do not receive job application by women in the first place. Do you believe that storytelling could help high-technology companies attract more female employees? Please specify your answer.
5. Do you believe that high-technology companies should invest in storytelling techniques?  
5a. If yes, how high-technology companies could implement storytelling techniques?

➤ Questions addressing specifically each company

1. Do you believe that people are aware of your products or services?  
1a. If yes, how did you accomplished that?  
1b. If no, why in your opinion people are not aware of your products and services.
2. In your opinion what is the first word that crosses somebody's mind when they hear the name of your company?
3. Can you describe what you are doing as a company in one sentence?  
3a. Now I want you to repeat that sentence without using any technological terms.
4. Can you please name the first three priorities of you as a communication department?  
4a. Do you believe that storytelling could add value to any of these priorities?
5. As a company would you be interested in investing in storytelling?  
4a. If no, I why wouldn't you be interested in investing in storytelling?  
4b. If yes, how would you do that and which positive outcomes would you expect?
6. Since you are working in the marketing/communication department have you ever felt less important than other departments?
7. Have you ever used a story in order to communicate your agenda?

Table 2: Companies Overview & Participants' Information

Company	Industry	Year of foundation	Number of employees	Type of Market	Interviewee	Position
Logica	IT Services IT Consulting	1969	13,274	B2B	Herma Volwater	Marketing Director
Microsoft	Computer software  Computer hardware  Cloud computing	1975	131,800	B2B/B2C	Symonne Swaag	Service Delivery Manager
Apifon	Telecommunications	2014	42	B2B	Christos Stergiopoulos	Marketing Manager
Cisco Systems	Networking Hardware	1984	72,790	B2B	Cathy Boers	Global Client Service Manager
Amazon	Online Shopping	1994	566,000	B2C	Felix Zylla	Marketing Manager
NEC	Information and Technology  Electronics	1899	107,729	B2B	Ronald Schapendonk	Marketing Director
Vonq	Recruitment Analytics	2006	138	B2B	Rinske Lichtendahl	Marketing Support
Rambus  *Although this interview lasted 40 minutes only the last 22 minutes are available due to technical issues. Although I decided not to exclude it from the sample as the insights retrieved from the interview	Semiconductor	1990	750	B2B	Lyubima Petrova	Marketing Specialist



were valuable for the research process.						
Prognosis	Healthcare Application	2014	15	B2C	Dimitris Iakovakis	Founder
Signify (until recently known as Philips Lighting)	IT lighting	1891	32,000	B2B/B2C	Jonathan Weinert	Technology Writer
Vodafone	Telecommunications	1991	111,556	B2C	Eva Zahrawi Ruiz	Marketing Director

*Table 3: Sample of Interview Invitation*

*“Dear....*

*My name is Ilektra Chatzopoulou and we have met yesterday where we discussed the topic of my thesis “How high-technology companies could benefit from storytelling?”. In order to answer this question, I decided to conduct interviews with employees of high technology companies where we review the relationship between high-technology companies and storytelling, if they are using it and how they could benefit from that to the fullest. To be honest some key points in your speech (humanize your company, make an impact inside a big corporation) really motivated me to ask you to provide an interview. The interview will last 30 to 40 minutes and it can be conducted via phone or skype. If there a day next week where we could have our interview that would be amazing. I am looking forward to your reply.*

