# Turku Ammattikorkeakoulu Turku University of Applied Sciences

## Bachelor's thesis

Consumer behavior and buying profile in the Wooden Housing Industry in France.

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**Degree Programme in International Business** 

August 2010



OPINNÄYTETYÖ (AMK) | TIIVISTELMÄ TURUN AMMATTIKORKEAKOULU

THESIS (TUAS) SUMMARY

TURKU UNIVERSITY OF APPLIED SCIENCES

Degree Programme in International Business | Bachelor's Thesis

July 2010 | 70

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In our modern and actual societies, topics about the protection of the environment and ecological commitment are omnipresent. More and more people feel concern about these environmental issues and a lot of alternatives are taken in order to prevent this phenomenon getting worse.

In these alternatives, one tendency is to live in a place that does not affect the environment and thus protecting it. This tendency is the ecological home that conserves resources (energy, water) and is modeled on the energy and material flows of natural ecosystems. Wooden houses are considered as being an ecological home. The purpose of this study is to present and discuss about the consumer behavior in the Wooden Houses Industry in France. The main objectives of this study are to define the typical customer of a wood house, in fact to establish his profile. Then to understand why people tend to be attracted by this type of house and what are the factors that contribute to people's buying decision.

In order to study the consumer behavior in this industry, and make his profile, the research study has been constituted of theories about consumer behavior and particularly psychological, sociological, economical, and stimulus response model theories. Questionnaire method of data collection is applied to 43 individuals property. The empirical findings are presented and analyzed in a narrative form.

The findings show that customers of wooden houses are rather upscale, young and very sensitive to environmental issues. People are attracted by this type of house most of all because of their important environmental involvement. Factors that contribute to people's buying decision while choosing a wood house are several such as the family situation, and the many advantages that this type of house offers. The results can have an implication for further research, in particular to make this research deeper with more technical terms and can be used by professional and supplier of the wood house.

Keywords: Consumer Behavior, Buyer decision process, Wood House

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## 1. INTRODUCTION:

The importance of the sustainable development has become an important topic in the society and continuously gaining interest. We can notice that more and more people turn to the protection of the environment by different ways to preserve it, for instance, waste of management, energy saving, sustainable use of the grounds, durable use of water and the minimizing of vehicles' energy. We note an increase of ecological installations in residences, which respect the environment and preserve it.

The purpose of this thesis is to uncover the consumer buying profile and behavior in the Wooden Housing Industry (WHI). The motivation for the thesis comes from a desire to do an ecological subject and to focus the topic on the eco-houses, and particularly, on wooden houses. The author realized the importance of identifying key elements behind household individuals and their decision to invest more in constructive wooden house.

The research is conducted in France because it is not as common to construct a wooden house contrary to Scandinavian countries where it is in their norms. In Scandinavia, it is normal to have a wooden house for many years ago because it is in their lifestyle, in their customs. And Scandinavian countries are richer and exploit much more the wood because of their dense forests.

In France, there is limited availability of wooden houses hence the trend towards constructing is growing increasingly because of the sustainable development and a lot of different criteria. I have a personal interest by doing this topic because it can be considered as a growing industry in France.

#### **1.1** Objectives of the study:

The objective of the study is to determine motivations behind constructing wood houses in France.

The author has considered the following questions as mainframe for the study:

- To define what factors contribute to people's buying decisions while choosing wooden houses
- 2) What are the people's motivations, expectations when planning to invest in it

These questions will be approached by literature and research. The research will mainly focus in France.

The author has considered the following questions as mainframe for the research:

- 1) Who is the typical customer of wooden house (profile)
- 2) Why people tend to be attracted by this kind of house?
- 3) What factors contribute to people's buying decisions?

## 2. LITTERATURE REVIEW:

## **2.1** Environmental pressure:

The human beings continue to have a great environmental impact. The Combination of an exponential growth of the population, intensifying the use of the resources of the Earth and the human desire to modify rather than to adapt to our surrounding, started to run up against the sensitivity of our natural systems. That creating a pressure to mitigate these harmful effects in the society in which we are living.

The pressure on the environmental protection has become increasingly important in recent years. More and more people feel concerned by the anticipated degradation of the environment in which we live. People became aware that ecology became a field whose they must pay attention. Simple efforts contribute to preserve the environment giving them the feeling to do something useful for the future generations: "Simple acts can empower the individual by providing a feeling of doing something to help". The series of natural disasters caused by the global warming have made world react and thus take actions against this phenomenon to slow down the effects. Many associations, organizations have emerged to defend their interests in the fight against the environmental degradation such as Greenpeace and WWF. The new ecologists ideologies and the environmental pressure on the society made people aware that it was important to act now. People turn more and more to the consumption of alternate good not affecting the environment. This is an important subject because ecology and environmental balance are the basic supports of all the human life on earth. Victor Papanek says that "Ecology and the environmental equilibrium are the basic underpinnings of all human life on earth; there can be neither life nor human culture without it".

## 2.2 Political pressure:

The environment occupies a place in Politics, increasingly since the appearance of the Ministry of Environment in the developed countries. In particular, with the creation of the green parties, the defence of the environment took an increasing part in the political debates. Today, certain recent elections show the importance of the environmental questions in the political debates. In France, 2007, all the presidential election candidates have ratified the ecological pact, which requires a strong commitment as regards environment. This ecological Pact is an environmental charter that establishes 10 objectives and 5 concretes proposals,

which can be applied to worry in a durable way of the problem about the destruction of the planet.

During the European elections of 2009, the very good score of the Green parties in countries of the European Union comes to confirm this tendency: the environment became a really important political issue.

International actions in link with the environment have been multiplied: international summits, agreements and protocols, worldwide days, and so on. During the seventies, the ecological thoughts and approaches have been developed more and more with the petrol crisis. At the time, this new phenomenon, to start thinking about other resources, sustainable and renewable resources, without worsening the greenhouse effect, was amplified with the first conference of the United Nations on the environment in Stockholm in June 1972. The awakening of the need for protecting the environment started to become worldwide. In June 1992, the Earth Summit in Rio de Janeiro defined the environment like a community property and a public property. Since the Nineties, mentalities evolve very quickly to approach the perception which we have today of the environment.

Awareness of environment and sustainable development become important issues. People realized that the Earth's resources are exhaustible and that their needs have to be satisfied without destroying the resources for the future generation.

## **2.3** The French housing industry overview:

On the 1<sup>st</sup> January 2010, the French population amounts to 65 million inhabitants (http://www.insee.fr). The population is concentrated today in some areas especially in the urban centers. The highest figure is represented in Paris and its suburbs, and then come the city of Lyon and Marseilles.

Two main areas are distinguished from the others: "L'Île de France" – it is a region of France that refers to the urban area around Paris – with nearly a quarter of the population and the East-South. There exists a lot of interior and external migrations on the territory, in particular the North-South migrations, reinforcing the densities in the South. Contrary, certain areas are considered as to be empty. They correspond to the great relief such as the Massif Central and the Alps but also to zones exclusively or almost devoted to agriculture. This is called the vacuum diagonal from the North East to the South West.

The dispersion of the French population on the land comes from the French topography as a result major economic and social movements from nineteenth and twentieth centuries: rural depopulation, industrialization and urbanization, and more recently the suburban development and deindustrialization. On the opposite, the desert areas or of low density are mainly located in the vacuum diagonal and in the mountains.

The population on the land is unequal, although there are some zones of high density near to the major urban areas, on the costal region, in the large valleys, while the rural areas are either abandoned, or placed under urban dependence. Since the fifties, the majority of the French live in the city but the trend is changing. The cost of the dwelling, the noise, the lack of green area and the pollution in the cities motivate more and more people to leave the cities and go to live outside in the periphery or in the countryside. The main motivation of this movement from cities to the countryside is the search for a better quality of life. The city men are attracted by this lifestyle, which they consider like less stressing to the city, a life generally less expensive and an environment less polluted. Having children is often a determinant criterion in order to raise them in a better environment and in security. It is preferable to live in a healthy and safety space for any family. Moreover, to live in the countryside offers comfort and well being because of the favorable access to a detached house compared to cities where space may miss. (Feltin M., 2002).

#### **2.3.1** The housing market and structure in France:

In 2009, the number of main residences is estimated at 28 million in France of which 16 million are single dwellings that means a building that includes only one dwelling such as the house. The main individual residences constitute the essence of the dwelling park in France. (www.insee.fr). At the end of the Second World War, the housing situation was very damaged. It was necessary to rebuild quickly and efficiently. The rebuilding concerned primarily on collective buildings until the middle of the Seventies, then turned more to the construction of single houses. The interventions of the authorities contributed to the improvement of housing conditions including sanitary comfort by the effort of construction and renovation. (Jacquot A., 2006, Insee Report). The measures taken by the government have changed the housing situation over the years thus improving the housing condition. Housing is an important aspect in measuring the well being of the society as whole and reflects the social membership of the individuals.

Several different single dwellings appear during the years, like the detached house, private housing estate, flat. This last has been much developed from the nineteenth century with the generalization of the building because of the industrial revolution that involved a growth of the population density in the cities.

The various types of house correspond to the variety of landscapes and climates. The houses illustrate at the same time the history and the geography of France. The styles of house are different according to the region and the climate, and architecture reflects the tendencies at a certain period. For instance, we see a lot of houses in half-timbering in the East of France and this date from the Middle Age where the wood was much used. The varieties of house are primarily apparent in the rural areas where distinct differences between the houses of village and houses of the cities are noticeable. (www.french-property.com).

In the French real estate, the house is the type of habitat the most popular and desired. There exists various types of construction material such as the concrete block which is also called perpend, the brick, the stone or the wood which is more and more developed. These materials have different advantages as well as disadvantages and the choice of material before any construction is a crucial step because it contributes significantly at the same time to the cost and to the quality of construction.

Today, the majority of the new house constructions are built with the traditional standard construction material, which is the perpend. In 2009, 70% of houses were built with perpend (Schaplein M, 2009). This material is the reference in term of construction because it presents first of all a good value for money. It is one of the cheapest building materials that is found in all wholesalers of building materials. It is very known for its simplicity and its rapidity of implementation than others materials due to its relatively lightweight. The perpend shows a good solidity performance in relation to its ability of bad weather and usury resistance. It is a noncombustible material and has a good phonic isolation. Concerning the environmental aspect, it can qualify as having a weak impact on the environment. The road transport is limited by the supplying proximity of this material for the building sites due to the several production sites distributed on the land. Moreover, it presents a good energetic outcome because it is composed of natural materials, which make the perpend a natural and recyclable material. From an aesthetics point of view, it is necessary to cover this surface with plaster because of its unpleasant aspect and color that give a coldness impression to the house. On the other hand, this building material has disadvantages. It requires a lining

because it has a very low thermal resistance and low thermal capacity: it does not accumulate and restore the heat. Even if perpend is composed from natural resources, its manufacture requires much energy to produce it. (Guillaume, 2008, maison.fr).

In comparison with the perpend, the brick is less used in the construction of a house. Before the increased arrival of construction in concrete block after the Second World War, the brick was considered as a material of excellence. Then the brick became less used because after the destruction, it was necessary to rebuild quickly and not expensive. (www.travaux.com). It is not used now as widely because of the fragility of the material during its construction. However, this material was mainly used in the northern and eastern regions, which were industrial regions. Today, the use of brick is done especially for the preparing of frontage of houses. The brick is different from the concrete block in the fact that it is already aesthetic, there is no need to cover it with a plaster. Just like the perpend, the brick is a non combustible material and resists the climatic risks, and easy to implement. The brick offers certain advantages, which the perpend does not have. It has a much better thermal isolation thus making the winter hotter and summer fresher. Like the perpend, the brick does not isolate sufficiency and needs an isolation complement. Moreover, contrary to the perpend, the brick's implementation requires a particular know-how. This type of construction takes a longer time, requires more money and more specialization. (Guillaume, 2008, maison.fr).

