

Integrated Consumer Decision Process model for the Internet

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Author: Tamas Hayde

305999

Supervisor: Nel Hofstra

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Abstract

Blackwell, Engel, and Miniard claim that their Consumer Decision Process model (CDP model) is applicable for the Internet. Their claim is criticized by different literature from the sciences psychology and sociology. This thesis is an attempt to apply the original Consumer Decision Process model to the Internet environment and modify it according to the criticism of these two sciences. Creating this way a new *Integrated Consumer Decision Process model for the Internet* based on the Trust model of Lee and Cheung.

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1 Executive Summary

During my third bachelor year at the Erasmus University Rotterdam I was given the opportunity to choose from different major courses. One of the courses I have chosen was the course Consumer Behavior, lectured by Drs. L.P.O. Kloosterman. During this course I have heard about the Consumer Decision Process (CDP) model of Blackwell Miniard and Engel and realized the unquestionable importance of it for the marketing science. The model explains how consumers make their decisions whether to buy or not to buy a specific product. During the course we mostly applied the model for the traditional retail channels, but never for the Internet. I became very much interested if the model which we were lectured about still is valid when people are purchasing goods through the Internet.

The several differences between the online and the offline/ traditional marketplaces would make it impossible to declare the decision process on both markets with one model. Yet, Blackwell, Miniard, and Engel claim that their model is applicable for both markets (*Blackwell, Miniard, Engel, 2006*). This literature research is an attempt to answer the question: *Is the CDP model of Blackwell, Miniard, and Engel applicable to the Internet?*

We will look at this problem mainly from an economical point of view, as I am an economic student. During my literature research on the CDP model I found significant amount of psychological and sociological literature that criticizes the claim made by Blackwell, Miniard, and Engel. Therefore I decided that basic literature of those disciplines needed to be integrated in this research. Psychological literature strongly criticizes the CDP model. This thesis focuses on: the Trust model of Cheung and Lee (*Cheung, Lee, 2006*). Which is of empirically proven significance for the consumer behaviour on the Internet.

By adding this *Trust model* to a modified CDP model we create an *Integrated Consumer Decision Process model for the Internet*. This model is an empirically yet to be proven version of the CDP model which will explain consumer behaviour on the Internet even better than the original model.

2 Introduction

This thesis is a literature research on the subject Consumer Decision making on the Internet focused on the broadly accepted CDP model of Blackwell, Engel, and Miniard. The authors claim that their original model is also applicable for the online markets. To be able to confirm or to contradict their claim it is important to study the online market, E-commerce and the differences compared to the traditional markets.

Chapter 3 will first enlighten the history of the Internet. Later, the Internet market, E-commerce and how it developed to its present state. In paragraph 3.3 the online market will be compared with the traditional, offline markets. The last section will discuss the usage of the Internet as a marketing tool and the theories of the functions and the added value of the online market.

Chapter 4 focuses on the Consumer Decision Process. First, the Consumer Behavior as the science behind the consumer decision making. Afterwards, Consumer Decision Process models and specially the model of Blackwell, Miniard, and Engel will be analyzed.

Chapter 5 introduces the Trust model. This thesis will discuss two models of Matthew K.O. Lee which are based on different views within psychology and sociology.

In Chapter 6 the stages of the CDP will be discussed combined with the criticism from psychology and sociology literature. By doing so this Chapter also proposes an extended model to explain Consumer Decision Making on the Internet, which might be more acceptable for different views of psychology and sociology.

Chapter 7 is a summary of all the proposed changes made on the traditional CDP model and the integrated model itself. Each stage of the original model will be discussed and modified if necessary. This way creating a new, integrated model. Thus all details of the Integrated Consumer Decision Process model for the Internet will be shown in Chapter 7.

Chapter 8 suggests some options for future research which might make use of this integrated model or might prove its significance for the Consumer Behavior Science.

3 The Internet

3.1 History of the Internet

Since the beginning of mankind there has been a demand for communication, partially as a tool for survival. During several recent decades this need emerged into a demand for tools to make the communication more convenient. Nowadays we want to communicate with several people at the same time in a convenient manner, while ignoring the distance as a limiting factor. Internet makes all this possible on a daily basis through WhatsApp people can chat with each other, through Skype people can call each other even on different continents. Internet makes it possible for people to communicate in revolutionary ways.

To be able to understand the working and the abilities that Internet has to offer the history of this network should be taken into consideration.

The Internet can be seen as a large platform that enables people to create their own domain and gain access through different providers. Thus a large network has been created all over the world. This created a perfect business opportunity for different firms to communicate with others and to inform people about the firm and its products, leading to a reduction in the supply chain. Internet also led to a reduction in the costs to communicate, making the possibilities of the Internet for firms even more interesting (*Mowery, Simcoe, 2002*).

3.2 Electronic commerce

Parallel with the demand to communicate grew the demand for “digital communities”. These social groups are defined as people with a share of interest communicating mostly through the Internet. In the economy this process is called segmentation. This development offered an exceptional tool for the consumer communication and for the marketing of products because if penetrated these communities formed an aggregated demand. These options for marketing usage of the Internet have led to the forming of the E - commerce (*Leiner, Cerf, Clark, Kahn, Kleinrock, Lynch, Postel, Roberts, and Wolff, 2009*).

Besides the function as a communication tool the Internet has created a digital market place. The commercial usage of the Internet has begun in 1995 by offering the system Netscape to the main public. Netscape made the step from a purely educational system to the .com domain. This made the creation of Dell, Amazon and Yahoo and other Internet brands possible. Thanks to these developments the usage of Internet gained a whole new option. The business to consumer usage grew, but the business to business usage even faster (*Mowery and Simcoe 2002*).

This is how E-commerce or Internet commerce was born as a definition for all sales and purchases of products or services through the Internet. The main focus of this thesis is the business-to-consumer exchange of products through this online market place.

It is important to point out that the E-commerce has no value proposition, because it only stands for means of purchasing the product and has no added value to the product itself. Therefore, according to Keeney the competitors of a specific Internet purchase are the other purchases on Internet, the traditional purchasing of the same product or no purchase at all (*Keeney, 1999*).

3.3 E –market vs. traditional markets

To be able to understand why consumers would rather choose to purchase their products on the Internet instead of the traditional ways it is important to compare the E-market with the traditional markets.

According to Keeney, consumers choose to purchase through the Internet because of one mayor benefit: "*minimizing costs*" (*Keeney, 1999, p. 535*).

By lowering the retail costs, made by the supplier, products should be cheaper for the consumer. Research has shown that this is not necessarily the case because of the producers surplus is shifted to the consumer (*Brynjolfsson, Smith, 2000*).