*Kind Regards,*

*Ilektra Chatzopoulou”*

## References

- Aaker, A., D., Jacobson, R. (2001). The value relevance of brand attitude in high-technology Markets. *Journal of Marketing Research*, 38(4), 385.
- Alderman, N., (2013, July). How interactive technology is transforming storytelling? Retrieved from: <https://www.theguardian.com/culture-professionals-network/culture-professionals-blog/2013/jul/12/interactive-technology-transform-storytelling-fiction>
- Argenti, P., Howell, R., & Beck, K. (2005). The strategic communication imperative. *Mit Sloan Management Review*, 46(3), 82-89.
- Barker, R. & Gower, K. (2010). Strategic application of storytelling in organizations: Toward effective communication in a diverse world. *Journal of Business Communication*, 47(3), 295-312.
- Baruh, L., Secinti, E., Cemalcilar, Z. (2017). Online privacy concerns and privacy management: A meta-analytical review. *Journal of Communication*, 67(1), 26-53.
- Batchelor, T. & Hooton, C. (2017). Pepsi advert with Kendall Jenner pulled after huge backlash. Retrieved from: <https://www.independent.co.uk/arts-entertainment/tv/news/pepsi-advert-pulled-kendall-jenner-protest-video-cancelled-removed-a7668986.html>
- Berry, M. (1998). Strategic planning in small high-tech companies. *Long Range Planning*, 31(3), 455-466.
- Bloom, G. (2017). GDPR: A challenge and an opportunity. Retrieved from: <https://www.forbes.com/sites/forbestechcouncil/2017/06/02/gdpr-a-challenge-and-an-opportunity/#3cac6b9f6254>
- Boeije, H. (2010). *Analysis in qualitative research*. London: Sage.
- Bort, J. (2015). Some tech workers over 50 are literally working themselves to death – other things we discovered about their careers. Retrieved from: <http://www.businessinsider.com/stressful-lives-of-older-tech-workers-2015-11?international=true&r=US&IR=T>
- Braun, V. & Clark, V. (2008). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Brown, M. H. (1985). That reminds me of a story: Speech action in organizational socialization. *Western Journal of Speech Communication*. DOI: doi.org/10.1080/10570318509374179
- Bryman, A. (1988). *Quantity and quality in social research*. London: Routledge.
- Carr, A. N. & Ann, C. (2011). The use and abuse of storytelling in organizations. *Journal of Management Development*, 30(9), 236-246.
- Carr, L. T. (1994). The strengths and weaknesses of quantitative and qualitative research: what method for nursing? *Journal of Advanced Nursing*, 20(4), 716-721.
- CBS News. (2017). Report: 2017 the years of “trust in crisis. Retrieved from: <https://www.youtube.com/watch?v=Rs7fTRZqANE>
- Clifford, N., Cope, M., Gillespie, T., & French, S. (2016). *Key methods in geography*. London: SAGE.
- Darling, A. L. & Dannels, D. P. (2010). Practicing engineers talk about the importance of talk: A report on the role of oral communication in the workplace. *Communication Education*, 52(1), 1-16.
- Deal, T. E., Kennedy, A. A. (1982). *Corporate cultures: The rites and rituals of corporate life*. Reading, Mass.: Addison- Wesley.
- Delgado-Ballester, E. & Fernandez-Sabiote, E. (2016). Once upon a brand: Storytelling practices by Spanish brands. *Spanish Journal of Marketing*, 20(2), 115-131.
- Doyle, C. (2016). *A dictionary of marketing*. Oxford: Oxford University Press.
- Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, 12(1), 8-19.
- Duffy, M. E. (1986). Quantitative and qualitative research: Antagonistic or complementary? *Nursing and Healthcare*, 8(6), 356-357.
- Eisenhardt, K. (1989). Building theories from case study research. *Academy of Management*, 14(4), 532-550.