The stone is no more used widely and is found mainly in the rural areas. This material has aesthetic good qualities, which one especially finds in the old villages, and it is a natural material, which requires few energy for its exploitation. Expensive and difficult to implement in particular with its long exposure time, it disappears progressively from the new building to the profit of the perpend or brick although it has a better durability. It is very frequent to use the stone to cover the frontage of a house to give it an effect of country house, traditional house. Now the stone is mainly used for the renovation of old buildings. (Guillaume, 2008, maison.fr)

These materials, the perpend, the brick and the stone are the basic materials of construction and the perpend is the most common type of construction nowadays. It is changing today with the appearance of new ways and materials in constructing house in particular with the eco-house trend. Since a few years, the ecological tendencies have been incorporated in the construction of houses in France because of the important energy consumption weight of the building sector. This sector harms the environment with its strong consumption in energy, water and it contributes to the greenhouse effects by generating 25% of gases (www.developpement-durable.gouv.fr). But it can be positioned as a key actor in the

resolution of the environmental challenges in particular by using alternate materials respecting the environment. Wood, renewable and ecological material, remade its appearance on the market of the construction.

There exist various methods of construction with the wood, and the framework wood is the most used technique. Contrary to the many brakes that this material can meet, it has much more advantages than traditional constructions. Its strong points are above all of ecological, energy saving orders but also comfort, aesthetics and quality of life are noticeable assets.

To build a house with wood takes less time than a traditional construction. The wood construction belongs to the dry channel that does not use water compared to concrete, thus reducing the duration of building site because there is no need of drying. The duration for a wood construction can last between 4 and 5 months versus 10 to 12 months for a traditional construction (www.salon-maison-bois.com, 2009). Its lightness facilitates its implementation as well as the construction on difficult surfaces. This material has a weak impact as regards consumption of energy. It mobilizes fewer energy in its transformation to its final product compared to others building materials. The transformation of this material consumes four times less energy than the concrete construction. In addition, the industry process of wood generates only very few polluting matters for the environment: the pollution of water, air and soil is minor. (Dominique Gauzin-Müller, 2004). Whereas the perpend construction, basic element of construction has a weak thermal isolation, wood shows a natural capacity of thermal isolation 10 times larger. The wood is presented as an efficient insulator allowing heating savings going up to 20% (www.base.futur-e-maison.com). The wood is known to be a material promoting combustion, but contrary to popular beliefs, wood has a high resistance to fire. Its use in the construction does not increase the risk of fire. In case of fire, this one transmits less quickly the heat than for a concrete construction, has a slow combustion that does not release from toxic smoke and it keeps its mechanical qualities.

This material gets a feeling of comfort. In general, the wood house is very pleasant to live what is due to its capacity to create a serene environment by its good isolation and then its aesthetics side. Wood in the construction industry makes the dwelling healthier and more comfortable those being important criteria for the wellbeing of the households. Unlike the perpend, which requires a coating on the frontage for an esthetics aspect, wood can be let in its natural state. But it offers also a great freedom in its coating and its architecture: it can be painted, to be associated with other materials as the stone, glass, metal. (www.bois.com). Wood is one of the most solid materials. With a conception and a manufacture of quality,

wood has a high longevity. That is shown by many wooden buildings still perfectly preserved dating from several years like the half-timbering houses or the structure of churches.

Its biggest asset that makes the wood completely different from the other materials is that it is a natural material that forms the ecological material par excellence because it is the only one construction material that is naturally renewable and renewed. Unlike traditional construction materials, wood is a material whose recycling is without effects on the environment. Wastes from wood processing can than be recycled under various forms such as combustible, and used in the panel industry or the paper industry. To use wood for construction contributes to the fight against the greenhouse. At the time of their growth, the trees absorb carbonic gas and reject oxygen. From there, the exploitation of wood for construction makes it possible to renew the forest because the younger the trees are, the more they absorb carbonic gas to grow. Moreover, the durable use of this material like in the construction industry makes it possible to continue to store this gas.

France has engaged itself to decrease its consumption in energy in the sector of the building with housing construction respecting the environment. Since few years, the wooden houses, originally from Scandinavian countries, have increased in France. With the awareness of the climate warming and the omnipresence of the respect of the environment in societies, this method of construction tends to democratize itself more and more in France with a progression of 46% since 2001 (www.cnbd.org). They are mainly constructed in the wooded, mountainous areas and in the West part of the country. In 2009, 11 500 wooden houses have been constructed in France representing 5% of the housing market (Bolle H., *Beneteau caron marketing*, 2010). Moreover, according to a survey of the journal, *Le Moniteur*, 42% of the French think that the protection of the environment is the most important criterion in the purchase a dwelling nowadays (www.developpement-durable.gouv.fr).

Even if this market tends to develop, these houses represent a market share of only 5% of the housing according to a study of the National committee for the Development of Wood. (www.cndb.org). More and more people are interested in this alternative construction with for primary reasons the concern of environmental quality and the energy saving but few people really get involved in this investment. There is a gap between the intention and the act of purchase and the reasons are many.

The various types of material construction have different characteristics although the concrete block, the brick and the stone have much more similar characteristics than wood. The house in concrete block being more reputed can be compared to evaluate the

competitiveness of construction wood in order to explain the different brakes that this one meets.

The key reason that moderates the choice to invest in a wood house is of a financial order. At a price level, the wood appears to be more expensive than the concrete block construction. The average costs of the square meter of a house of 120 m<sup>2</sup> are estimated at 1250 € for a construction wood against 1050 € for traditional construction, according to the L'express magazine (Schaplein M., 2009). This difference can be explained by the quality and the comfort of life which wood provides. The wood house is often larger and more complex in their forms due to its custom-built construction and its elaborate architecture that allows the purchaser to be free in the design. It is related to a luxury construction that remains a more expensive construction than the traditional houses because of its uniqueness and its handcrafted manufacturing process. Its purchase is significant and a considering choice by the search of information and advices than for traditional house. This market is still targeted on the top-of-the-range house. Their price is from 10% to 15% higher than the one of traditional houses. (www.nostrodomus.fr). Admittedly, the wood house is partly more expensive than a concrete construction, but for this kind of purchase, it is necessary to distinguish two types of costs such as the cost of construction, which is the direct costs on the short term for the realization and the cost of exploitation, which means the amortization of the construction on the long run. By reasoning in this manner, the house of wood proves true to be more economic thanks to its qualities of thermal isolation. For instance, it costs 2000 € per year to heat a traditional house with gas whereas for the wood house it costs only 400 euros, that is a saving of 1600 € (Tréguier E., 2008). The additional cost at the moment of the purchase is then quickly paid off by energy saving that this material offers.

The high cost of a wood house prevents people from being able to afford to buy this kind of house and that is therefore the most important barrier. Also the cultural barrier proves to be rather consequent in the minds. This method of construction is not widely used and neither widespread in France. People have many false assumptions because of a limited communication. There exists a deep ignorance generated by the massive use of concrete for all types of buildings during the rebuilding. People tend to have a bad image of wood by the story of "the three little pigs". In this story, the wood house is perceived as being less solid than the concrete one because it does not resist to the breath of the wolf. Contrary to this cliché, a gust is not enough to make collapse a wood construction. This material is as resistant as steel and as durable as the stone.

In the same idea of obstacle to the use of wood in the construction can be explained by a deficit of communication that makes people think that the exploitation of wood reduces the forest and destroys it thus endangering it. But its exploitation contributes to the renewal of the forest and the fight against the greenhouse effect since the young trees consume a great quantity of carbonic gas in order to grow.

Very often in France, the image of the wood house is often reported to the chalet one. In the mountainous regions, a lot of constructions are made of wood in the form of chalet. (www.bois.com). The use of this material generates reluctances concerning its maintenance, its solidity and its fire resistance. According to the external coating used, wood will have a different maintenance. But it does not require more maintenance than the others constructions, which require also a regular maintenance. Concerning the solidity of wood, people can notice that many old constructions were made of wood. Many old buildings have a timber structure dating from the Middle Age. When wood burns, it is consumed more slowly than other materials, such as the concrete and steel, and keeps its capacities of bearing pressure longer. (www.bois.fr). Timber construction can be perceived as outdated, an old material, which is not anymore topicality and can be associated to poverty because before these houses were seen like a rustic building without comfort. (Pierre Mardaga, 1995, 198).

## 2.4 Overview of marketing concepts:

In this study it is essential to describe the marketing concept that states, "organizations need to anticipate and satisfy consumer needs if they are to remain on top in terms of making profits" (Blythe, 1997, 1). Marketing has a significant role in the case where some key elements are identifying the needs of the customer and then meeting those needs. It is the way the company communicates with the customer.

## 2.4.1 Marketing:

Prior the World Ward II, companies were not worried about the consumers' needs but only about the technical problems like the financing and the manufacture of the products. These products responded largely to the basic need, and they were sold easily due to the exceed demand referring to the supply. Then, competition had increased and firms had begun to be interested to the needed products by paying attention to the customer satisfaction. After the World War II, with better means of production, has appeared an increasing in the variety of

products that involved a higher supply than demand. With this variety of products that was offered to the consumer, this one was able to choose which product would satisfy more its needs. In response to this, firms began to use the marketing concept, which involves focusing on consumer needs before developing the product and meet them in order to realize a profit by satisfying those consumers' needs (www.media3.bmth.ac.uk).

There are several definitions of marketing. Kotler, Armstrong, et al., defined the concept of marketing as "a social and managerial process by which individuals and groups obtain what they need and want through creating and exchanging products and value with others" (Kotler, Armstrong, Wong, Saunders, 2008, 7). The concept of marketing is thus a way of managing the exchanges that are established between the company and its market by seeking the satisfaction of the customer and the one of the company created by the product.

In the study of consumer, marketers view and analyse everything from a consumer's perspective that means they take a look at the firm and its products and think ahead the consumer's needs and interests.

In the consumer's behaviour field, the role of marketing is to stimulate the problem recognition by product information, as well as to provide sources of information in order to help people formulate alternatives and to influence the evaluation process of consumers.

## **2.4.2** Marketing-mix, the four Ps:

A lot of companies had a product-oriented view, which firstly focused on the product's characteristics. The products developed by the engineers, seem to them to be the best that can be produced in term of price and satisfaction for the consumer. But that does not have any interest for this last since a consumer rather will buy a product, which meets its needs. The four Ps is a marketing strategy that makes marketers wonder some question referring to the consumer's needs in order to better satisfy them and take a consumer-oriented view: price, product, place and promotion. "The right price is always the price that consumers see as good value for money, the place where the product is purchased is also part of the bundle of benefits making up the product, promotion must be geared to the consumer's aspirations, personality and needs, and products are only of interest to consumers for the benefits, both physical and psychological." (Blythe, 1997, 191). The strategic choices in term of these four Ps characterized the product and state the characteristics that will attract the consumer.

## **2.4.3** Target marketing:

In the market, consumers are all different and have different needs and interests. Marketers group them into distinct groups with similar needs, characteristics or behaviour who might require separate products or marketing mixes. This division of the market is called the market segmentation. Jim Blythe defined the segmentation as "the process of dividing markets into groups of potential customers with similar needs" (Blythe, 2009, 120). By the market segmentation, marketers have a better consumer-oriented view with the typical customers and the adaptation of the company activities towards its customers. Each segment is treated differently because needs of each one differ. The segmentation of the markets enables the company to be clearly focused on the consumer's defined needs and thus have a better understanding of these needs. Once the market segmented into these groups of different consumer behaviour pattern, marketers decide which segment is most likely to be interested by their products. The selection of focussing a certain group of consumers on is called the target marketing. The targeting process focuses marketing resources on a certain market segment and enables to identify the possible marketing opportunities in this segment. In the case of this study, it is essential to define a target market as not everyone affords a wooden house. The price of wooden houses stays rather expensive hence the necessity to target certain people than others. For the different segment of the market, the company is able to develop strategies relating to the choice of the target market such as undifferentiated, differentiated and concentrated strategies. In this study, it is about more a concentrated strategy where marketers focus on a single segment because wooden houses company are small ones and they don't have major competitors. The concentration strategy secures a competitive advantage in the form of niche market (Blythe, 2008, 126).

## **2.4.4** Niche marketing:

Niche marketing is the targeting on a small segment of the market focuses on identifying and satisfying it by conceiving a unique product for the customer of this particular segment. This small narrowly defined market is formed of distinct groups that we call niche, which is a small segment of a market.