Besides the purchase price time is also a cost driver for the consumer. Consumers can easily find information on the Internet without leaving their homes, thus saving time on their search for information. The fact that consumers can shop from home any time saves them time, minimizing the costs made by the search process.

Besides the fact that Internet lowers search costs it does create a market for products which otherwise might never have created any value. According to Bakos, lower search costs enable the secondhand markets to emerge. In his theory these products can find new owners through the Internet. On the conventional markets the search costs would have been significantly higher than the created value, so it would have been difficult to sell these products (*Bakos, 1998*).

Bakos claims that the price differences between the online and the offline markets will disappear, when consumers will learn to use the Internet more efficiently and will find a way to distinguish the cheapest supplier even when the number of suppliers is tremendously high (*Bakos, 1998*).

Comparing markets is the easiest by comparing the efficiency of them. This type of research focuses on four main points; price levels, price elasticity, menu costs, and the price dispersion (*Smith, Bailey, Brynjolfsson, 1999*).

Efficiency in price levels concurs when prices are the same as the marginal costs of the seller. Retail costs are lower for Internet suppliers, so it is argued that prices for homogenous products on the Internet should and can be lower. This is partially proven by the empirical research of Brynjolfsson and Smith about book and CD prices, in their article "*Frictionless Commerce? A Comparison of Internet and Conventional Retailers*". On the other hand they have proven that for other products this is not the case. The prices for all other products, included in their research, did not differ significantly on the conventional markets from the prices on the E-market (*Brynjolfsson, Smith, 2000*).

In their research Brown and Goolsbee, found evidence that Internet did pressure the prices on the conventional markets. In their paper they describe a significant decline in prices on the insurance market by 8- 15%, making to compare the two markets more difficult. The authors claim that the two markets have a mutual influence (*Brown, Goolsbee, 2002*).

In efficient markets consumers react stronger to changes in price levels because there are more suppliers on the market and the products are homogenous. On the Internet more information can be found about products, so the homogenous product assumption stands less on the E-market than on the traditional markets. This makes the E-market and the E-customers less sensitive for price differentiation. By providing extra information competitors distinguish themselves from other suppliers and make the price a less significant attribute in the eyes of the consumer.

Bailey, studied the amount of price changes on both markets. In his conclusion he points out that Internet retailers made significantly more changes in their prices and also concludes that their menu costs are lower (*Bailey, 1998*). "*Menu costs are the costs retailers incur when making price changes*" (*Smith, Bailey, Brynjolfsson, 1999, p. 5*).

A conclusion of a research, made by Ratchford, Pan, and Shankar, proved that price dispersion decreased in the year of 2001 for several, different kinds of products. Their conclusion was that by the maturing of the Internet markets dispersion is inevitable, because of the consumers whom can oversee the market better over time. This effect will be enforced by price-comparing sites and the learning effect of the Internet usage. According to their conclusions consumers surplus increased besides the suppliers surplus creating a gain in welfare (*Ratchford, Pan, Shankar, 2003*).

3.4 Internet as a marketing tool

The value of the Internet to the business world has been a subject of different discussions. According to some experts Internet will become the only marketplace where all consumers will buy their goods. This would make all shops superfluous and all retailers will communicate by internet.

Porter strongly disagrees, he argues that Internet should be considered as a tool and nothing more. *“The winners will be those that view the Internet as a complement to, not a cannibal of, traditional ways of competing”* (Porter, 2001, p. 63). The best way to use the Internet is besides the already accepted business tools and by implementing it into the business strategy.

He argues that at the beginning of the commercial usage crucial mistakes were made on both sides. The producers experimented too much with the price level on this market. They wanted more market share. To achieve this they offered their products below the normal retail price. This “unhealthy” supply led to an “unhealthy” demand. Consumers started to buy stuff they did not really need, partially because it was an experience to buy something in a “new way” and partially because it was cheaper on the Internet than in the stores. Consumers started buying products even though it did not lead to a higher utility just because it was offered on a lower price level. This behavior of the consumers may be called irrational, that leads to a distortion on the market. Besides this, companies started to add Internet domains as a value to their balance. This created another distortion according to Porter, because the value of these assets could not be measured with certainty.

Porter does agree that value has been created by the Internet in the value-chain. We shall focus on the values created for marketing and sales. These benefits are:

- “- *On-line sales channels including Web sites and marketplaces*
- *Real-time inside and outside access to consumer information, product, catalogs, dynamic pricing, inventory availability, on-line submission of quotes, and order entry*
- *On-line product configurators*
- *Consumer- tailored marketing via consumer profiling*
- *Push advertising*
- *Tailored on-line access*
- *Real-time consumer feedback through web surveys, opt-in/opt-out marketing, and promotion response tracking” (Porter, 2001, p. 75)*

From these benefits it can be stated that the strength of marketing on the Internet is the dynamical and traceable communication between buyer and supplier without any subjects in-between with an overall reach. A company selling its products through the Internet is a global firm because consumers from all over the world can gain access to those products. Even though, it might not deliver or serve different countries (*Porter, 2001*).

Besides the dynamical communication another strong benefit of the Internet is that consumers leave registered information. Suppliers can use this information to identify their consumers and create a more accurate customer profile than through traditional retailing. Internet qualifies as an ultimate marketing research instrument. All actions are registered as data, which can be used as real life information for research. “*Conceptually, the Internet represents an extremely efficient medium for accessing, organizing, and communicating information.*” (*Peterson, Balasubramanian, Bronnenberg, 1997, p. 84*) This will be discussed in more details in Chapter 5.

Besides the benefits there are several shortcomings of the usage of Internet in a commercial way. Porter lists the following shortcomings (*Porter, 2001, p 76*):

- Consumers cannot physically examine or test products
- Spontaneity and judgment are restricted which could result from interaction with skilled personnel
- Lack of face-to-face contact with the supplier
- For the retailer it is more difficult to encourage repurchases
- Delays are involved because of the not direct physical exchange of payment and the product itself
- Extra logistical costs are made by the delivery
- Companies are unable to take advantage of scale advantages with their deliveries
- The absence of physical facilities limits the channels how target groups can be reached and the image they might create about a company

These arguments are pointing out basically that the “shopping experience” is missing, when consumers purchase products on the internet. People cannot touch the products neither can they see a shop or a production process on the internet to get a feeling with the supplier. Another important point is the missing of interaction with skilled personnel. This mayor difference is the most difficult to overcome. Internet retailers have to compensate the lack of human contact to be found in stores by trying to create a site layout or providing extra information about their products.

Next to the mentioned shortcomings an organizational challenge for the supplier is the logistics of delivering the product to the buyer. Internet retailers have to arrange the delivery to the consumer instead of the traditional buy and take practice.

