

## The Benefits of Implementing Lean Management System at IKEA Malaysia Company

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**Abstract:** Lean management system is one of the most advanced and popular management techniques, which many companies are using in recent days. Many of the non-manufacturing companies are also using these techniques for better results. This is also the case for IKEA, Malaysia. During our visit to IKEA in 2011, we have been able to acknowledge the lean practices in the store. IKEA is mostly renowned for the quality and model of its home furniture. In this paper, we are going to explain in details the lean management system, its application to services and its practice at IKEA Malaysia.

**Keywords:** Lean management, Non-Manufacturing Companies, Services, IKEA Malaysia.

**Jel Classification Codes :** L81, M11.

### I- Introduction:

Lean is the English term used to refer to the Toyota Way, It was born on the Japanese manufacturing shop floor and was promoted through the success of the Toyota Motor Corporation, the idea was born already in the 1950s, the dissemination of the new idea did not reach readers outside Japan until 1990<sup>1</sup>.

The concept of lean was first introduced by Womack, Jones and Roos in 1990, in order to describe the working philosophy and practice of the Japanese vehicle manufacturers and in particular the Toyota production system\*. Lean production is generally described from two points of view, either from a philosophical perspective related to guiding principles and overarching goals or from the practical perspective of a set of management practices, tools or techniques that can be observed directly, lean production is most frequently associated with elimination of waste commonly held by firms as excess inventory or excess capacity (machine and human capacity) to ameliorate the effects of variability in supply, processing time, or demand\*.

Lean Manufacturing is an operational strategy oriented toward achieving the shortest possible cycle time by eliminating waste, The Toyota production system TPS was developed in Japan by Ohno and Shingo and forms the basis of lean manufacturing, researchers focused on lean manufacturing because of its major impact on peoples work on the shop floor and manufactures interest in techniques such as supply chain coordination, customer distribution,..Etc. The benefits generally are lower costs, higher quality, and shorter lead times<sup>2</sup>. the term "lean manufacturing" is coined to represent half the human effort in the company, half the manufacturing space, half the investment in tools, and half the engineering hours to develop a new product in half the time\*.

Some organization view lean as a method of cutting cost, which is true, but lean is not a short term concept that an organization adopts but an ongoing process. There are many factors that can help in the successful implementation of lean management to service. Lean is about the people as they are the ultimate implementers of the concept<sup>3</sup>.

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Lean needs to be aligned with the most critical goals of the organization and a sound leader should be able to integrate it fully into all aspects of the organization. The leadership capabilities are the key ingredients to the successful implementation of the lean concept. Lean can be a very powerful tool if organizations understand the ongoing nature of continuous improvement and also have a very strong leader to implement it<sup>4</sup>.

A medical director at the NHS modernization agency in the UK claims that the key element of lean management has been applied in service improvement programs, and has shown successful outcomes in applying them. Lean management and service is all about the customer, what the customer perceives as value and what they are paying for<sup>5</sup>.

The application in the call center let the company achieved: highlighting rapid improvement in quality and cost positions, removal barriers to flow value to the customers. The author in this part show us the applicability of lean approaches to the pure service environment and highlight the importance of this approach to build on the existing management techniques of these types of services community to drive forward real improvement in the service sector<sup>6</sup>.

Note that lean principles apply to new product development, service, operations, and production; in fact, all domains of the enterprise can and should apply lean principles to banish waste and increase value. Lean is about defining value, value as perceived by customers, specific features and services that they require. Lean is about making that value flow from organizations to the arms of the customer, they see lean as the best path to reinvigorate their business performance in customer. This paper comprises of five sections.

Section 1 is talking about the main concept of the article, which begins with brief definitions of lean management, followed by its principles. Section 2 discusses lean management application to services. Section 3 consists of IKEA background and IKEA Malaysia. Section 4 is explanation of lean management activities at IKEA Malaysia. Section 5 is the conclusion.

## **I.1. Lean management:**

**I.1.1. Lean management definition:** Lean management definition has given many forms according to the views of authors and practitioners, these some definitions for lean management:

- Lean management is an approach to running an organization that supports the concept of continuous improvement, a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality<sup>7</sup>;
- Lean management can be defined as small lead-times and a decreased in human, financial capital and other resources required in producing good products and services to fulfill customer requirements<sup>8</sup>.

**I.1.2. Lean management principles:** There are several key lean management principles that need to be understood in order to implement lean<sup>9</sup>:

- Elimination of waste: it is one of the most critical principles of lean management, the idea of waste elimination is to review all areas in your organization, determine where the non-value added work is and reduce or eliminate it;
- Continuous improvement: without continuous improvement your progress will cease. As the name implies, continuous improvement promotes constant, necessary change toward achievement of a desired state;

- Respect for humanity: the most valuable resource to any company is the people who work for it. Without these people the business does not succeed. When people do not feel respected, they tend to lose respect for the company. this can become a major problem when you are trying to implement lean;
- Just in time production (JIT): the basis behind this principle is to build what is required, when it is required and in the quantity required.