When thinking of wooden houses market, niche market comes into mind because it is a small segment of the market where there is little competition. Customers have distinct needs and wants. In this particular niche, customer is looking for good knowledge and skills in constructing a wooden house. Customers belonging to this niche of the market are in the search for a good quality and good information. Everybody cannot afford this kind of house

because it has rather an expensive price. Niche market implies the focus on a sub-segment of the market and the establishment of close relationships with customers understanding thus better their needs (Blythe, 2009, 120).

## 3. THEORETICAL FRAMEWORK:

#### 3.1 Consumer Behaviour:

In economics, we define the consumer as a person who has a budget, which can be spend on goods and services available on the market in order to obtain them for their use. The behaviour refers to the actions taken for satisfying needs or desires. The behaviour is usually in relation to the environment of the consumer. The consumer is an important actor in the market to consider for any firm seeking to succeed in a competitive environment. That it's why it is essential for every company, surviving and competing in any business field, to understand and to adapt to consumers on how they are making their choices and how they behave. According to Blythe (1997, 2) to be successful in marketing it is crucially important to study how those consumers behave and how they are likely to respond to our activities. Consumer behaviour is described as the decision processes that precede and follow actions, which are directly involved in obtaining, consuming and disposing of products and services. Consumer behaviour is said to be "the study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires". (Solomon, Bamossy, Askegaard & Hogg, 2010, 6).

#### 3.1.1 Theories behind consumer behaviour:

Consumer purchases are highly influence by two factors: internal and external. Internal factor refers to psychological and personal dimension and external factor to cultural and social one. Consumer behaviour is affected by several factors. Consumer behaviour is explained by theories that explore the various drivers that impel consumers towards their choice. These drivers form the theoretical models of consumer behaviour, which contain psychological, sociological, economical and stimulus response models. Each of these domains is related to all others. Wayne D. Hoyer and Deborah J. Macinnis give the example that "to make decisions that affect outcomes like buying new products, consumers must first engage in processes described in the psychological core. They need to be motivated, able, and have the opportunity to be exposed to, perceive, and attend to information" (Wayne D. Hoyer and Deborah J. Macinnis, 2008, 10).

## **3.1.2** A psychological perspective:

The consumer is influenced by psychological factors that focus on motives for buying and on the process of learning during the information search stage in the decision process. There are four keys of the psychological factors, which are motivation, perception, learning attitudes and beliefs, and the buying situation.

## **3.1.2.1** The motivation process:

Motivation refers to the processes that cause people to behave as they do (Solomon, Bamossy, Askegaard & Hogg, 2010, 177). Motives are the reasons why people take action (Blythe, 1997, 14). Motivation can be defined as an internal state or condition that activates behaviour and gives it direction, and a desire or want that controls goal-oriented behaviour. Blythe argues that a motive is simply a reason for carrying out a particular behaviour; it is not an automatic response to a stimulus.

Two categories of needs are distinguished: utilitarian needs and hedonic needs. Utilitarian refers to the useful side of the product, the functional attributes, while hedonic ones refer to pleasurable side of the product, aesthetic aspects.

There are complex motives behind purchasing decisions. Motives can be classified as following: primary, secondary, rational, emotional, conscious and dormant. Consumers' motives in buying tend to be attracted on primary motives which reason leads to the purchase of a product and secondary motives that form the reasons behind buying a particular brand. Motivation can be generated internally or externally. The customer will be influenced by external motivations, which will lead him to establish goals before buying the product, and then this will generate internal motivations that will activate a need to satisfy (Blythe, 1997, 11).

## **3.1.3.1** The perceptual process:

Once motives have motivated consumer in their choice to take actions in order to satisfy their needs, the consumer will search for information about the desired want that would most satisfy his needs. What is going to interpellate the consumer are called factors of perception. Perception is the process by which physical sensations such as sights, sounds and smells are selected, organized and interpreted (Solomon, Bamossy, Askegaard & Hogg, 2010, 138).

It can be defined as the process by which people select, organize, and interpret information that they identified. The perception process helps the consumer to make better choice in their buying decision process. They are exposed to a lot of kind of information. The way they will perceive this external stimulus will influence their reaction, their decision.

The perception process is made up of three stages of exposure, attention and interpretation. And includes a selective attention, selective distortion and a selective retention, which make buyers have the same stimulus, but perceive it in a different way. As a lot of things happen around the consumer, he is not aware of most of the information, he does not take in all the information around him. The different information are filtered and then selected. Consumer eliminates information he is not interested in and select those that attract him from the environment. Marketers need to identify what their customers will notice first and pay attention to. In a selective distortion consumer interprets the selected information in relation with his beliefs. It is described as the perceptual process, which occurs when people subconsciously try to make new information fit their old ideas about something (www.buseco.monash.edu.au/mkt/dictionary). Consumer adds preconceived attitudes to interpret new information that enters the sensory store of the memory. In term of retention selection, people subconsciously are more apt to remember information that confirms their previously held attitudes. They remember information that they find meaningful and interesting. Reasons for retaining particular information may be because it touched them emotionally, or it was of immediate relevance, or it reinforced previously held views (Frances Brassington, Stephen Pettitt, 2006, 119). These three kinds of information selection represent the causes of differences in reaction to the same stimulus.

Marketers need to be aware of the way people receive and perceive stimuli to better catch their intention. They should anticipate the desired need of the consumer in order to set the right message that will influence the buyer decision.

## **3.1.4.1** Learning attitudes and beliefs:

At the conclusion of his search for information, the consumer will develop an attitude with regard to the various alternatives which are present on the market and which he knows. Learning relates to any change in long term and is associated with how information is processed. Solomon, Bamossy, Askegaard & Hogg (2010, 246) explain that learning refers to a relatively permanent change in behaviour, which comes with experience. Learning can occur through simple associations between a stimulus and a response or via a complex series of cognitive activities (Solomon, Bamossy, Askegaard & Hogg, 2010, 268). Learning

tends to be an ongoing process like the concept of perception. Our knowledge about the world is constantly being revised as we are exposed to new stimuli and receive feedback that allows us to modify behaviour in other similar situations.

The process of learning of the consumer is to study the effect of former experiments on his reaction when he is confronted with the same stimulus. The process of learning is capital in the sense that he exerts an influence on all the variables intervening in the consumer's behaviour: beliefs, selection criteria, and so on.

The process of learning comprises four phases: attention, memorizing, recovery in memory and reproduction, phases during which the individual observes models while focusing himself on relevant information, records in memory these data, and then recovers them for finally reproducing the behaviour observed (Solomon, Bamossy, Askegaard & Hogg, 2010, 250-251).

There exists different way to learn, as there are different manner to perceive information: behaviourists' theories on conditioning learning and operant learning, and cognitive concepts with the cognitive learning and social learning. In conditioning learning, individual establishes a relationship between a stimulus and a response to bring about the learning of the same response to a different stimulus. The concept of conditioning is based on behaviourists' theories, which regard the learning as a modification of the behaviour resulting from an association between a stimulus and a response. This process is directly associated with work of the physiologist Ivan Pavlov. According to him, the conditioning learning supposes the existence of a relation between a stimulus and a behavioural response. The reinforcement is necessary for individuals to develop attitudes and beliefs from these informations because this process can be less effective in modifying the consumer's behaviour for products that he knows than for products that he is not accustomed to meet such as wooden houses (Solomon, Bamossy, Askegaard & Hogg, 2010, 247).

Operant learning occurs as the individual learns to perform behaviours that produce positive outcomes and to avoid those that produced negative outcomes (Solomon, Bamossy, Askegaard & Hogg, 2010, 248). It is about a process of conditioning related to the training resulting from the direct experiment of the individual. In fact the innate reflexes intervene in the later behaviour of an individual are issued from the consequences of a former behaviour. According to the consequences of this behaviour, positive or not, the consumer deteriorates his future behaviour consciously. The consumer thus has various possible answers to the same stimulus among which he chooses what contribution will provide the most satisfaction.

Thus if the consumer tests a pleasant feeling during an exposure to a stimulus, it tends to reproduce the same type of reaction confronted with an identical stimulus. One speaks then about positive reinforcement. The higher this last is, the more is the probability that the consumer reproduces this behaviour is high. Contrary, a disappointment or an unpleasant feeling felt in the same context will encourage the consumer not to renew the behaviour which is caused by negative reinforcement (Solomon, Bamossy, Askegaard & Hogg, 2010, 249).

Apart from conditioning, two models are based on cognitive concept of the learning: cognitive learning and social/observational learning.

The cognitive learning is a mental process, which an individual uses in a conscious way or not when it is in search of solutions to apprehend the environment in which he is located. In the process of social learning, consumer observes others' behaviour and adjust their own accordingly. It is a learning by observation where consumer increases its repertory of actions by seeing or by intending individuals to adopt a given behaviour (Blythe, 1997, 59).

## **3.1.5.1** The buying decision process:

When a consumer purchases goods, he goes through the following four stages of the process of making purchase decisions: problem recognition, information search, decision making, and post-purchase evaluation (Wayne D. Hoyer, Deborah J. Macinnis, 2008, 12). In our modern societies, the decision making process turns to be more complicated that it was partly because of the abundance of choice whose consumer faces.

The approach that the consumer will adopt in his decision of purchase depends on the statute of the purchase in question. It depends if the purchase is a new one, a repeat of a previous one, if it is a novel product, if it used in the daily life or occasionally. In this process, the consumer informs himself by all possible ways having the aim of satisfying his needs thus leading him to his buying decision.

## - Problem Recognition:

At this stage, the consumer becomes aware of a lack that he will decide to solve by satisfying this one with the purchase of a good or a service. Problem recognition occurs whenever we see a significant difference between our current state of affairs and some desired or ideal state (Solomon, Bamossy, Askegaard & Hogg, 2010, 320). Two models of recognition can be distinguished: the need recognition and the opportunity recognition. An actual state leads to a need recognition in the case where the consumer misses something in order to continue to

be satisfied. This need recognition as an actual state can decrease if it does not meet the consumer's expectations, or simply if his needs change. In the case that his needs are not anymore the same, the consumer will turn to reach an ideal state that comes by experiencing something new or observing other new alternatives of a product. This ideal state increases consumer's expectations in a product that will satisfy his needs and that will refer to an opportunity recognition. The consumer will become more exigent in the manner of satisfying his needs by new means because of the profusion of more and more better- quality products in the environment where he lives. Blythe (1997, 119) explains that marketing activities, which try to encourage the consumer to use this product or this brand rather than another, changing therefore the individual's aspirations, causes this shift. He adds that this shift is predicted because it is rare for the actual state and the ideal state to be the same. It would imply that the consumer would not want to have more than he has and he is perfectly satisfied with what he posses already.

#### Information search:

The second step of the consumer decision process is the information search. The consumer searches for information that will respond to how resolve the problem recognized in the first stage. At this stage "the necessary information is gathered and used to evaluate mentally the options" that the consumer is faced (Wilkie, 1994, 481).

We can distinguish two source of information search: internal search and external search. Internal search is engaged when consumers face a product that they already had experience in it, he uses what he's already known from the learning process. He is informed on the purchase by his own experience and his knowledge that he has on it. Living in a consumer culture, consumer has also already in his memory some knowledge about many products. When the internal search is not enough sufficient for the consumer to make his decision to

When the internal search is not enough sufficient for the consumer to make his decision to purchase because of a lack of information, the external search comes to complete this last. Contrary to the internal search that comes from memory, the external search comes from all the outside sources. (Blythe, 1997, 120).

## Decision making:

After having to collect all the necessary information to choose the better decision, the consumer establishes comparison according to criteria that he will have determined. The consumer will have to make his choice among all these alternatives. The decision making can be defined as the evaluation of alternatives. The consumer chooses the product that will allow satisfying his needs as well as possible. He will identify which criterion is more

important than another based on his collected information. This will lead him to make a choice.

The decision making process is composed by different step that draw the consumer's way to make a choice. Knowledge from the information search are assembled in the consideration set. In the consideration set there is all the criteria from what the final decision has to be made. Consumer can have some rules concerning their purchases like to buy always in the same shops because they trust them, or to buy always the best quality whatever is the price. These rules are called heuristic decisions (Blythe, 1997, 125).