As described above, Internet has been invented as a communication channel. That function is of high importance for all marketing activities. Through these tools can the buyers and the suppliers communicate with each other not only about all the needed information about a product and its delivery, but also about the experience. Feedback is easier for the customer to give and for the supplier to collect. The importance of this is essential within the marketing and for the future existence of a company as well. Future improvements of the product based on customer feedback may lead to an advantage above the competition.

Besides the fact that Internet forms a new market its function as a tool is of great importance. Traditional retail markets may lead to a supplement of the Internet market. Consumers might see a product in the store and afterwards search for it on the Internet or the other way around. This strategic combination of internet with traditional marketing and sales tools is a key to success according to Porter.

4 The Consumer Decision Process

4.1 Consumer Behaviour Science

People make decisions all the time. To take the bus or go by car to work is just one of these decisions which we make on a daily basis without giving it much of a thought.

Wilkie, a highly recognized professor of marketing, defined consumer behaviour as *“The mental, emotional and physical activities that people engage in when selecting, purchasing, using and disposing of products and services so as to satisfy needs and desires.”* (Wilkie, 1994, p. 14)

The science of Consumer Behaviour is studying the economical choices of consumers. Analyzing these choices is of great importance for companies and for marketers. Finding out the reason why a product is bought, or not bought, by the consumer is of high value. By changing specific characteristics of a product more demand can be generated. A marketer's work starts with a product (concept) and finding out what the target group thinks about it. By doing so a marketer can predict if a product in its present state will be profitable or changes have to be made first. Besides this the needs of consumers change over time. These changes have to be measured as well for a better prediction. For this reason is the constant studying of the consumer decision making of great importance. Thus suppliers are able to keep up with the competition, and with the trends.

A choice is influenced by different factors. These factors are alternatives, attributes of value, and uncertainties. (Bettman, Johnson, Payne, 1991) Traditional normative economical theories claimed to have a solution by stating that consumers possess all the needed information and decide rationally. So, the consumer decision making can be solved as a logical equation. By possessing all information put all alternatives besides one another measure the value/ benefit gained from these alternatives. Now measure the costs and uncertainties and decrease the measured benefits with these “costs”. The highest positive value of benefit stands as the best option and should be purchased by the consumer.

It has been proven by different consumer behaviour researchers that this process is not so easy in real life. Partially because consumers do not act rationally and partially because they do not possess all the information needed for this process.

In most cases nowadays the number of alternatives is tremendous and values can not be easily measured. Although, in general it can be stated that the weight of uncertainties has decreased in the modern economies also because of the Internet, which made it possible to spread information even more efficiently.

4.2. Consumer Decision Process (CDP) Models

Consumer decision making theories find their origin in consumer behaviour analysis, which can be defined as the use of behaviour principles, gained by psychology, to interpret human economic consumption. As the definition states it is a combination between marketing and psychology. The *behavioural analysis* explains the behaviour by the consequences bonded to the specific choices (Foxall, 2001). This thesis focuses on the *behaviour analysis of consumer choice*.

Further on different models will be discussed about consumer decision making. First of all it is important to note that not all decisions can be explained by these models. This is where the irrationality plays a role in the decisions. In different cases consumers come to a conclusion which option is the best for them, but because of external/internal influences they make impulse decisions. These kind of decisions are difficult to study or to describe as a process. For these reasons these decisions are left out from these models. The models do not intend to describe all decisions, but try to find a common step by step process which is made in most of the cases, when consumer make a purchase/non purchase decision.

One of the oldest, yet still used model in consumer behaviour sciences is the Maslow's Hierarchy of Needs model. (See *Figure 1*)

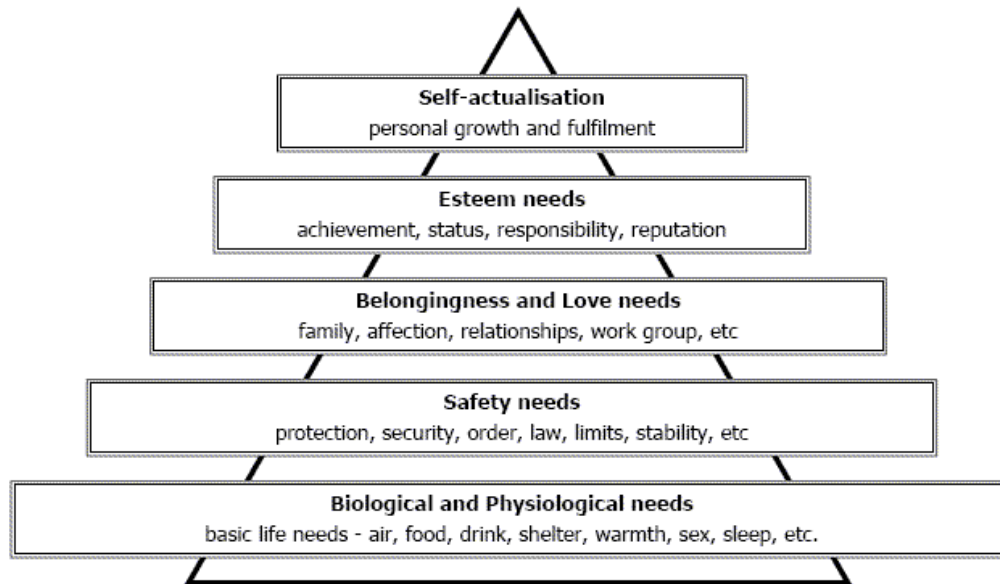


Figure 2. Maslow's Hierarchy of Needs model

The Hierarchy of Needs model created in 1943 by Abraham Maslow, as stated in the title, is a hierarchy model. This means that the needs of the first stage have to be fulfilled to be able to focus on the needs of the next stage. What this model basically does is modelling how the consumers think when the need for specific service or product arises.

How consumers make their choices caught the interest of several economists. Mostly based on *Maslow's model* different models have been created to visualize the decision making process. Becker was the first to introduce other factors than income to the Consumer Decision Making Model. He introduced the power of time and some other factors using the household concept. (*Becker, 1965*)

In 1971, Lancaster added that the characteristics of the product itself does play a role in the Decision Model. (*Lancaster, 1971*)

Wilkie, created a Consumer Decision Model partially based on the Maslow Hierarchy of Needs model. His model had four stages: (Ambaye, 2005)

1. Problem recognition
2. Information search and alternative evaluation
3. Purchase process
4. Post-purchase process

These consecutive stages give a model how consumers decide. The stages are follow-ups of each other. This model is of great importance for further models on this subject. The fact that a decision model does not end with the purchase but with a post purchase (evaluation) process is also of great importance. Future purchases are dependent on earlier purchases and experiences.