- Erevelles, S., Fukawa, N., & Swayne, L. (2016). Big data consumer analytics and the transformation of marketing. *Journal of Business Research*, 69(2), 897-897.
- Gaddam, S. (2008). Modeling Employer Branding Communication: The softer aspect of HR marketing management. *Journal of Soft Skills*. 2(1). 45.
- Goodrick, D. (2014). Comparative case studies, methodological briefs: Impact evaluation 9. Retrieved from:  
[http://devinfo.live.info/impact\\_evaluation/ie/img/downloads/Comparative\\_Case\\_Studies\\_ENG.pdf](http://devinfo.live.info/impact_evaluation/ie/img/downloads/Comparative_Case_Studies_ENG.pdf)
- Graham, M. (2017). The buzzword that needs to buzz off. *Advertising Age*, 88(24), 29.
- Gruen, D. (2000). Beyond scenarios the role of storytelling in CSCW design. Retrieved from:  
<http://domino.research.ibm.com>
- Grunig, J. (2006). Furnishing the edifice: Ongoing research on public relations as a strategic management function. *Journal of Public Relations Research*, 18(2), 151-176.
- Holtzhausen, D. R. (2002). Towards a postmodern research agenda for public relations. *Public Relations Review*, 28(3), 251-264.
- Holtzhausen, D. & Zerfass, A. (2015). *The routledge handbook of strategic communication*. New York: Routledge.
- Homburg, C., Clarman, M. & Schmitt, J. (2010). Brand awareness in business markets: When is it related to firm performance? *International Journal of Research in Marketing*, 27(3), 201-212.
- Hughes, P. E. (2014). Vodafone first helps deaf girl experience live music. Retrieved from:  
<https://www.entertainment-focus.com/technology-section/technology-news/vodafone-firsts-helps-deaf-girl-experience-live-music/>
- Mohr, J., Sengupta, S. & Slater, S. (2010). Marketing of high-technology products and innovations. Retrieved from:  
[https://erl.ucc.edu.gh/jspui/bitstream/123456789/3000/1/%5BJakki\\_Mohr%2C\\_Sanjit\\_Sengupta%2C\\_St Stanley\\_Slater%5D\\_Mark%28BookZZ.org%29.pdf](https://erl.ucc.edu.gh/jspui/bitstream/123456789/3000/1/%5BJakki_Mohr%2C_Sanjit_Sengupta%2C_St Stanley_Slater%5D_Mark%28BookZZ.org%29.pdf)
- Jemison, D. (1981). The contributions of administrative behaviour to strategic management. *Academy of Management Review*, 6(4), 601-608.
- Kanter, J. (2018). Trust in Facebook has spectacularly nosedived after its enormous data breach. Retrieved from: <https://www.businessinsider.nl/facebook-trust-collapses-after-cambridge-analytica-data-scandal-2018-4/?international=true&r=US>
- Keller, K. L. (2013). *Strategic brand management: Building, measuring, and managing brand equity*. Harlow, England: Pearson Education Limited.
- Kelly, J. W. (1985). Storytelling in high tech organizations: A medium for sharing culture. *Journal of Applied Communication Research*, 13(1), p.45-58.
- Kramer, B. (2014). There is no B2B and B2C: It's human to human (H2H). Retrieved from:  
[http://bryankramer.com/wp-content/uploads/2014/02/BK\\_H2H\\_eBook\\_F.pdf](http://bryankramer.com/wp-content/uploads/2014/02/BK_H2H_eBook_F.pdf)
- Kvale, S. (2007). *Doing interviews*. Los Angeles, California: Sage.
- La, M. (1979). Empathy in nursing practice. *Issues in Mental Health Nursing*, 2(1). 1-13.
- Lugmayr, A., Sutinen, E., Suhonen, J., Sedano, C. I., Hlavacs, H. & Montero., C. S. (2016). Serious storytelling: A first definition and review. *Multimedia Tools and Applications*, 76(14), 15707-15733.
- Lynch, J. & Chernatony, L. (2004). The power of emotion: Business communication to business to business markets. *Journal of Brand Management*, 11(5), 403-404.
- McGregor, J. (2018). The "fearless girl" statue turns 1 today. Here's what she's inspired. Retrieved from: [https://www.washingtonpost.com/news/on-leadership/wp/2018/03/07/embargoed-37-8-am-the-fearless-girl-statue-turns-one-today-what-the-campaign-behind-her-says-its-accomplished/?noredirect=on&utm\\_term=.d8564c3c7fb7](https://www.washingtonpost.com/news/on-leadership/wp/2018/03/07/embargoed-37-8-am-the-fearless-girl-statue-turns-one-today-what-the-campaign-behind-her-says-its-accomplished/?noredirect=on&utm_term=.d8564c3c7fb7)
- Mercurio, Z. (2017). What every leader should know about purpose? Retrieved from:  
<https://www.huffingtonpost.com/entry/what-every-leader-should-know-about->

- purpose\_us\_58ab103fe4b026a89a7a2e31?gucounter=1
- Morozov, E. (2018). After the Facebook scandal it's time to base the digital economy on public private ownership of data. *Guardian*. Retrieved from: <https://www.theguardian.com/technology/2018/mar/31/big-data-lie-exposed-simply-blaming-facebook-wont-fix-reclaim-private-information>
- Nummela, K. (2016). Digital marketing strategic for B2B: Case study: Smurfit Kappa Pirkan Pakkaus Oy (Bachelor Dissertation). 16-18. Available from: [https://www.theseus.fi/bitstream/handle/10024/114935/Nummela\\_Katarina.pdf?sequence=2](https://www.theseus.fi/bitstream/handle/10024/114935/Nummela_Katarina.pdf?sequence=2)
- Nylèn, D. & Holmstrom, J. (2015). Digital innovation strategy: A framework for diagnosing and improving digital product and service innovation. *Business Horizons*, 58(1), 57-67.
- O' Connor, G. C., McDermott, C. M. (2004). The human side of radical innovation. *Journal of Engineering and Technology Management*. 21(1). 11-30.
- Parrish, P. (2006). Design as storytelling. *Tech Trends*, 50(4), 72-82.
- Patton, M. (2005). *Qualitative research and evaluation methods*. Thousand Oaks, California: Sage Publications.
- Philips, A. (2012). Transmedia storytelling, fan culture and the future of marketing. Retrieved from: <http://knowledge.wharton.upenn.edu/article/transmedia-storytelling-fan-culture-and-the-future-of-marketing/>
- Pitt, F. L., Berthon, P. R., Watson, T. R., Zinkhan, G. M. (2002). The internet and the birth of real consumer power. *Business Horizons*, 45(4), 7-14.
- Poole, S. (2010). The shallows: How the Internet is changing the way we think, read and remember. Retrieved from: <https://www.theguardian.com/books/2010/sep/11/shallows-internet-changing-way-think>
- Prateen, R. (2015). Getting started with transmedia storytelling: A practical guide for beginners. Retrieved from: [https://s3.amazonaws.com/academia.edu.documents/45791832/gettingstartedintransmediastorytel1.pdf.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1512384786&Signature=uQEXBmKsXuToV2POBRTzoEjDfzg%3D&response-content-disposition=inline%3B%20filename%3DGetting\\_Started\\_with\\_Transmedia\\_Storytel.pdf](https://s3.amazonaws.com/academia.edu.documents/45791832/gettingstartedintransmediastorytel1.pdf.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1512384786&Signature=uQEXBmKsXuToV2POBRTzoEjDfzg%3D&response-content-disposition=inline%3B%20filename%3DGetting_Started_with_Transmedia_Storytel.pdf)
- Pulizzi, J. (2012). The rise of storytelling as the new marketing. *Publishing research quarterly*, 28(2), 116-123.
- Quinton, S. (2013). The community brand paradigm: A response to brand management's dilemma in the digital era. *Journal of Marketing Management*, 29(7-8), 912-932.
- Raugust, K. (2014). It's all about storytelling. *Publishers Weekly*, 261(25). Retrieved from: <https://search-proquest-com.eur.idm.oclc.org/docview/1540503926?OpenUrlRefId=info:xri/sid:wcdiscovery&accountid=13598>
- Reichheld, F. F. & Scheffer, P. (2000). E-Loyalty: Your secret weapon on the web. *Harvard Business Review*, 78(4), 105-113.
- Richter, F. (2018). The tech world is still a man's world. Retrieved from: <https://www.statista.com/chart/4467/female-employees-at-tech-companies/>
- Rutledge, P. (2011). A think lab. Retrieved from: <http://athinklab.com/>
- Ryan, M. K. & Haslam, S. A. (2005). The glass cliff: Evidence that women are over-represented in precarious leadership positions. *British Journal of Management*, 16(2), 81-90.
- Sandelowski, M. (1986). Some ethical implications of qualitative research. *Advances in Nursing and Health*, 8(3), 27-37.
- Significant Objects (2009). About the significant objects project. Retrieved from: <http://significantobjects.com/about/>
- Simpson, J. (2017). Finding brand success in the digital world. Retrieved from: <https://www.forbes.com/sites/forbesagencycouncil/2017/08/25/finding-brand-success-in-the->