## Post-purchase evaluation:

In this phase, the consumer evaluates the utility of the product and its adaptation to the need. If the real utility is higher than the utility expected, he will become a faithful customer. After making a purchase decision, customer cares about the expected results. This comes from a concept known as cognitive dissonance. He evaluates the product's performance in light of his own expectations. This may involve remorse as well as a feeling of satisfaction or dissatisfaction. Leon G. Schiffman, Håvard Hansen, Leslie Lazar Kanuk (2008, 90) present three possible outcomes of these evaluations. First the actual product satisfies consumer's expectations leading to a neutral feeling. Then performance may exceed consumer's expectations leading to a complete satisfaction. Finally comes the dissatisfaction due to a low performance compared to expectations. It is said that consumer's expectations and satisfaction are two outcomes closely linked: "consumers tend to judge their experience against their expectations when performing a post-purchase evaluation" (Leon G. Schiffman, Håvard Hansen, Leslie Lazar Kanuk, 2008, 90).

## **3.1.3** A sociological perspective:

Many social factors are influencing the consumer behaviour such as the groups to which the customer belongs and social status. Sociological model explain consumer behaviour in terms of the social forces that act upon consumers. In this part, influences surrounding consumers in their everyday decision-making situations will be analysed. These influences are from several sources such as culture, social class, reference groups, family, lifestyle, geodemographics.

The consumer who belongs to a group can admire many others and a desire to belong to this group often directs his purchase decisions. Frances Brassington and Stephen Pettitt (2006, 115), explain that individuals are influenced by "current trends in society as a whole and by a

need to conform with the norms of the various social groups to which they belong, as well as to enhance their status within those groups".

There are five mains social influences as culture, social class, reference groups, family and the personal influences.

Many various factors influence the consumer's purchase behaviour. These factors can be split into two main categories: factors related to the environment and factors related to the individual. Factors related to the environment refer to the cultural and social elements, which exert an influence on the purchase behaviour.

## 3.1.3.1 Cultural factors:

Cultural factors refer to the culture, the subculture and the social class. Blythe (1997, 90) defined the culture as a set of beliefs and values that are shared by most people within a group. Culture is perceived in a very broad set. It includes the accumulation of shared meanings, values, ethics, norms, rituals, material objects and services that are produced by the society's members, traditions among people (Solomon, Bamossy, Askegaard & Hogg, 2010, 506).

Culture is one of the main important element in the manner that consumer behaves. It can be considered as being one of the most basic external influences on consumer because through culture, certain behaviour is learned which has traditions, values, attitudes that vary according to the countries. Each individual shares values of his own culture. These is learned and transmitted by various groups and institutions like the family, friends, school. The impact of culture is thus natural and automatic since all individual in a society acquires it and transmits it to the future generation.

As there are different cultures, several fundamental distinctions between cultures come to explain it. Hofstede has demonstrated that cultures vary in term of individualism and collectivism. People in an individualistic country tend to attach more importance to personal goals while in a collectivist culture, people are more passive, their goals depend on the entire group whose they belong to. A individualistic consumer is more likely to take his own decisions whereas a collectivist one would wait for the decisions of the other members of the group since they are not independent and maintain strong relationship to the community whose they belong to. With this dimension is added the power distance, uncertainty avoidance, and masculinity and femininity (Blythe, 1997, 91).

Each culture contains subcultures that are cultural groups, which coexist within the same culture. Subcultures are defined as "distinctive groups of people within a society that share common cultural meanings, behaviours and environmental factors. Subcultures include

nationalities, religions, racial groups and geographic regions" (Blythe, 2008, 197). These groups of people have different norms, customs that distinguish them from the values and beliefs of the main culture. Consumers identify the groups, which share the same common characteristics. Marketers identify their consumer's identity in reference to their group membership. Consumer's ethnic origins, racial identity, religions, can be a valuable criterion about consumption decisions.

#### **3.1.3.2** Social class:

Social class is an important influence factor on consumer behaviour since it affects the consumer's tastes, preferences. A social class can be defined as a group of people which share similar lifestyles, interests, behaviours and people in this social class are equal in terms of their social standing, occupations (Solomon, Bamossy, Askegaard & Hogg, 2010, 460).

There exists a hierarchy in each culture. People are devised into social class such as upper middle class, middle class, lower middle class, working class, and lower class (Blythe, 1997, 94). In a society people are grouped according to their social class and economic resources. Several indicators characterized the social class such as the profession, the income, and the educational level. The decision-making process is different in each social class. Important factors as occupation, income and educational level have to be considered in the social class' composition.

According to his social class, the consumer will consume certain products and spend differently. These products can be different according to the class social to which he belongs. Upper middle class consumer is going to be more concerned by aesthetic side of a product, the general appearance, so to analyse under a hedonic perspective whereas a working class consumer is going to evaluate the utility side of the product, to analyse it in an utilitarian term (Solomon, Bamossy, Askegaard & Hogg, 2010, 470). The consumer belonging to the upper middle class will have access to much more products compared to the lower class because he possesses the resources for.

## **3.1.3.3** Reference groups:

When an individual or a group influence others behaviours it is considered as being a group reference. Reference groups are "groups that have a direct or indirect influence on the person's attitudes or behaviour" (Philip Kotler, Gary Armstrong, Veronica Wong, John

Saunders, 2008, 244). These groups influence the consumer's behaviour since he has a close relationship with the one to which he belongs. This membership influences the purchase behaviour of the consumer according to the references of the group that he adheres.

There are two main influences of reference groups: normative influence and comparative influence that are called primary and secondary groups. In a normative influence group the consumer has direct relations and influences on the purchase decisions and behaviours. In this group is included influence of people seen most often like family, friends, colleagues that can change considerably the consumer ideas about a product and thus his decision. In a comparative influence group, influences decisions are more affected by people that consumer meets occasionally with whom he shares common interest like brands or activities. These groups have less impact in controlling behaviour since there is less interaction between them and the consumer compared to relationships with family. However they still have an influence on consumer's decisions dealing with shared interests. (Solomon, Bamossy, Askegaard & Hogg, 2010, 384). Blythe, 1997, 101, states that reference groups influence in three ways: normative compliance, value-expressive influence, informational influence.

Besides primary and secondary groups, reference groups are also grouped under the form of aspirational groups, dissociative groups, formal and informal groups. When an individual wishes to enter a specific group, this group is considered as being an aspirational group. It can have a strong influential impact on consumer behaviour because in the purpose to be a member of this group, he will adopt attitudes and behaviours of this one. Contrary to these groups, dissociative groups can be considered as "undesirable group" whose consumer does not want to belong to.

Formal groups are structured with written rules for members, codes of conduct whereas informal groups are not structured, but formed on friendship that develops rules of behaviour. This informal group states to be more impressionable on consumer because it is bind with a normative influence (Solomon, Bamossy, Askegaard & Hogg, 2010, 385-387, Blythe, 1997, 100).

## **3.1.3.4** Family:

A family is a group of at least two people in a household based on marriage, cohabitation, blood relationships, or adoption (http://www.marketingpower.com/\_layouts/dictionary.aspx, 1995). The family is an essential actor of influence in the consumer decision-making in terms of attitudes, beliefs and learned behaviour. Any individual is using the family dimension as a scheme of reference for most of his behaviours.

Family needs and expenditures depend on several factors such as the number of people within the family, their age, how many of them is employed. With time these needs and expenditures change, as people are growing, involving thus a change in interests and in behaviour. Therefore the model of the family life cycle (FLC), which provides an understanding of changes in consumer buying behaviour, describes a way of segmenting the family market at the various stages during her evolution in time in order to determine the products and services that consumer buys at each of these stages. This model associates the consumer in a particular segment according to the changes in term of income and family composition with the new demands on this income. Changes in the life of the consumer are described through variable as ages of family members, marital status, disposal income, presence or absence of children, the number of adults employed outside the home.

These categories show the differences in consumption between consumers. Consumer priorities change along his life referring to new events that will change his expenditures.

Consensual purchase decision and accommodative purchase decision are the basics types of family decision. In a consensual purchase decision, the group agrees on the desired purchase and differs on how it will be achieved. In an accommodative purchase decision, the process to achieve agreement among a group whose members have different preferences or priorities. Family decisions use often the accommodative purchase decision by reaching agreement among family members by bargaining, coercing, compromising, and wielding power.

We can distinguish several purchase roles inside the family like the initiator, the influencer, the decider, the purchaser, and the final user.

Family decisions are bound to create conflicts, as family members cannot always be agreed on the same needs and preferences. The family decision conflict can be explained by several factors including interpersonal need, product involvement and utility, responsibility, and power. The type of decision that the family will be agreed on depends on the intensity of theses factors generating conflicts.

#### **3.1.3.5** Personal influence factors:

A consumer's decision is also influenced by internal factors that are his personal characteristics, which include factors such as buyer's and life cycle stage, occupation, economic situation, life style, personality and self-concept, gender, habits. With the age and through each life cycle stage, people's consumption change over their lifetime, they don't buy the same products during their life because they needs and tastes have changed. To develop appropriate products and marketing plans, it is important for marketers to define their target markets in terms of life-cycle stage. Moreover, they have to identify groups that

are occupied in order to attract their interest in their products because occupation in an important variable that affects the buying behaviour.

## **3.1.4** An economical perspective:

The purchaser has the intention to spend his income on the products, which bring him the maximum of utility satisfaction. The economist's perspective contains two important variables of the consumer in his purchase decision: demand and income. Demand for goods and services will depend on the consumer's ability to buy and his willingness to buy. Economic models are said to consider "how consumers decide what to do with their money" (Solomon, Bamossy, Askegaard & Hogg, 2010, 483).

#### **3.1.4.1** Demand:

From an economist's perspective, influences like income, price, preferences, and expectations about the future are affecting the demand function. Several economic factors are influencing demand such as the price, the disposable income, the use of credit, and the willingness to spend. The demand will be thus affected by these factors. Consumer's demand depends mainly on the price of the product, and at the same time on price of substitute products or complementary goods. Once the consumer has identified the best price, he will attend to buy it according to his disposable income. The disposable income depends on the employment or unemployment of the consumer, the inflation and wage rates. If the consumer has a low disposable income, he could have recourse of the use of credit. Before to contract a credit, the consumer will be attentive to the credit terms and the interest rates. The consumer is going to buy when he disposes all the means for his purchase. However, another factor affecting the demand can emerge which is the consumer's willingness to spend. His willingness depends on his confidence on the product, if he really needs it because he could have already the same kind of purchases.

The consumer knows his preferences, his disposable income, and the price of the different products. Demand and price are two variables, which are bound. As price falls, the quantity demanded rises, the consumer is going to buy more, and vice versa. The consumer's sensitivity to price changes varies in case of an elastic demand or inelastic demand. An elastic demand means that consumer is very sensitive to price changes while with an inelastic demand the consumer is not sensitive to price changes. (Kotler, Armstrong, Wong, Saunders, 2008, 292-294).

#### **3.1.4.2** Income:

According to his income, the consumer has a certain way of spending. Ones distinguish different income patterns such as the nominal income, the real income, the disposable income, and the discretionary income. Consumption depends on the disposable income, the income left after compulsory deductions, in order to be spend as consumption. Thus the level of the disposable income modifies the expenditure's structure in the case that a household disposing of a high income will be able to spend more and in a higher range of products than those having a lower income. But it modifies also its evolution when households grow rich, they change their purchase's habits.

The income elasticity of demand measures this impact. The income elasticity is positive when the income rises, the consumption does also. Its responsiveness differs according to change in income with which other kinds of products will be associated: basic products have a low-income elasticity while luxury products have a high one. The income elasticity of demand explains why in affluent countries there is a rapid growth of demand for luxury products and a slow growth demand for basic products.

Income is also an important indicator of social class as consumer's purchases are reflected his level of resources, what kind of products can he gets, and therefore it determines his social class. (Solomon, Bamossy, Askegaard & Hogg, 2010, 454-456).

## **3.1.5** Stimulus response models:

The stimulus response models answer to the question of how marketers can have a great advantage in attracting the consumer over their competitors. Comparing to others stimuli, in these models, behaviour is a learned experience through exposure to a set of stimuli and their association. The stimulus-response model is summarised by the following scheme that shows how marketing and other stimuli enter the consumer's "black box" which contains the buyer's characteristics and his decisions process, and produce responses in term of product choice. Marketers create stimuli and consumers respond to these stimuli. Marketers must determine what occurs in the mind of the consumer, of what his "black box" is made up. These stimuli are perceived referring to the consumer's characteristics and lead to the purchase decision which is undertaken. The most important stimulus is the marketing mix one, which consists of "everything the firm can do to influence the demand for its product" (Kotler, Armstrong, Wong, Saunders, 2008, 49). For that the firm uses the four Ps as to know product, price, place and promotion (Kotler, Armstrong, 2001, 171).