This model laid down the foundations for the CDP model of Blackwell, which is now broadly used as the Consumer Decision Process model. The model was later renamed to EBM model, after the three authors Engel, Blackwell, and Miniard. The seven stages of this model are also consecutive, so they have to be applied step by step (Blackwell, Miniard, Engel, 2006).



Figure 2. Consumer Decision Process (CDP) model (Blackwell, Miniard, Engel, 2006)

5 The Trust model

5.1 The importance of the Trust model

The most recent and broadly discussed issue about Internet shopping is the trust issue. Several psychological studies argue that the growing number of purchases through the Internet could be even higher in absence of the lack of trust phenomenon.

“Lack of trust is one of the most frequently cited reasons for consumers not purchasing from Internet shops.” (Lee, Turban, 2001, p. 75)

Trust in traditional marketplaces has been defined as the *"willingness of a party to be vulnerable to the actions of the other party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party."* (Mayer, Davis, Schoorman, 1995, p. 712).

In the traditional markets branding has become important partially because of the trust issue according to different researchers:

"A brand is a trust mark that is the cue for all intangible trust generating activity and in the absence of human touch, it can be a symbol of quality and assurance that is capable of building trust." (Sultan, Urban, Shankar, Bart, 2002, p. 10).

The managerial importance of this issue has been expressed by the same authors as followed:

"..managers need an understanding of the role of trust in e-business, the web site drivers of trust, and how trust perceptions affect behavioral customers response to the Web site." (Sultan, Urban, Shankar, Bart, 2002, p. 3).

Because of the differences between the traditional marketplaces and the Internet as a marketplace the definition had to be adjusted to the new, online environment. Also different trust models have been created for the Internet. Two acknowledged models will be presented further on in this chapter.

5.2 Trust models

Matthew K.O. Lee and Efraim Turban have designed a model for consumers' trust in internet shopping for business-to-consumer transactions, called the CTIS model. This model, (Figure 3), is based on a broad scale of literature on this subject and summarizes all influences which might play a role in the Trust issue for internet purchase. The authors defined online trust as:

“The willingness of a consumer to be vulnerable to the actions of an Internet merchant in an Internet shopping transaction, based on the expectations that the Internet merchant will behave in a certain agreeable ways, irrespective of the ability of the consumer to monitor or control the Internet merchant. ” (Lee, Turban, 2001, p. 79)

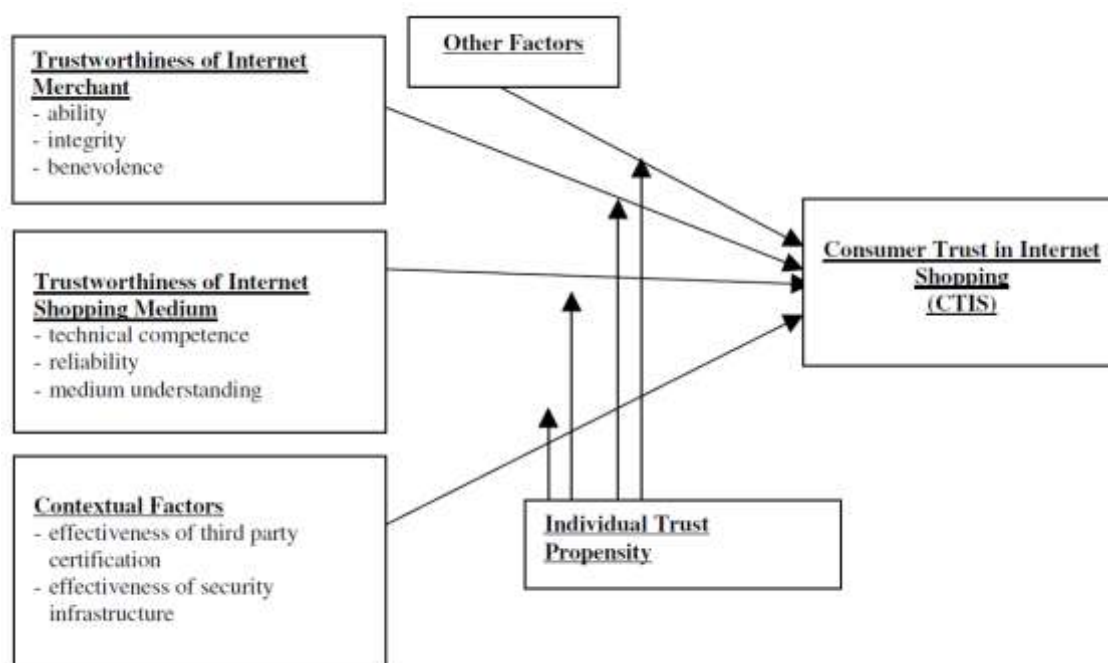


Figure 3. A Proposed Model for Consumers' Trust in Internet Shopping (Lee, Turban, 2001)

It is important to notice that it is not only a trust variable between retailer and consumer but also a variable between the consumer and the computing system which conducts the payment system used to purchase the product. Besides this is the “*Individual trust Propensity*” also of multiple influence, which stands partially for the open-mindedness of the consumer.

Five years later, together with Christy M. K. Cheung, Lee has designed an *Integrative Model of Consumer Trust in Internet Shopping*. This model is integrated because it is based on psychological, social psychological, and sociological views on the subject (Cheung, Lee, 2006). This model is proven by an empirical study of Cheung and Lee together and has proven the significant relations between the influences of the model and the consumer trust. The model is shown in *Figure 4*.