- digital-world/#48bb25fe626e
- Singh, S., Sonnenburg, S. (2012). Brand performances in social media. *Journal of Interactive Marketing*, 26(4), 189-197.
- Stevens, B. (1999). Communicating ethical values: A study of employee perceptions. *Journal of Business Ethics*, 20(2), 113-120.
- Thomas, G. F. & Stephens, K. (2015). An introduction to strategic communication. *International Journal of Business Communication*, 52(1), 3-11.
- Tompkins, A. (2017). 3 storytelling tips for brands in emerging tech sector. Retrieved from: <https://www.entrepreneur.com/article/302420>
- Turkle, S. (2008). How computers change the way we think? *The Chronicle of Higher Education*, 50(21), 3-4.
- Undercover Recruiter (2018). Diversity & inclusion at America's Top 10 tech companies. Retrieved from: <https://theundercoverrecruiter.com/top-10-us-tech-diversity/>
- Wakefield, J. (2018). The man who was fired by a machine. Retrieved from: <https://www.bbc.com/news/technology-44561838>
- Weber Shandwic (2014). Employees rising: Seizing the opportunity in employee activism. Retrieved from: <https://www.webershandwick.com/uploads/news/files/employees-rising-seizing-the-opportunity-in-employee-activism.pdf>
- Whyte, J. (1987). Girls into science and technology: The story of a project. Retrieved from: [https://books.google.nl/books?hl=el&lr=&id=nTEIDwAAQBAJ&oi=fnd&pg=PP1&dq=girls+int+o+science+and+technology+judith+whyte&ots=z0aNiquISw&sig=3ntw7uKIBndgTUfGGNUfW yZTuUw&redir\\_esc=y#v=onepage&q=girls%20into%20science%20and%20technology%20judith%20whyte&f=false](https://books.google.nl/books?hl=el&lr=&id=nTEIDwAAQBAJ&oi=fnd&pg=PP1&dq=girls+int+o+science+and+technology+judith+whyte&ots=z0aNiquISw&sig=3ntw7uKIBndgTUfGGNUfW yZTuUw&redir_esc=y#v=onepage&q=girls%20into%20science%20and%20technology%20judith%20whyte&f=false)
- Yin, R. K. (2009). *Case study research: Design and methods* (4<sup>th</sup> Edition). Thousand Oaks, California: Sage.
- Yin, R. K. (2015). *Qualitative research from start to finish*. New York: The Guilford Press.
- Zetlin, M. (2018). Stanford research explains lack of women in tech: Men make them unwelcome before they even apply. Retrieved from: <https://www.inc.com/minda-zetlin/stanford-research-explains-lack-of-women-in-tech-men-make-them-unwelcome-before-they-even-apply.html>