#### Stimulus-Response Model of Buyer Behaviour

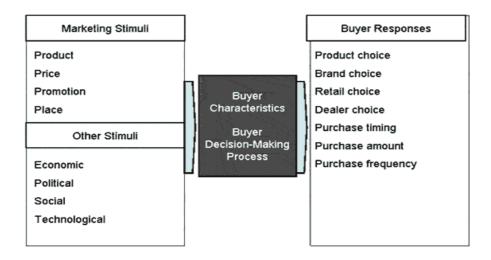


Figure I: the stimulus-response model of buyer behaviour

(Source: http://tutor2u.net/business/marketing/buying\_stimulus\_model.asp)

## 3.2 Consumer behavior in the wooden houses industry:

A purchase decision of a wood house is a significant investment constituted of complexities and risks that generate a well thought-out decision-making process. The Wood house purchase could make the owner benefit of wellbeing, good health, less stress, better quality of life, saving energy. This choice will result from a strategic decision that is being made in a range of fields as decisions about health, ecology, protection of the environment issues or financial investments (Vida & Kos Koklifc, 2009).

The buying process starts with the need recognition. In all purchase situations, the consumer feels a need that he must then satisfy. The need could come from internal or external source such as environmental factors and personal factors. The need recognition can be seen as a perception by the consumer of a gap between a desired state and an actual state. For instance, the actual state of a consumer wanted a simple dwelling could be to live in a house made of concrete. This actual state then moves to the desired state, which will be to live in a wood house here. The activation of this new need can be due to the modification of the consumer environment. This desired state comes from a new need of a better way of life and living in an environmental protective way. The consumer observes the new tendencies of their environment, in particular the stakes of environmental protection. The need recognition can also come from individual factors. The consumer can feel a need for variety, change of life, and can be sensitive to the social influence to which he belongs. From these factors, he sees that it is possible to live differently, i.e., more healthily, by consuming less energy and

thus by making economies and by respecting the environment, a key subject of the current society. His desired state could result in wanting to acquire a wood house, and for this reason he will seek all the necessary information in order to justify this choice and to carry out it.

Once the need to live in a healthy environment is recognized, the specific characteristics of the wood house are determined and form the choice criteria. At this stage that the attributes such as the price range and the place of construction are set. It will lead to the next step of the buying decision process, the information search, which is the search that will give the best information to the buyer in constructing wooden houses and will target the suitable criteria desired.

The search for information will respond to the recognized problem in the first stage: "Consumers seek information to help them decide how best to satisfy a need" (Gibler & Nelson, 2003). The buyer could search for information internally, but since he is a first-time wood house buyer, he doesn't have the required knowledge in wooden houses construction. He will thus rely more on external sources such as family, friends, sources of information like internet, specialized magazines, wooden houses manufacturer. The first information source of the buyer would be to get information by the means of commercial sources because much of buyers think that offers a vast and varied result of information like Internet. Other buyers will opt to go to family members and friends since they believe in them for best advices. Buyers tend more to use personal sources than commercial ones. It could be very useful for the buyer to look for people who already possess a wood house in order to share the information in a better way and have concrete ones. On the other hand, others would privilege the information beside builder of wooden houses since they think that they have the required competences in order to advice them in this type of construction. In order to make his final decision, the buyer will need time to select information, which seem to him most convincing and decisive.

The information search can be limited if the buyer does not succeed to find the right information that he was searching for. The wooden houses market is not much spread as the housing market for concrete construction therefore it could be more difficult to find enough information. Some consumers like searching for information more than others who don't like this searching process and that affect the external search because of the consumer's attitude (Gibler & Nelson, 2003).

During this process of search for information, the buyer is exposed to a lot of information. All of these information have to be evaluated in order to consider only the most important ones. Once the buyer has collected information on the various alternatives present on the market, consumer carries out the evaluation of these alternatives. The buyer will evaluate alternatives following several criteria such as the location, the maintenance and the price.

During the evaluation of the alternatives, the decision-making is done simultaneously. The purchase decision of a wood house depends on important factors such as the income, the social status, the price, and the location that will have a direct influence on the evaluation. Upstream, the family situation, the level of motivation, the knowledge of this kind of construction will influence the choice of this decision (Gibler & Nelson 2003).

All the buyers don't attach the same importance to all the attributes, some being more sensitive to an attribute than others. Thus the consumer will evaluate the good on the base of the attributes, which he considers as most important. The buyer will have a comparative opinion of the various builders, for instance, leading to a choice.

The purchase of a wood house will result from important choices since it implies risk and uncertainty for the buyer. In order to simplify the decision of a choice, the buyer can use some decision rules as compensatory decision rules or non-compensatory decision rules. In the compensatory rule, the information according to the determined attributes are classified in order of importance. The higher attribute will be considered as the best one. In the non-compensatory decision rules, the buyer sets a scale of conditions to fill, and classifies them based on the level of importance. (Gibler & Nelson, 2003).

#### 3.2.1 Internal determinants of consumer behavior:

Earlier, the internal influences of the consumer behavior was explained whose include "motivation, attitudes, perception, personality, self-concept and lifestyle". Internal factors contribute to the formulation of self-concept and lifestyle, which affect the consumer decision process. According to Vida & Kos Koklifc, 2009, the lifestyle and self-concept influence goals through needs, desires and preferences, and the goals define the decision-making. In the case of a wood house, the choice the wood in the construction and the layout directly reflects the lifestyle of the buyer.

To pass from a house builds with concrete to a wood house comes from some drives that can trigger this shift. These drives can be as a weary of a suburban culture, increase in

income, preference of living in a healthy, pleasant and comfortable space, the desire for building something with his own image, financial economies in term of energy.

As explained, the wood house purchaser is greatly involved in the information search and the information collected would influence in the decision. Consumer will perceive then if this purchase is worth good or bad benefits. Moreover, the change in lifestyle and the new trends now influence the buyer's decision. That would lead the young buyer then to position his choice on what is more tendency or on what is booming. (Gibler & Nelson, 2003).

External determinants of consumer behavior:

External influences that can affect the buying behavior in the wood house industry are culture, social class, reference groups, the family and personal influence factors. All of these factors have been already explained in details in the model of consumer behavior.

The culture, considered as being one of the most basic external influences on consumer, can have an influence on the choice of the purchase decision since it transmitted certain values and attitudes to the consumer. It can have positive effect as well as the negative one. The idea of the story of the "three little pigs" forms the most important cultural barrier for a wood house. Moreover, this kind of house is not a traditional form of construction that is found a lot in France contrary to Scandinavian countries where the wood is widely incorporated in the construction. However, the subject of ecology today carries a kind of a cultural revolution, which brings new types of housing consuming less energy and that are more aesthetically ecological. The social class has also an effect since it affects the consumer's tastes and preferences. Consumers belonging to the upper middle class can opt for a wood construction because they will spend differently for this specific good. Consumers in this class are more sensitive to the aesthetic side of the product, its general appearance because they feel concerned by environmental protection and thus have a pronounced taste for ecology. The family is another important external factor in the decision-making. The choice to build a wood house can come from a desire to offer a better quality of life and to take advantage of the qualities of the wood for the children. The choice of this housing and the financial decision are strongly influenced by the reference group with the changes in the family lifecycle and her structure. (Gibler & Nelson, 2003).

#### **3.3** The motivation to have a Wood House and its perception as a luxury good:

The consumers have a broad vision of a product. The consumers do not buy only the physical product but also perceptions, values and an image. The advantages gained from purchase of a product come from the physical product as well as from the expanded vision of the product. The whole of this expanded vision justifies the price that the consumer purchased. The consumer will agree to pay more for a wooden structure than an ordinary one because it is built with natural, healthy materials, which offer many advantages.

There may be various reasons and motivations to buy a wood house in particular by the social category of the consumer. The motivation, discussed earlier, is a key to the psychological factors that influences the consumer. The motivation will push individuals to act with an aim of satisfying their need. Motivations that would be likely to push the consumer in the purchase of a wood house have been seen earlier which were from ecological order, economic order, aesthetic order, healthily order.

People have more and more interest in ecology. The ecological motivation for a wooden house arose from low fuel energy consumption during its production as well as limited use of non-toxic materials. Wood is a biodegradable material, which fights against the greenhouse effect.

The economic motivation is to reduce the consumption of energy. Energy saving is carried out thanks to the use of this renewable material which offers good qualities of heat insulation. The control of energy is a major concern in the spirit of the French that they wouldn't neglect in their construction (Immobilier.nouvelobs.com, 2010).

This natural material has beneficial effects with regard to the health of its inhabitants. As it was explained in the housing market and structure in France, it is a material that has many advantages for the comfort of the inhabitants: sound insulation, regulators of moisture and the air, non-harmful material. This material gets comfort and wellbeing, contrary to traditional materials, which release moisture and polluting matters and thus generate a degradation of health and comfort of the inhabitants. At the aesthetic level, wood brings an element of harmony getting a feeling of wellbeing for the inhabitants and forms a warm material where life is good.

At present, the French consumer feels concerned by the environmental questions (Lelong C., 2010). Whereas the real ecologist consumers represent a small portion of the population,

currently there are individuals who beginning to be more interested on subjects concerning the environment (Lelong C., 2010). The wood house could attract consumers who are aware of ecological policies but it could also encourage other consumers to modify their manner of living.

The motivation of purchase and the perception of a good can be different according to the social class and the reference group of the consumer. According to one's social class or reference group, the consumer may perceive the wood house as a luxury good. Historically the term "luxury" was applied to items that were both rare and scarce and available only to the elite few (Hauck, Stanforth, 2007). This term has being continuously redefined since the nineteenth and has been democratized. Its definition evolved during years, so that at the end of the Nineties, it becomes "things you have that I think you shouldn't have" (Hauck, Stanforth, 2007). Through the years, goods and services reserved for an elite became available to everyone. The term luxury evolves over the time. Goods financially not affordable before and non-essential can become essential goods that are available to all.

A study about the perception of luxury goods has shown that the term luxury is a social perception based on differing values and tastes of each individual. The study shows that there are significant differences between certain groups of consumer in their perception of luxury goods. For instance, generally the youngest consumers view some categories of products as lower on a luxury scale than the older ones. Not only the luxury is perceived differently according to the social class, reference group to which the consumer belongs but also this perception varies according to the age of the consumers. According to Berry, what was a luxury for one generation becomes a necessity for the next (Hauck, Stanforth, 2007). Reasons to buy a luxury good are several. People buy product that they don't really need because it can afford them pleasure, improve their quality of life, and reflect their personality.

In France, the wooden house may be considered as a luxury product. When people see a wooden house they can think that the inhabitants have a good social status because this kind of housing is not yet quite widespread in France and remains rather rare. Moreover, if a wood house responds to the various attributes that characterize a luxury item, it can be considered as being a product belonging to the luxury range. The attributes linked to luxury item include a high product quality, a high price, scarcity, a call to all the senses and a special relationship with the past (Dubois B., Laurent G.).

As discussed in the section dealing with the characteristics of a wooden house, the wooden house has an excellent quality by its materials uniqueness and its manufacture process that

is often traditional. Its cost directly refers to an upscale product than a midrange product. For the consumer, the price is a consequence of the excellent quality of the product. There still exist few wooden houses in France. The scarcity is often associated with the luxury and is present not only in the offer but also in the demand. The wood house triggers certain senses, like the touch, the sight, hearing, and the sense of smell. The wood house is pleasant to live in, beautiful aesthetically, pleasant by the touch, releases a good scent and has excellent quality of sound insulation. Finally, the wood house returns to a certain history and called upon traditions.

The wood house can be thus regarded as a luxury item since it answers to the attributes of a luxury good. This perception can change over the time according to generations. Today, the old generations can perceive this kind of habitat as a luxurious one while the new generations can regard it less luxurious and as an essential and important purchase in order to protect the environment and save energy.