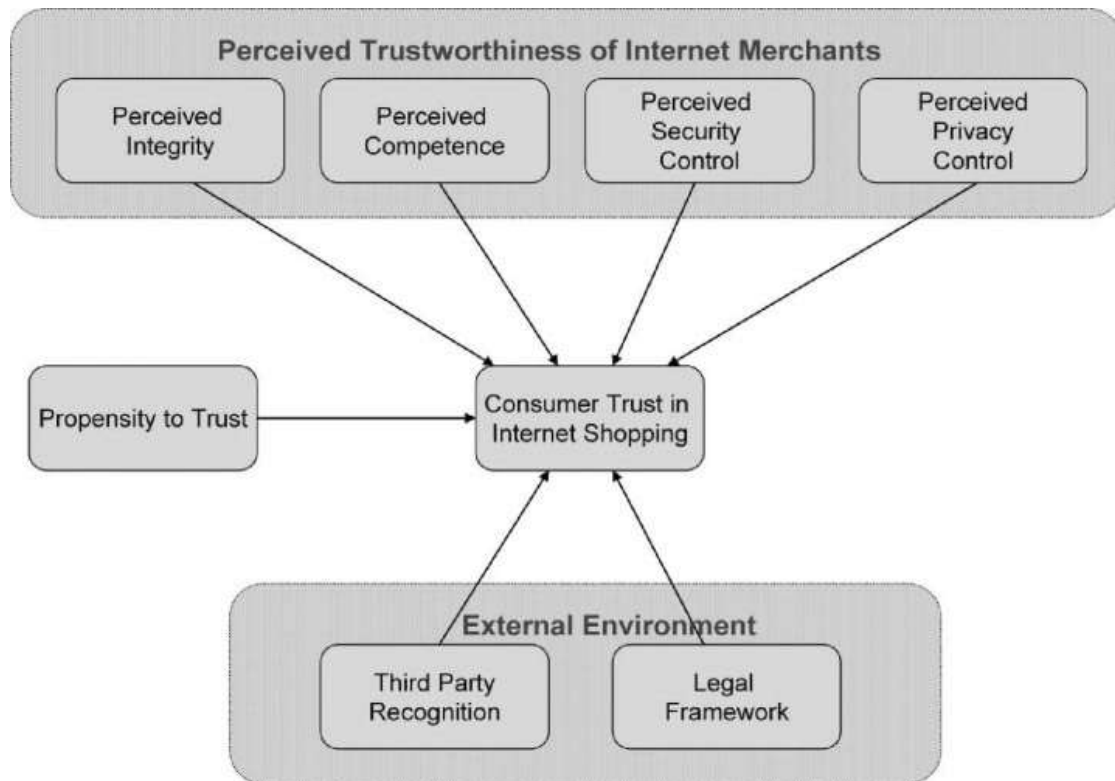


Figure 4. An Integrated Model of Consumer Trust in Internet Shopping (Cheung, Lee, 2006)

The model of Cheung and Lee is mainly different with the CTIS model in the fact that the trust in Internet medium is now a part of the *Perceived Trustworthiness of Internet Merchants*. Internet is less seen as a medium with a questionable trustworthiness thanks to everyday usage. The questionable is the trustworthiness of the merchant during the purchase decision. Consumers have to decide whether the retailer is to be trusted with their credit card numbers and other personal details, whether the product information is to be trusted, and whether the product will be delivered correctly.

As already stated *Figure 4* is an integrated/multidisciplinary model combining three different perspectives of trust (*Cheung, Lee, 2006*):

- The views of social psychologists: focusing on the expectations about the behaviour of others in the transaction shown in the model as *Integrity* and *Competence* and because of the setting of the Internet *Security and Privacy*.
- The views of personality theorists: "*trust reflects a personality trait that is stable over time and across situations, propensity to trust is also applicable to the context of Internet shopping.*" (*Cheung, Lee, 2006, p. 481*)
- The views of sociologists: Because of the large amount of information to be found on the Internet and the great amount of suppliers a trusted third party should play an important role in promoting trust. This third party can be anyone who has already earned the costumers trust. Also the influence of a Legal Framework has a significant contribution to the trust.

Thanks to this integrated approach, combined with empirical prove, we can state that this model is the most representative for psychological views on trust. The economic use of this model has been proven by different authors.

This model is of great importance for the consumer shopping behaviour on the Internet and it should be added to the CDP model of Blackwell, Engel, and Miniard, creating a better, integrated model with a deeper understanding of the consumer behaviour on the Internet.

6 Stages of the CDP for the Internet

Different models have been designed especially for the Consumer Decision Process on the Internet environment. Most of these models use the CDP (EBM) model of Blackwell, Engel, and Miniard as a foundation to their research because of the applicability to a wide range of situations (Ambaye, 2005).

Blackwell, Engel, and Miniard claim that their model can be applied for E-commerce (Blackwell, Miniard, Engel, 2006).

Ambaye, philosopher on the Brunel University, states that the CDP model of Blackwell “..appears to be the most comprehensive of the available models and the most adaptable to possible application to consumer behaviour on the internet.” (Ambaye, 2005, p. 61) This can be substantiated by the fact that it has for each important decision moment a different stage and it adds to the Wilkie model (Wilkie, 1994) additional “*Divestment*” and “*Consumption*” stages, making it more differentiated and better to be applied to the internet.

All stages of the CDP model are influenced by different external and internal influences. More about these influences will be discussed for each different stage of the model.

6.1 Need Recognition stage

Compared to the traditional decision making the *Need Recognition* stage is different in a way that internet users are confronted with more information. Thanks to the internet people can be in touch with each other all around the globe. Environmental influences are forming an influencing factor on the *Need Recognition* stage. Thanks to the Internet, environmental influences have more weight in the *Need Recognition* than in the traditional model.

Besides environmental influences also individual differences may influence the *Need Recognition*. These influences are the same whether the consumer is making use of the Internet or the traditional markets. After all the individual is the same consumer.

There is also a time aspect added to these influences by adding memory to this model. All the influences from the past can be stored in our memory and later may be called upon.

These differences from the traditional CDP create no need to modify the model.

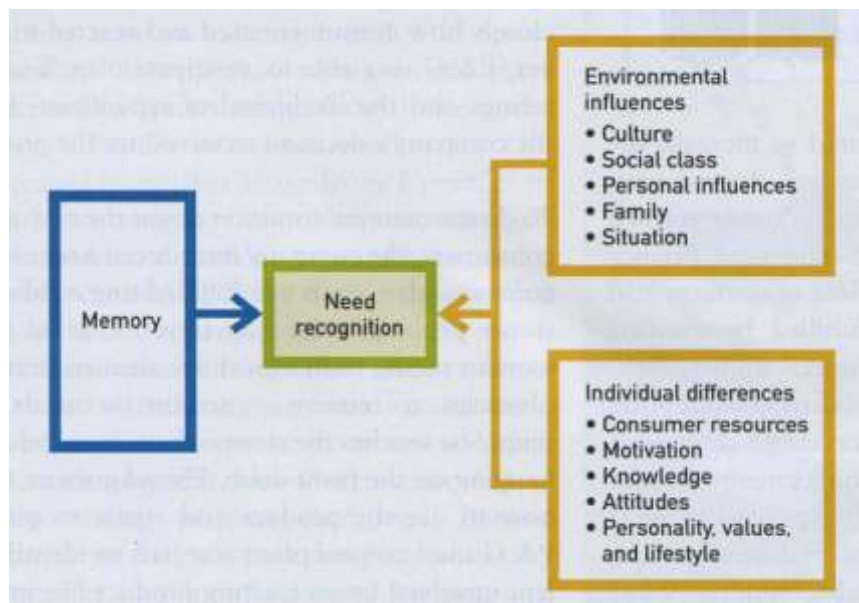


Figure 5. Need Recognition (Blackwell, Miniard, Engel, 2006)

6.2 Information Search stage

The border between *Search for Information* stage and the *Pre-purchase evaluation of alternatives* stage is not that strict as in the traditional decision process because in some cases when ordering through the internet, physical pre-evaluation of the product is not possible. Ordering sites only deliver if the products are already *Purchased*. On the other hand other alternatives can also be easily found on the Internet. For these reasons these stages should be considered as one, *Information Search* stage.