# 4. METHODOLOGY:

Theories concerning the consumer behavior and the different characteristics of a wood house have been previously discussed. Thanks to the literature review that has been seen before, knowing what distinguish a wood house from another, which advantages does it have is really important in order to be able to gather the data collection. The quantitative questionnaire method was used to collect the data. This questionnaire would help to answer to the research questions and conclude the work properly.

#### 4.1 Methods for collecting data:

To conduct this research, two kinds of data have been used: the primary and secondary data. The primary data refer to all the information collected by the researcher. In this case, the collection has been conducted through a complete survey destined to private individuals. The literature and analysis made by writers and researchers form the secondary data. Secondary data can already provide useful information to answer the research questions (Saunders et al., 2007, 256). Secondary data allows the researcher to identify theories in order to justify its argumentation. In order to have a complete overview of the subject, academic books, internet sources, reliable newspapers and magazines have been used.

More attention was paid on the primary data collection because the author of the study has conducted it. There exist several methods for the collection of the data as quantitative, qualitative, and mixed methods. These three methods have a different approach of the data collection. The choice of the collecting method is important following the type of data wished. The type of data differs from the data collection method chosen. The information collected according to the method may be numeric information in the case of questionnaires or text information through interviews. The quantitative data collection or the qualitative one refers to the mono method where only one single data collection technique and corresponding analysis procedures is used (Saunders et al., 2007, 145-146). Both quantitative and qualitative data collection can be used in some forms like in case of mixed methods. The mixed research method belongs to a multiple method where more than one data collection technique and analysis procedures are used.

Quantitative and qualitative research methods contain different points. A quantitative research method is defined as a data collection technique that generates or uses numerical data (Saunders et al., 2007, 145). The aim of a quantitative is to classify features, and

construct statistical models in an attempt to explain what is observed. In contrast, a qualitative research method uses non-numerical data through interviews as data collection technique. A qualitative research aims to have a complete and detailed description of the information collected (Miles & Huberman, 1994, 40).

Several characteristics form the quantitative method and have to be followed by the researcher. When a researcher decides to choose this method, he must know clearly in advance what he is looking for and uses tools such as questionnaires to collect numerical data. This kind of research is recommended during latter phases of research projects and the data are represented in the form of numbers and statistics. The researcher has to be careful to design all aspects of the study before collecting data. (Miles & Huberman, 1994, 40). When using a qualitative research method, the researcher uses strategies of inquiry such as narratives and the design emerges as the study unfolds. This method involves analysis of data such as words in case of interviews for instance. With a qualitative research method, the researcher is gathering the data by its own means. This type of research is recommended during earlier phases of research projects. (Miles & Huberman, 1994, 40).

Both quantitative and qualitative data collection techniques can be used in a research design. This research method is the mixed method one. All characteristics of a quantitative and a qualitative research method are mixed in one case study. Thus this method involves the use of mixed data such as numbers and words and additional means, statistics and text analysis. This method is recommended for conducting of a detailed research. The choice to use this method allows using different methods for the same study and helps to focus on a single process and to confirm the data accuracy. This method can increase the validity and accuracy of the information gathered. (Saunders et al., 2007, 145-147).

#### **4.2** Methodology of the field study:

The quantitative data collection technique has been chosen for this study. For using this kind of research, the recommendations that have to be followed have been completed. All the theory that has to be researched for this topic has been previously designed. The objective of this questionnaire is to collect as many private individual's point of view on the wood house as possible. The questionnaire is the method the best adapted to survey a broad population and an easily way to get lots of information from people. It is a method of a fast interrogation and common for consumers, which allows a general processing of information. As lots of

data are collected with this method, the questionnaire has also the advantage to facilitate the comparison and analysis of the results.

There exist different types of questionnaire: self-administered and interviewer-administered. Self-administered questionnaire has been used to conduct the collection of the data. This questionnaire has been administered electronically using Internet that is called Internet-mediated-questionnaire. (Saunders et al., 2007, 356). It can be administered via two different ways: via email or via a website. The aim was to obtain at least 30 responses from private individual. Firstly, questionnaires have been sent via email to acquaintance having already or wishing to buy a wood house. Secondly, the questionnaire has been posted on a website such as a forum of an ecologist website in order to gather data from unknown private individual. In both case, the respondents have been invited to access a website in order to fill in an online questionnaire. This web-based approach allowed anonymous responses. (Saunders et al., 2007, 389-391).

#### **4.3** The design of the questionnaire:

The questionnaire constituted of mainly quantitative questions and some qualitative questions. Quantitative responses can be measured and analyzed but give little or no insight of the way of the respondent is thinking. Contrary, qualitative questions can't be measured, but give more reflection of the way the respondent is thinking.

Until the question 7, questions were general and personal information so that respondents could be profiled. From question 9, the respondent's position concerning wooden houses is determined. There exist several positions where all consumers can find themselves in it.

The goal of this survey is to answer to the remaining research questions, which are:

- Who is the typical customer of wooden house (profile)?
- Why people tend to be attracted by this kind of house?
- What factors contribute to people's buying decisions?

# 5. Consumer behavior and buying profile in the Wooden Housing Industry in France QUESTIONNAIRE:

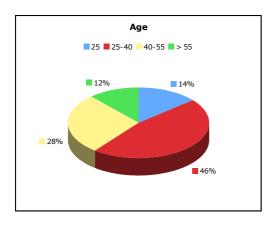
#### 5.1 Research Analysis:

A total number of 43 questionnaires were answered. The questionnaires have been answered by acquaintance who have already a wood house or who are planning to have one, and by unknown private individual through forum on three different ecologists website: www.hermes-travaux.com, www.bois.com and www.maisons-et-bois.com. The language of the online questionnaire was French, since the respondents were assumed to be French. A cover letter was attached to the online questionnaire, which presented the purpose of the study.

The first section of the questionnaire, from question 1 to question 8, was designated to all respondents regardless their position towards wooden houses. However, all kind of respondents had to answer nevertheless some questions according to their status: having or not a wood house, planning to have it, ...

#### **5.2:** Results and reflexion:

The majority of the respondents (46,5%) were ages from 25-40 and were in family with children. For most of them, one child lives under their roof at least. The educational level is mixed but we can see that most of respondents had a high level of study. Indeed, 30,2% of the respondents were graduated 5 years after the Baccalauréat or more.



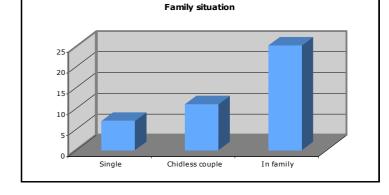


Figure 1: Questionnaire results by age.

Figure 2: Questionnaire results by family situation.

In terms of their occupation, 37,2% of the respondents had a profession or were a corporate manager. The executive category is the second one the most occupied with 32,6%. After it's the worker, employee category which is at the third position of the respondents' occupation (25,6%). More than a half (69,8%) of the respondents reported living in a house in the countryside, mountain, and seaside. It seems that they prefer to live in a calm, relaxing space, far from the stresses of the city.

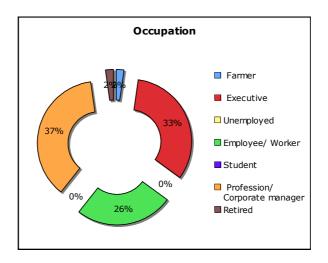


Figure 3: Questionnaire results by occupation.

Concerning their point of view on environmental issues, nobody has responded that they don't care about it. All of the interviewees felt one way or another affected by the environmental problems that we encounter today. 53,5% of the respondents were sensitive to environmental issues and it seems essential to them. A lot of them felt concern just by civic and they represent 37,2% of the respondents.

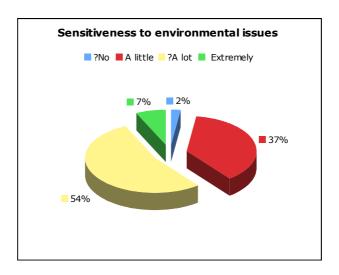


Figure 4: Questionnaire results, respondents' sensitiveness to environmental issues.

The results are very interesting because most of the interviewed people had a wood house or planned to make the purchase, they represented 58,1%. 25,6% of the respondents felt like having a wood house against 4,7% who didn't like the wooden houses. Some of the respondents never asked themselves about having a such construction and they represent 9,3%.

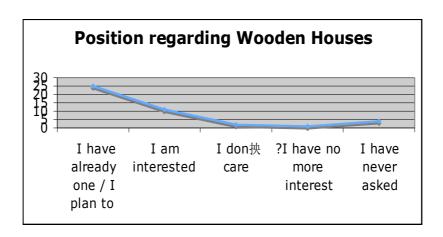


Figure 5: Questionnaire results, respondents' position regarding Wooden Houses.

These responses were very important in order to establish the consumer profile of a wood house. 88% of them said that they were themselves primarily responsible for the choice of habitat and for 12% of them, their spouse was responsible for it.

What had most drove them for this type of construction rather than a traditional construction is firstly the energy profits that the wood offers. Secondly, the fact to have a special attraction for the wood pushed them to construct a wood house. Feeling sensitive to environmental issues, their choice had been supported by an ecological gesture that this construction represents and reveal a commitment to environment. Others had answered that the aesthetic, the solidity and the spaciousness had drove their act with the fact to live in a healthily space. Some respondents had been motivated by the self-build, which is easy, fast and affordable with the wood house.

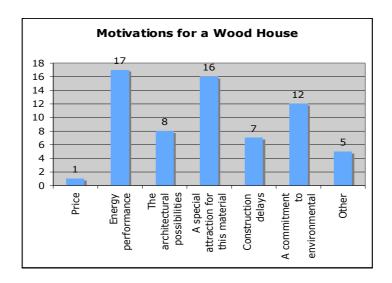


Figure 6: Questionnaire results, respondents' motivations for a Wood House.

80,8% had estimated that the investment cost had not been an obstacle at the time of their decision. Contrary for 11,5% of the respondents the cost of this choice had been a problem, which had probably made their decision longer. The search for the necessary information for the construction of a wood house, in the whole, had not been complicated. However, 30,8% of them had encountered difficulties in seeking the necessary information.

If they didn't have a wood house, there was nevertheless 25,6% of the respondents who were interested by a wood house. Several points had made them still hesitating to opt for this type of construction. The most important barrier was the financing. For them, the cost is still an obstacle to their desire to have a wood house. Moreover the cost of the ground is also a point to consider for constructing a wood house. There were others points like, the quality of the house in terms of durability and the ageing of the wood (woodworking, blackened hue,...), that made them still wondering about the wood house. Some of the respondents interested by this kind of house, didn't feel enough sensitize, they didn't feel sufficiently informed. Another fear was to find a good and skilled supplier that might turn out to be a not easy task for interested people because of the lack of information. Finally, the time necessary to be able to concretize this project seemed to prevent people buying a wood house.

The barrier of the financing is justified with the question n°14. Indeed, on the 25,6% of the interested people, 57,9% of them thought that the price plays an important role in the buying decision for a wood house. If the price of a wood house would be the same as a traditional house, that would totally facilitate their choice for 36,8% of the respondents. The price is therefore a strong barrier of the decision-making process.

When looking at what motivated them the most, the price of the wood house appeared to be the less one. All of the other criteria which are, the energy performance, the architectural possibilities, the special attraction for the wood, the construction delays, the environmental commitment and mainly the use of a healthy material are motivated them the most. As it has been mentioned earlier, the interested felt uninformed. 42,1% thought that many things are still unclear about the wooden houses in order to make their definitive choice.

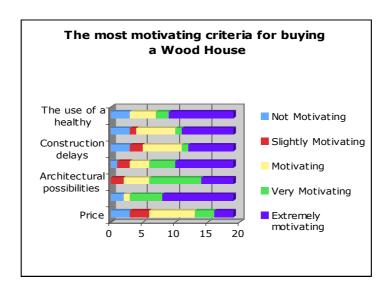


Figure 7: Questionnaire results, Motivating criteria.

Only 4,7% of the respondents were not interested at all by a wood house. The main reasons were because the traditional construction seemed to be sufficient for them and they didn't know much about it. They have remained sceptical about certain points such as the fire resistance of the wood, the aesthetics over the time, the attraction of insects.

People who had no more interest and gave up to have a wood house, represented only 2,3% of the respondents. There were several reasons, which was first the price. From the point of view of a respondent, it was a steep price, 30% more expensive than a house made of concrete block with equal energy performance. The second point was the knowledge about wooden houses, whose the reason might be the lack of information around the respondent.

9,3% of the respondents didn't know the wooden houses. The fact to not know the wooden houses gave some a priori. For 25% of them, the wood house deteriorates over the time mainly and burns easily for 16,70% of the respondents. Another respondent had added that to him, a wood house requires a lot of more maintenance than a traditional house. Also, they were many to believe that a wood house is not ecological because it implies the exploitation of wood. Concerning their point of view about the cost of a wood house compared to the one of a traditional house, the wood house appeared to be more expensive, whose 33,30% of the respondents thought that it was 25%-50% higher than the price for a traditional house.

For the last question, I had a lot of comments about wooden houses, opinion from the respondents. Comments were about advice from people who had a wood house, or people who wanted one, they have given the reasons of their desire to have one, and even feedback from an importer of wooden houses. The feedbacks are the following:

- The self-build is an important aspect non-negligible with the wooden houses, in particular with the wood kits
- The wood house is more ecological: the air is circulating in your home as the wood breathes. A wood house is economic because the wood is an excellent insulator.
- The wooden houses are the ideal, easy and simple to assemble
- We are very happy of the result: aesthetics, insulation,... Finally our house has cost us the same as a traditional house with a good value for money: savings made on the structure (wood) were reinvested in a proper insulation and an adequate heating for savings in the long term.
- More information about wooden houses is needed by the builders on the one hand, and one the other hand more information by the government.
- I would feel concerned if there was more promotion and information on these houses that may be the future of the world construction.
- The wood house is cheaper with the self-build
- The wood house has a positive environmental impact because of its natural insulation which can be reinforced by others means of insulation, therefore consume less energy.
- We don't regret our choice at all: perfect insulation, housing very healthy (no humidity), aesthetically very nice for lovers of wooden houses. In our village, since we have built our house, this type of construction interests more and more people.

# 6. CONCLUSION:

Theories about consumer and marketing have been studied, the industry of wooden houses, and more particularly, the characteristics of a wood house have been analyzed, and the consumers' point of view about these wooden houses have been found out. The main findings and conclusions of the analysis will be presented and will answer to the research questions, as well as implications and recommendations for further research will be presented.

#### **6.1** Answer to the research questions:

Thanks to this survey, valid and current information about the typical consumer of a wood house have been collected. Results presented interesting facts about the buyer and also interesting information about wooden houses in general.

#### **6.1.1** Who is the typical customer of wooden houses (profile)?:

The results of the study made possible to establish the profile of the purchaser of a wood house and thus to answer to the first research question. Therefore the typical customer of a wood house is mainly aged from 25-40 years old. It is in this range of age that most of people make their house purchase. Moreover, this range of age is more sensitized to environmental issues than older people, for instance, because the protection of the environment was not so strong as today.

The customer of a wood house has a high level of study. This kind of house can so reflect a certain status. More people are graduated, higher is their social status. So the wood house seems to be more affordable for people belonging to an upper middle class. It is more affordable for people whose occupation is executive, profession, or corporate manager because of the price of this house that is more expensive than a traditional house as it has been seen earlier. Therefore the price of the wood house does not seem a barrier. The customer for this kind of dwelling is rather upscale and worried about the environment.

The purchaser is mainly responsible for this choice but his choice is also influenced in case of children. By purchasing this kind of house, the customer want also provide a healthy place to live for his children and the architectural possibilities with the wood allow living in a

spaciousness place. From what has been seen, the customer of a wood house has often a special attraction for this material. This attraction is justified by the assets of the wood in a home, and for its many architectural possibilities. Indeed, it becomes easier for the buyers to realize their home to their image. The aesthetics of the wood house is an advantage for the environment that surrounds the home.

#### **6.1.2** Why people tend to be attracted by this kind of house?

There are many reasons of this attraction for wooden houses. The main reason is for its energy performance. As it has been discussed earlier, in the literature review part, the wood house is very insulated that enable to make economies in term of heating. A wood house consumes less energy than a traditional home. It is interesting to see that this natural material attracts many people. The wood can only attracts the customer by its quality, its natural beauty, its warmth aspect, and its solidity. For amateurs of this material, it is very attractive to have a house made of wood for their well being, and like that they live in an environment that they like. Moreover, the architectural possibilities with the wood reinforce the fact to live in a place in his own image.

The fact to make a gesture for the environment motivates people for this kind of house. Today, we hear a lot about environmental issues, we are more and more sensitized. To have a wood house shows in a way an ecological commitment because it is considered as an ecological habitat.

The construction delays and the self-build is an interesting point if people are interested by this kind of house. The wood house offers a time saving during its construction and the self-build is easy, simple to assemble, thus no professional is needed. The purchaser is therefore able to benefit more quickly to live in his house than if it was a traditional house.

#### **6.1.3** What factors contribute to people's buying decisions?

People who purchase a wood house don't buy in the same way as for a traditional house. To buy a wood house involves a longer buying decision process. Their desire to have a wood house can be stimulated by their involvement in the protection of the environment, which is an important topic today. This construction may be more complex, that is why more information about it is needed. When he will search for all the information needed about wooden houses, the customer will know gradually more about it, and will feel more confident

about these information because it will be him that looks for information and not another person. His own research will enable the customer to consider more easily all the alternatives that he can have.

In this decision making process several factors come to influence the decision. The French culture can have an influence as the wood house is not so yet known in this country. Having an ecological house more and more interests people. And the fact that a wood house is not common can motivate its purchase because of its uniqueness. The social class has an impact on the buying decision. With wooden houses, it was more people belonging to an upper middle class who bought a wood house. To buy a wood house implies that the purchaser can afford it and have a certain occupation. For him, the price of a wood house may not be an obstacle contrary to people which have a lower occupation and thus belonging to a lower social class. The family also contributes to people's buying decisions in the case where a single person will probably not buy a wood house. As it has been seen earlier in the analysis of the questionnaire, the customer of a wood house is mainly in family with children. For many of the customers, to live in a healthy place and outside from the city is important when there are children.

The wood house has many advantages, which attracts customers increasingly concerned about environmental issues and, nevertheless worried, in the long term, about the cost of their housing. The reasons to turn to the wooden houses are the following:

- An ecological house
- An economic housing (thermal properties of wood)
- A construction site quickly and cleanly
- A housing scalable and sustainable
- A housing with a lot of aesthetic qualities (many architectural possibilities)

#### **6.2** Implications for further research:

Conclusions of the study and research questions have just been presented. In order to close this work, implications for further research will be discussed.

In reference to the previous chapter, marketing research could be conducted about people's interest and willingness to resort to the self-build and as well as which type of wood they wish for their wood house like in solid wood or the timber frame.

Further research could be also conducted about manufacturers of wood house. It could be interesting to see if there are a lot of and sufficient manufacturers in France or if there are more importers. Moreover, the differences between a wood house constructs handmade or industrially and their number, can be interesting to research.

#### **6.3** Pitfalls of the study:

One of the biggest problems in the theory research was that the industry of wood house and characteristics of a wood house are not very explored academically. Many books about the material concerning its quality, and mainly about architecture have been published, but studies about benefits to have this kind of house, and what it can afford have not been explored as much by the academics. Moreover, there still not so much information about this market in France. Therefore to find good references has been quite difficult.

The questionnaire has been first quite too long, so it has been made shorter, but some questions should have been added in order to gain more insightful knowledge from the results. This would enable to make more cross references with other questions and thus find correspondence between them.

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# **APPENDICES:**

- 1 Cover letter in French
- 2 Questionnaire in French
- 3 Cover letter in English
- 4 Questionnaire in English

**Appendix 1/1 (1)** 

Bonjour à tous,

Dans le cadre de mes études, en tant qu'étudiante d'échange à l'Université des Sciences Appliquées de Turku, Finlande, dans le commerce international, je réalise une thèse sur le sujet suivant: "Le comportement d'achat du consommateur et son profil dans l'industrie des maisons en bois". Il est question de déterminer quels facteurs poussent les gens à la décision d'achat dans ce secteur, quels sont les caractéristiques qui attirent le consommateur et donc quel est son profil type.

Pour mener à bien mon travail, je réalise une enquête auprès de vous, qui avez acheté ou construit une maison en bois ou qui projette de le faire. Que vous ayez une maison en bois, le projet ou que vous en aviez l'intention, même pour les personnes intéressées par ce type de construction, ce questionnaire vous concerne. J'aimerais connaître ainsi le point de vue des consommateurs et obtenir leurs opinion s personnelles sur les maisons en bois. Cette enquête permettra de mieux comprendre et de déterminer les facteurs qui peuvent affecter les consommateurs lors de leurs décisions d'achat. Une maison en bois implique un long processus de décision vu son important investissement. Beaucoup d'acteurs peuvent entrer dans ce processus et donc l'influencer. Une maison en bois possède des opportunités en ce qui concerne les contraintes d'économies d'énergie auxquelles nous aurons à faire face dans l'avenir.

Ainsi, en tant qu'acheteur potentiel d'une maison en bois, votre avis sera capital. Votre contribution sera très importante afin d'aider à trouver les réponses concrètes que je recherche. Je vous remercie de prendre votre temps et de remplir ce questionnaire, qui ne devrait vous prendre que quelques minutes.

Votre anonymat sera respecté et toutes vos réponses resteront confidentielles et ne seront utilisées que pour établir les statistiques nécessaires à ma recherche. Les réponses ne seront pas analysées individuellement, mais seront toutes réunies et analysées en un ensemble. Si vous avez des questions au sujet de cette enquête, n'hésitez pas à me contacter à : cecile.beauprez@groupe-esc-troyes.com.

Je vous remercie d'avance pour votre aide, Cordialement,

Cécile Beauprez.

#### **Appendix 2/1 (5)**

- 1. Quel âge avez-vous?
  - o 25 ans
  - o 25-40 ans
  - o 40-55 ans
  - o >55 ans
- 2. Quelle est votre situation familiale?
  - Seul(e)
  - o En couple sans enfant
  - o En famille (en couple avec enfants)
- 3. Combien d'enfants vivent chez-vous?
  - o Aucun
  - 0 1
  - o **2**
  - o **3**
  - o 4 ou plus
- 4. Quel est votre niveau d'étude?
  - o Aucun
  - o Brevet
  - o CAP
  - o BEP
  - o Baccalauréat (BAC)
  - o Bac + 1
  - o Bac + 2
  - o Bac + 3
  - o Bac + 4
  - o Bac + 5 et plus
  - o Autre
- 5. Quelle est votre activité professionnelle?
  - o Agriculteur
  - o Cadre
  - o Chômeur/ Sans activité
  - Employé/ Ouvrier
  - Etudiant
  - o Profession libérale/ Chef d'entreprise
  - o Retraité
- 6. Vous résidez dans:
  - Un appartement en ville
  - o Une maison de ville
  - o Un appartement à la campagne / montagne / bord de mer
  - o Une maison à la campagne / montagne / bord de mer
- 7. Etes-vous sensible aux problèmes environnementaux?

#### **Appendix 2/2 (5)**

(Réchauffement climatique, pollution de l'air et des mers, disparition de la faune et de la flore...)