Using the Internet consumers can reach much more information about different subjects. The way of searching on the Internet experienced a great progress with the introduction of search engines. These sites (like: Google, Yahoo etc.) look for a specific content on different sites. Search engines enjoy great popularity among consumers. In the year 2005 till 21st of August search engines displayed 13 billion sponsored results (Fain, Pedersen, 2006).

Basically, the increasing popularity of the Internet is thanks to this stage in the CDP. Through Internet much more information can be found with less effort, meaning less time and less expenses on the consumers side. According to basic economical theories this should lead to a higher utility on the consumers side and to higher competition/differentiation on the suppliers side. But yet, with these theories economists do forget that people are not machines. They do not think always rationally and cannot process all the information which they can find. This fact is proven in practice by impulse purchases and different psychological experiments (*Wilkinson, 2008*).

Interesting about the Internet is that it forms in these cases the market, where the product is about to be purchased, and the communication tool to gather information through eternal channels. Consumers can mail different individuals to ask their opinion on a specific product, gather other references or ask the retailer directly questions.

The fact that consumers do not process all the information given to them has been another challenge. How to provide all the information that is needed, but be able to organize the information? This had to be one of the first questions of the makers of Google, Yahoo etc. These sites among others make it easier for individuals to search the web in an organized way.

The existence of “Information Overload” is a broadly discussed subject in the marketing science. One of the most influential scientists is Naresh K. Malhotra, from the Georgia Institute of Technology, who has written different papers about this subject. As a conclusion of his experiment he states that information overload does exist and that “.. respondents experienced information overload when they were provided 10, 15, 20 or 25 choice alternatives or with information on 15, 20, or 25 attributes.. ” (*Malhotra, 1982*).

This is important information for the Internet itself, but especially for the Internet as a marketing tool. Consumers will not remember 15 or more characteristics of their products, so retailers should differentiate based on the basic characteristics of a product. This way they could earn more advantage on the rest of the competition.

A model has been created by Robert M. Loease Jr., from the University of North Carolina, to minimize this negative effect for the electronic messages. He states that each message can be rated based on importance or economic worth (Loeae, 1989).

Using this conclusion we can state that site-designers also have an important task in creating value by organizing the information in a specific costumer friendly way. So how retailer promote their products, build their sites, communicate with their potential customers, and all what we call the fundamentals of marketing are of great importance at this stage of the CDP. This effect has been added by Blackwell, Engel and Miniard to their CDP model.

The Information Processing model, which is the same for the Internet as for the traditional market, is shown in *Figure 6*. This subject is a popular subject for many papers about pop-up and direct mailing efficiency. Yet for this point it will be considered to be the same in both settings, online as offline just as stated by the authors.

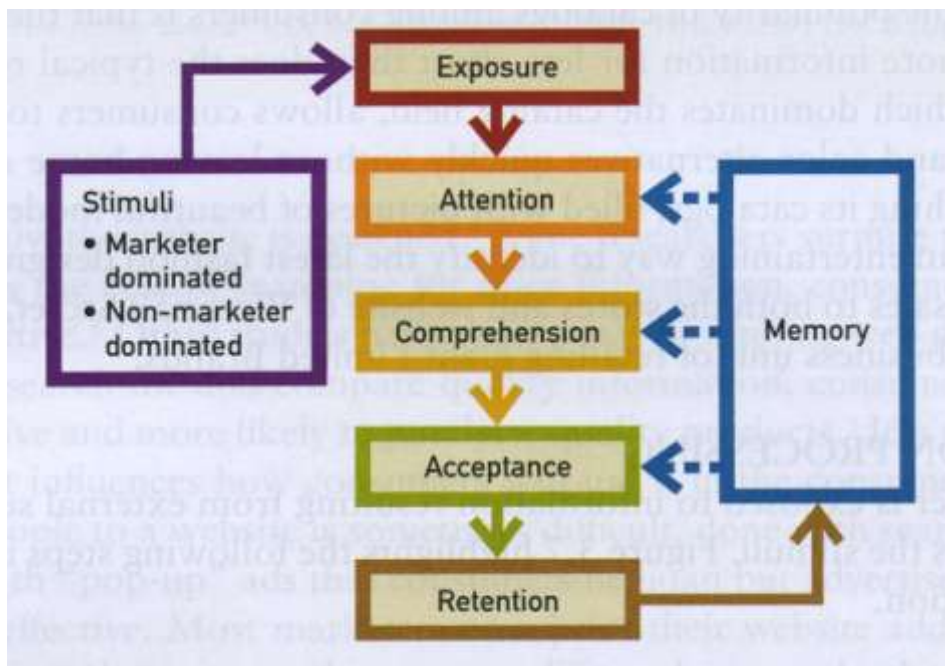


Figure 6. Information Processing: Stimuli (Blackwell, Engel, Miniard, 2006)

6.3 Purchase

A big obstacle in the CDP is the step to purchase a product. Whether the consumer is in an Internet environment or in a traditional retail environment. The step to purchase a product or not is a step which makes a lot of consumers leave the CDP by not

purchasing. This has to do with the fact that purchasing through the Internet consumers can not examine physically the products. Through the Internet no *Pre-Purchase stage* can take place like in the original model. This physical examination will take place after the *Purchase stage* when the product is received.

This is seen as a negative influence on the CDP. On the other hand it can be seen as a positive effect. According to psychologists in this case the “*Anticipatory utility*” has a positive effect. This utility is gained by people “..from the anticipation of events in the future..” (*Wilkinson, 1998*).

To interpret this difficult difference with the traditional CDP we use the Trust model in the Integrated model. This way all concerns of the customers surrounding their privacy, worries about the trustworthiness of the retailer are processed into the model. By doing so we also replaced the Pre-purchase stage with the Consumer Trust stage.

6.4 Pre- Consumption stage

Different literature from psychology argue the inseparable nature of the Internet with the traditional retail, giving the argument that the physical examination of products is of crucial importance in the CDP and for a purchase to take place (*R. A. Peterson, M. C. Merino, 2003*). This differs per product, like already seen in literature by Brynjolfsson and Smith (*Brynjolfsson, Smith, 2000*). In their experiment they pointed out that CD's and books are being purchased in big amounts through the Internet. It can be argued that this is because of the unimportance of the physical examination, but in that case some other products also might belong to the same category in the consumers eyes. To be able to create an Integrated Model this concern of the psychology literature should be added to the CDP model.