- Non, cela ne m'intéresse pas
- o Un peu, mais plutôt par civisme
- o Beaucoup, ça me parait essentiel
- o Enormément, je m'investis dans la protection de l'environnement
- 8. Quelle est votre position par rapport aux maisons en bois?
  - J'ai déjà une maison en bois / Le projet est en cours --> Merci de passer à la question 9
  - o Je n'en ai pas, mais ça m'intéresse --> Merci de passer à la question 13
  - Je ne m'y intéresse pas, je n'aime pas les maisons en bois --> Merci de passer à la question 18
  - Je ne m'y intéresse plus / J'en voulais une mais j'y ai renoncé --> Merci de passer à la question 20
  - Je ne sais pas, je ne me suis jamais posé la question --> Merci de passer à la question 21
- 9. **VOUS AVEZ UNE MAISON EN BOIS:** Qui a été le principal responsable de ce choix?
  - Vous même
  - Votre conjoint(e)
  - o Un membre de votre famille
  - Un professionnel
- 10. **VOUS AVEZ UNE MAISON BOIS:** Qu'est-ce qui vous a poussé vers ce type de maison plutôt qu'une construction traditionnelle? Plusieurs réponses sont possibles.
  - o Le prix
  - Les performances énergétiques
  - Les possibilités architecturales
  - Un attrait particulier pour ce matériau
  - o Les délais de construction
  - Un engagement écologique
  - Autre: \_\_\_\_\_
- 11. **VOUS AVEZ UNE MAISON EN BOIS:** Est-ce que le coût d'investissement a été un frein lors de votre décision?
  - Absolument pas
  - Pas vraiment
  - Ne sait pas
  - o Oui
  - Oui vraiment
- 12. **VOUS AVEZ UNE MAISON EN BOIS:** Avez-vous rencontré des difficultés dans la recherche des informations nécessaires pour ce type de construction?
  - Absolument pas
  - Pas vraiment
  - o Un peu
  - Absolument

## **Appendix 2/3 (5)**

qui vous retiennent encore d'acheter ou de faire construire une maison en bois?

- 14. **VOUS ÊTES INTÉRESSÉ(E) PAR UNE MAISON EN BOIS:** Pensez-vous que le prix joue un rôle important dans la décision d'achat d'une maison en bois?
  - Pas important
  - Un peu important
  - o Ce n'est pas un souci
  - Important
  - o Très important
- 15. VOUS ÊTES INTÉRESSÉ(E) PAR UNE MAISON EN BOIS: Si le prix d'une maison en bois serait le même que celui d'une maison traditionnelle, cela faciliterait-il votre choix?
  - Absolument pas
  - o Non
  - o Je ne sais pas
  - o Probablement
  - o Absolument
- 16. VOUS ÊTES INTÉRESSÉ(E) PAR UNE MAISON EN BOIS: Indiquez avec un chiffre allant de 1 à 5, du moins motivant au plus motivant, à quel point les critères suivants vous motivent ?

	Pas motiv	ant			Extrêment
			motivant		
Le prix	1	2	3	4	5
La performance					
énergétique	1	2	3	4	5
Les possibilités					
architecturales	1	2	3	4	5
Un attrait					
particulier pour	1	2	3	4	5
le bois					
Les délais de					
construction	1	2	3	4	5
Un engagement					
pour	1	2	3	4	5
l'environnement					
L'utilisation d'un					
matériau sain	1	2	3	4	5

## **Appendix 2/4 (5)**

- 17. VOUS ÊTES INTÉRESSÉ(E) PAR UNE MAISON EN BOIS: Pensez-vous avoir toutes les informations nécessaires sur les maison en bois pour faire votre choix?
  - o Oui, j'ai toutes les informations
  - o Pas vraiment, beaucoup de choses restent encore floues
  - o Non, jes n'ai pas eu assez d'informations
- 18. VOUS N'ÊTES PAS INTÉRESSÉ(E) PAR UNE MAISON EN BOIS: Quelles en sont les raisons? Indiquez à quel point vous êtes en accord ou en désaccord avec chacun des points suivants:

	Pas du tout d'accord	Pas d'accord	Ni en désaccord ni en accord	D'accord	Complétement d'accord
La construction traditionnelle est suffisante					
La maison en bois a beaucoup de désavantages					
Vous ne voyez pas cela comme une nécessité					
Vous ne vous y connaissez pas beaucoup					

19. VOUS N'ÊTES PAS INTÉRESSÉ(E) PAR UNE MAISON EN BOIS: Selon les critères suivants, lesquels d'entre eux pensez-vous être les plus justes?

	Absolument				Absolument
	faux	Faux	Neutre	Vrai	vrai
Une maison en bois n'est pas une vraie maison, c'est une cabane					
Ce n'est pas solide					
Ca brûle facilement					
C'est moins beau en vieillissant					
Ca devient moins solide en vieillissant					

Ca attire les insectes et les petits animaux			
Ce n'est pas confortable (froid/humidité/)			
Ce n'est pas écologique (déforestation, traitements nocifs du bois)			

20. VOUS N'ÊTES PLUS INTÉRESSÉ(E) indiquer ci-dessous les raisons?	) PAR UNE MAISON EN BOIS: Pouvez-vous

- 21. VOUS NE CONNAISSEZ PAS LES MAISONS EN BOIS: Avez-vous des a priori sur les maisons en bois? Plusieurs réponses sont possibles?
  - o Une maison en bois n'est pas une vraie maison, c'est une cabane
  - Ce n'est pas solide
  - o Ca brûle facilement
  - o C'est moins beau en vieillissant
  - o Ca devient moins solide en vieillissant
  - Ca attire les insectes et les petite animaux
  - o Ce n'est pas confortable
  - o Ce n'est pas écologique (déforestation, traitements nocifs du bois)
  - o Autres:
- 22. VOUS NE CONNAISSEZ PAS LES MAISONS EN BOIS: Pensez-vous que le coût d'une maison en bois, par rapport à une maison traditionnelle, est:
  - o 50% moins chère
  - o 25%-50% moins chère
  - o 10%-25% moins chère
  - o 0%-10% moins chère
  - Un prix équivalent

  - 0%-10% plus chère10%-25% plus chère
  - o 25%-50% plus chère
  - o 50% plus chère
- 23. Le questionnaire est terminé. Si vous le souhaitez, le cadre suivant est à votre disposition pour rédiger un commentaire à propos des maisons en bois, pour donner votre avis sur ce questionnaire, ou simplement pour apporter une information complémentaire.

**Appendix 3/1 (1)** 

Dear all,

As an exchange student in the international business program of the Turku University of Applied Sciences, in Finland, and as part of my studies, I realize a thesis on the following topic: "Consumer buying behavior and profile in the wooden houses industry". It deals with what factors contribute to people's buying decision in this sector, what are the characteristics that attract the consumer and thus what is his typical profile.

In order to complete my work, I realize a survey to you, who have purchase or build a wood house or who plan to make. Whether you have a wood house, the project or that you had the intention, even for people interested by this kind of construction, this questionnaire concern you. I would like to find out the point of view of consumers and to obtain their personal feeling about wooden houses. This survey will allow better understanding and determining the factors that can affect consumers during their buying decisions. A wood house involves a long process decision as it an important investment. Many actors can come into this process and thus influence it. A wood house has opportunities in regards to the constraints of energy savings that we will have to face more and more in the future.

Thus, as a potential buyer of a wood house, your opinion will be fundamental. Your contribution will be very important in order to help to find the concrete answers that I am looking for. I would appreciate you taking your time and completing this survey. It should take about 5 minutes to complete this questionnaire. You will find it thanks to the following link: http://FreeOnlineSurveys.com/rendersurvey.asp?sid=k9t7z41cdstr5pj781683.

All your responses are anonymous, confidential and will only be used for compiling the statistics required for my research. Responses will not be analyzed individually. They will all be compiled together and analyzed as a group. If you have any questions or concerns about this survey, please contact me at Cecile.beauprez@students.turkuamk.fi.

Thank you very much in advance for your help,

Sincerely,

C écile Beauprez.

#### **Appendix 4/1 (5)**

- 1. How old are you?
  - o 25 years old
  - o 25-40 years old
  - o 40-55 years old
  - >55 years old
- 2. Which is your family situation?
  - o Single
  - o Childless couple
  - o In family (in couple with children)
- 3. How many children live with you?
  - o None
  - 0 1
  - 0 2
  - o **3**
  - o 4 or more
- 4. Which is your level of study?
  - o None
  - o General certificate of secondary education
  - o CAP (Vocational Training qualification)
  - o BEP (General National Vocational Qualification)
  - Baccalauréat (BAC)
  - o Bac + 1
  - o Bac + 2
  - o Bac + 3
  - o Bac + 4
  - o Bac + 5 and more
  - o Other
- 5. What is your occupation?
  - o Farmer
  - o Executive
  - Unemployed
  - o Employee/ Worker
  - o Student
  - o Profession/ Corporate manager
  - o Retired
- 6. You reside in:
  - o A city flat
  - o Town-house
  - o A flat in the countryside / mountain / seaside
  - o A house in the countryside / mountain / seaside

#### **Appendix 4/2 (5)**

7. Are you sensitive to environmental issues?

(Global warming, pollution of air and seas, loss of fauna and flora,...)

- No, I don't have a lot of interests
- o A little, but rather civic
- o A lot, it seems essential to me
- o Extremely, I am involved in the protection of the environment
- 8. Your position regarding wooden houses:
  - I have already one / I plan to make the purchase -> please go to the question
  - o I don't have, but I am interested -> please go to the question 13
  - o I don't care, I don't like wooden houses -> please go to the question 18
  - I have no more interest / I wanted one but I gave up -> please go to the question 20
  - I don't know, I have never asked -> please go to the question 21
- 9. **You have a wood house:** Who was the main responsible for the choice of the wood house?
  - Myself
  - o My spouse
  - A member of my family
  - A professional
- 10. **You have a wood house:** What drove you to this kind of house rather than a traditional construction?
  - o Price
  - Energy performance
  - o The architectural possibilities
  - A special attraction for this material
  - o Construction delays
  - A commitment to environmental
  - Other:
- 11. You have a wood house: does the investment cost has been a barrier in your decision?
  - Strongly disagree
  - o Disagree
  - Undecided
  - o Agree
  - Strongly Agree
- 12. **You have a wood house**: Have you encountered difficulties in seeking information needed for this type of construction?
  - Absolutely not
  - Not really
  - o A little
  - Absolutely

	by the wood ild a wood hou	t are the p	oints that r	make you still

- 14. You are interested by the wood house: Do you think that the price has an important role in the decision of buying a wood house?
  - Not important
  - Slightly important
  - Don't care at all
  - o Important
  - Very important
- 15. **You are interested by a wood house**: If the price of a wood house would be the same as a traditional house, would it facilitate your choice?
  - Absolutely not
  - o Probably not
  - o I don't know
  - o Probably
  - Absolutely
- 16. You are interested by a wood house: According to the following statement, indicate how much they are motivated you the most?

Statement	Not motiv	vating	motivating	E	Extremely
The price	1	2	3	4	5
Energy performance	1	2	3	4	5
The architectural possibilities	1	2	3	4	5
A special attraction for the wood	1	2	3	4	5
Construction delays	1	2	3	4	5
An environmental commitment	1	2	3	4	5
The use of a healthy material	1	2	3	4	5

## **Appendix 4/4 (5)**

- 17. **You are interested by a wood house**: do you think to have all the necessary information about the wooden houses to make your choice?
  - o Yes, I have all the information
  - o Not really, many things are still unclear
  - No I did not have enough information
- 18. You are not interested by a wood house: what are the reasons? Indicate how much you are agree or disagree with each of the following statement.

Statement	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
The traditional					
construction is					
sufficient					
The wood					
house has					
many					
disadvantages					
You don't see					
it as a					
necessity					
You don't					
know much					
about it					

19. You are not interested by a wood house: According to the following points, which of them do you think the most right?

Statement	Absolutely				Absolutely
	not right	Not right	Neutral	Right	right
A wood house					
is not a real					
house, it more					
a log cabin					
It is not solid					
It burns easily					
It deteriorates					
over the time					
It becomes					
weak with age					
It attracts the					
insects and					
small animals					

ecological (deforestation, harmful treatments of	It is uncomfortable (cold/ humidity/)			
wood)	harmful			

ecological (deforestation, harmful treatments of wood)					
20. You have no more interest with a wood house: Could you indicate below the reasons?					
21. You don't know the wood house: Do you have any a priori about the wooden houses?					
0					
0	It is not solid				
0	It burns easily It deteriorates over the time				
0	It becomes weak with age				
0	It attracts the insects and small animals				
0	It is uncomfortable (cold/ humidity/)				
0	This is not ecological (deforestation, harmful treatments of wood)				
0	Others:				
	on't know the veed to the price of 50% lower 25%-50% lower 10%-25% lower 0%-10% lower Quite the same 0%-10% highe 10%-25% high 50% higher	a traditional ho er er e r er	•	at the cost of a	wood house,
23. The questionnaire is completed. If you wish, you can write a comment about wooden houses, give your opinion on this survey, or provide more information about this					

subject.