This is added to the integrated model by adding the stage: *Pre-Consumption evaluation*. The physical examination takes place at this (added) stage. After ordering from Internet, the consumer must purchase the product and afterwards receives it at home. The examination can lead to two directions: *Satisfaction* or *Dissatisfaction*.

If the consumer is satisfied, the product will reach the *Consumption* stage.

If that is not the case and the consumer is dissatisfied, the product might be sent back and *Consumption* will not take place. In these cases the CDP may start all over again with the question if the *Need* is to be satisfied by another product.

It is important that at this stage satisfaction is of expectations as far as the physical examination goes. The satisfaction of consumption is where it is answered whether the product satisfies the desired need which started the CDP. Both stages are influenced by the trust model.

Adding this stage to the original CDP will satisfy the need of importance of physical examination highlighted by psychology.

6.5 Consumption

The consumption stage on the Internet is the same question as in traditional retail, whether to consume now the good or to postpone the consumption to a later moment in time. This decision has no significant influence on the CDP model, because this decision has neither influence on the present nor on any future decisions.

From this stage on the CDP model is exactly the same for traditional and for the Internet environment because the differences are no longer of significant influence on the decision making.

6.6 Post- Consumption Evaluation

The *Post-Consumption Evaluation* has a big influence on future purchases. At this stage it is determined whether the purchased product fulfils the desired needs in a satisfying manner. If not, the consumer is dissatisfied, the need is still desired and the whole process might start again by searching for information.

If the consumer is satisfied by the purchased product this might lead to repurchase, starting with the orientation for alternatives. Besides deciding for own future purchases through the Internet consumers can rate products, giving a feedback on their satisfaction through the Internet.

More and more rating sites are being developed, where consumers can share their feedback and opinion on different products and services. By rating those with a grade consumers give each other the advice to use or not to use a specific product. This process influences the *Information Search* stage.

6.7. Divestment

This stage is exactly the same as in the traditional decision making. How consumers divest their products is not influenced whether they have purchased it through the Internet or not. With this stage the traditional CDP model of Blackwell, Engel, and Miniard is complete, as shown in *Figure 7*.

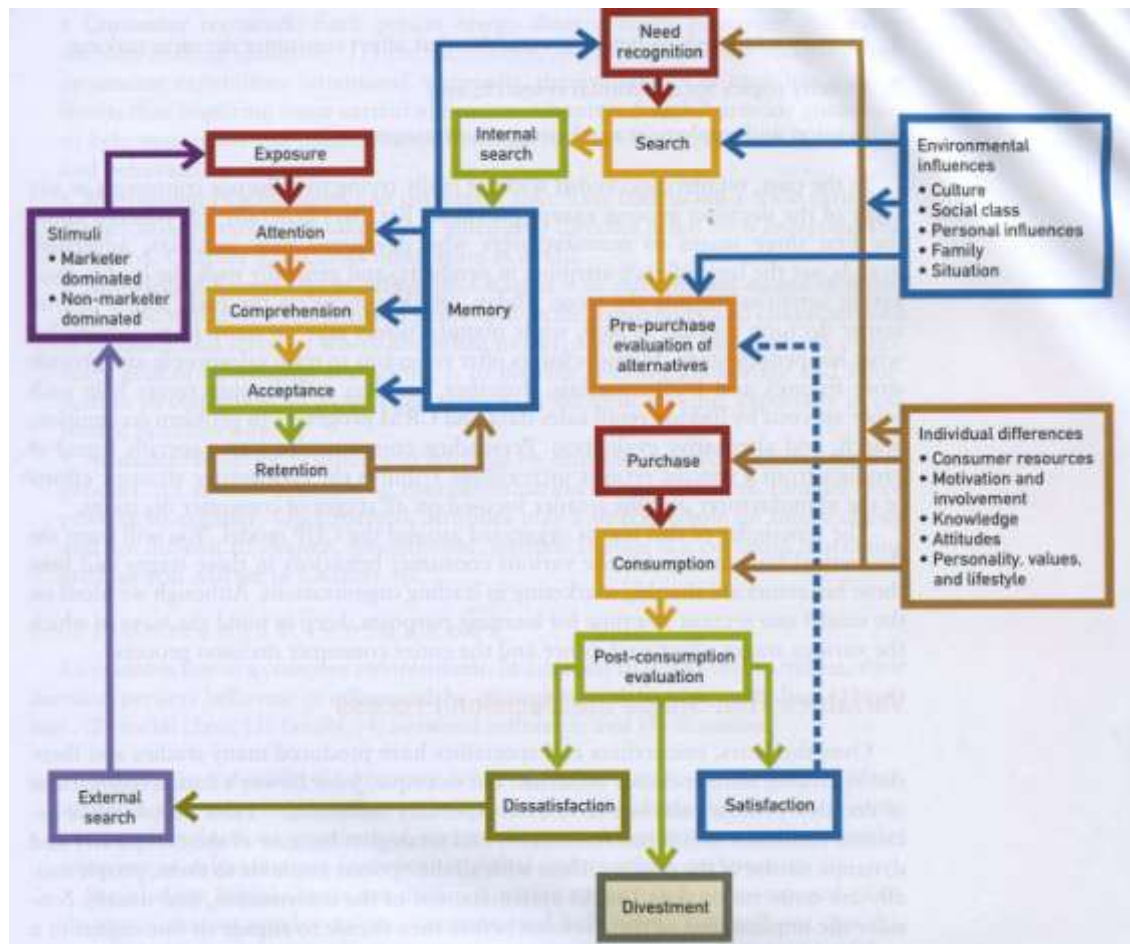


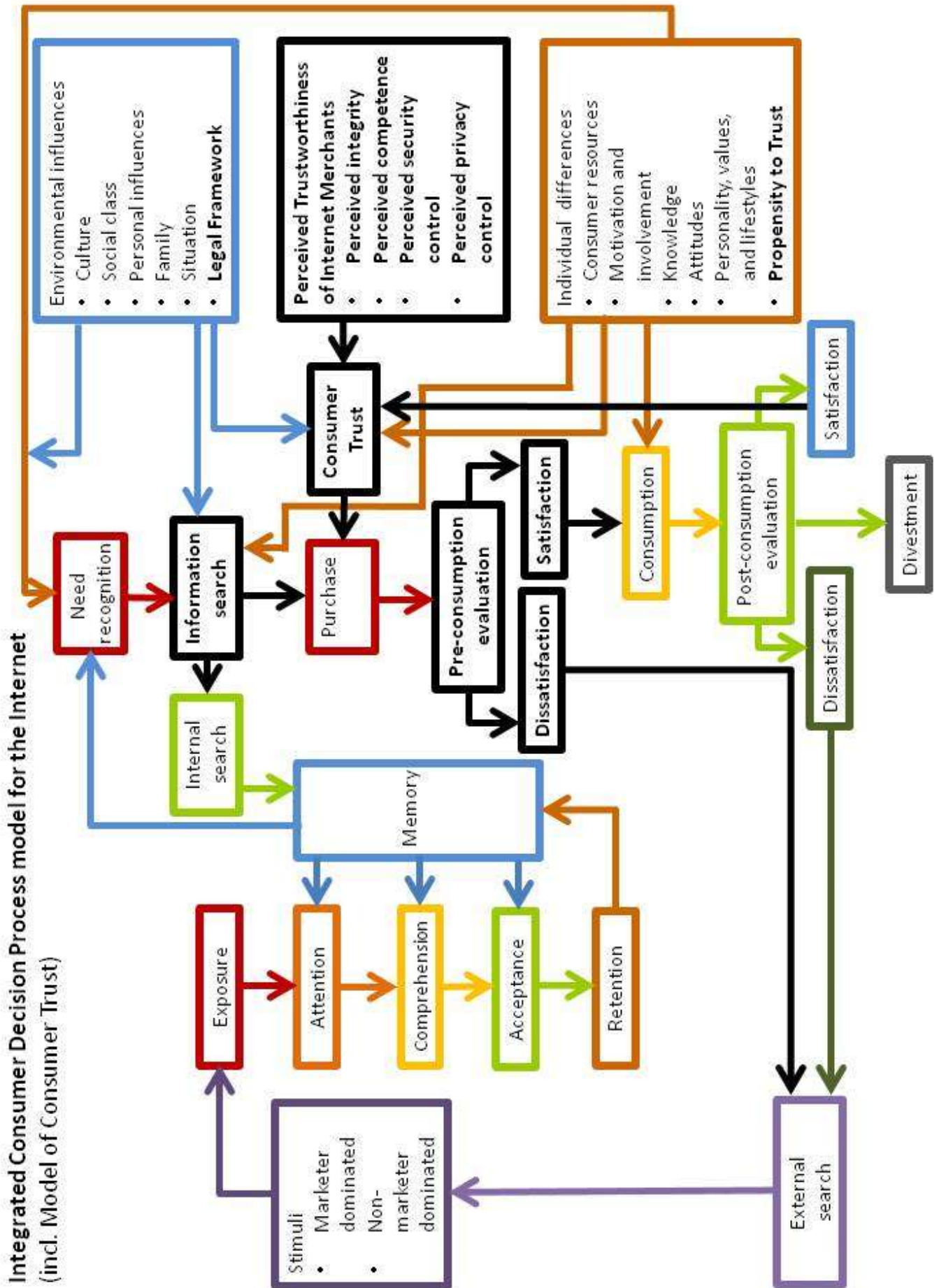
Figure 7. Divestment (Blackwell, Engel, Miniard, 2006)

7 Conclusions

Criticism from psychology and sociology has led to the conclusion that the original CDP model cannot explain fully the consumer behavior on the Internet. This is caused by the differences in behavior of consumers when purchasing on the Internet instead of in an offline environment.

To make this model more acceptable for sociology and psychology for the Internet market the Consumer Decision Process model of Blackwell, Engel, and Miniard, (shown in *Figure 7.*) should be modified. By modifying the model we create a new *Integrated model of Consumer decision Process model*, shown in *Figure 8.*

- *Search* and the *Pre-purchase evaluation of alternatives* stages have been combined into one **Information search stage** because these two activities are done at the same time when searching on the Internet.
- The Trust model of Cheung and Lee, shown in *Figure 4*, has been added to the original CDP model as an influence on the *Purchase* decision named as **Consumer Trust**. This is influenced by *Environmental influences*, **Legal Framework** in the Trust model and *Individual differences*, **Propensity to Trust** in the Trust model, and by the **Perceived Trustworthiness of Internet Merchants**.
- According to the criticism from psychology a **Pre-Consumption** stage has been added, where the physical examination of the product takes place. Whether these results are satisfying or not does the consumer take the next stage, which is *Consumption* or reformulating the *Need Recognition* through *External Search*.
- The final *Satisfaction* after the *Post-Consumption Evaluation* influences the **Consumer Trust**, after all, the merchant has proven to be trustworthy. This might lead to further *Purchase* from the same Internet Merchant.



8 Recommendations

Being an economic student, as the author, the main point of view of this thesis is economical. Besides economics consumer behaviour is also based on psychology and sociology. These sciences criticize the CDP model of not being applicable for the Internet. This criticism has been aggregated in one trust model. By adding this to the CDP model and modifying it the *Integrated Consumer Decision Process* model has been created.

This model, shown in *Figure 8*, is based on a literature study and some empirical studies on parts of the model. It would be useful to test with an empirical research the relevance of this model as a whole. This way an aggregated empirical test of this model based on the used empirical research methods should prove its significance of this study. Therefore a research like the one made by Cheung and Lee to prove their Trust model is suggested as a tool. (*Cheung, Lee, 2006*)

Further, the extra force created by adding the Trust model to the CDP might be crucial for further use of this model. If by using the Integrated model a significantly higher percentage of the behaviour of Internet consumers can be defined by empirical research the new model should be used for further studies as a basic model.

Shortcomings of this paper is that the Internet as an environment is rapidly changing. Therefore it is difficult to state that an empirical research from 2005 is still of significance. This also proves the need of modifying/updating the original CDP model.

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<http://www.econsultant.com/articles/abraham-maslow-hierarchy-of-needs.html>

Figure 2.

Consumer Decision Process (CDP) model (Blackwell, Miniard, Engel, 2006)

Roger D. Blackwell, Paul W. Miniard, James F. Engel; Consumer Behaviour; Tenth Edition; 2006; Thomson South-Western, p. 70 (Figure 3.1)

Figure 3.

A Proposed Model for Consumers' Trust in Internet Shopping (Lee, Turban, 2001)

Matthew K. O. Lee, Efraim Turban; A Trust Model for Consumer Internet Shopping; International Journal of Electronic Commerce; Vol. 6, No. 1, pp. 75-91, Fall 2001, p. 80 (Figure 1. *A Proposed Model for Consumers' Trust in Internet Shopping*)

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Figure 5.

Need Recognition (Blackwell, Miniard, Engel, 2006)

Roger D. Blackwell, Paul W. Miniard, James F. Engel; Consumer Behaviour; Tenth Edition; 2006; Thomson South-Western, p. 71 (Figure 3.2)

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