## **I.2. Lean management and services:**

The world is changing every day, with new technologies, new ways of doing things and the businesses have to keep up with the ingoing trend. With the recent economic crisis, and increase in customer awareness, which we can say is mainly due to globalization, has forced organizations to become more competitive and at a lower cost. Organizations have adopted many different kinds of management theories; from TQM, JIT and the most recent phenomena is lean management. Organizations believe that these management programs are the key to have competitive advantage over their competitors, which to a certain degree will be correct if they are applied as the way they are meant to be. Lean management is now the current bible of many organizations, to gain competitive advantage at a lower cost<sup>10</sup>.

Lean is unique as it focuses on enabling people to see the product or service and the whole value stream from the perspective of the customer. Lean management is defined by numerous authors in a different way<sup>11</sup>. Lean management is “an approach to deliver the upmost value to customers by eliminating waste through process and human design elements”<sup>12</sup>. Further, other definition of lean management is that “an applied methodology of scientific objective techniques that cause work tasks in a process to be performed with minimum of non value-added activities”<sup>13</sup>. Furthermore, it is as “methods to be adopted to reduce cost and enhance product quality by eliminating waste in the process”<sup>14</sup>. From the definition mention above, one can deduce that the common theme in all the definitions is elimination of waste, which we can say is the driving force behind lean management. Lean management has its origins from Japan, which started when Onichii Toyoda visited the Ford automotive plant for 3 months and found that the company did a lot of mass production and also used a lot of everything which resulted in waste. He knew that Toyota didn’t have that much capital to imitate the way of Ford motors production process. He decided to do “less” of everything to eliminate waste. This resulted in the introduction of lean management or lean manufacturing process in Toyota Production System. But this new method was not readily accepted by the people of Toyota, and it took the rejection of the American society of Toyota cars before the lean management principle was adopted<sup>15</sup>. Nowadays, lean management is adopted all over the world by numerous organizations to stay competitive in this evolving world of consumption, be able to compete globally or initiated by market forces or the organization be forced out of business<sup>16</sup>. The driving force or the whole purpose of lean management is the elimination of waste or commonly known in Japan as Muda. Waste or muda in lean management is defined as any action that does not add value to the product from the customer point of view or anything that interferes with the smooth flow of production. Waste here is basically anything that doesn’t add value to the finished product or service from the point of view of the customer and the customer is not willing to pay for it<sup>17</sup>.

The Eight (8) main activities that are considered waste or muda are<sup>18</sup>:

- Overproduction – producing more work, sooner or faster than required by the downstream process;
- Motion – any movement of people, machines, or materials that are not value added for the successful completion of a product or service;
- Waiting – idle time or delay in work flow when waiting for anything to happen next;
- Defects – includes inspection, scrap, errors, missing information, corrections, or repair of poor quality products or services;
- Inventory – any supply of materials, documents, or resources in excess of a one piece flow accumulated between work areas;
- Transportation – the movement or conveyance of parts, tools, materials, paperwork, etc. throughout a facility;
- Underutilized People or Knowledge Disconnection – focuses on not using people's mental, creative, physical, or skill abilities collectively to best meet a customer's need, often creating frustration and missed opportunities;
- Extra (or non-value added) Processing – effort or activities that do not add value to the product or service from the customers' viewpoint; includes doing more than what the customer requires.

Lean management or any other Total Quality Management tool is based on the principle of continuous improvement. Lean management is an unending journey for any organization, and this is a journey to become the most innovative, most effective and efficient enterprise. It is to continually discover hidden opportunities existing all around, and in the quest to achieve highest levels in operating performance is an ongoing journey of continuous improvement<sup>19</sup>. Any program or activities that have been introduced to enhance or increase business performance has been based on a concept of continuous improvement. Continuous improvement is to look for ways, methods or opportunities to increase the competitive nature of the business as well as achieve high standard of performance. Lean management basically affects the bottom line of any business if implemented correctly and is ingrained properly in the organization. It is a comprehensive management system, which covers all part of the organization, from the shop floor to the top management, and organizational culture<sup>20</sup>. There are five main lean principles<sup>21</sup>:

1. Specify Value;
2. Identify Value;
3. Make the value flow;
4. Let the customer pull;
5. Pursue perfection.

Lean management and service is all about the customer, what the customer perceives as value and what they are paying for, which is ultimately boils down to customer satisfaction. Lean manufacturing is based on a pull system, where a product is made only when the customer needs it, due to this nature of lean, organizations that practice lean manufacturing are more closely connected to demand and will likely reduce production levels quickly when sales fall. Lean management is a tool in achieving excellence and one of the main tools of lean management is value stream mapping. Value stream mapping is "the analysis of the entire value stream for a product from the raw materials to the finished state and also service transactional and administrative processes from point of need identified by a customer until the service is satisfactorily performed"<sup>22</sup>. This makes it easy to identify any part of the process in the value chain that doesn't add value to the customer

to be eliminated just by looking at the Value stream map. The tools or practices that are also under lean management are<sup>23</sup>:

- JIT (Just-In-Time);
- TQM (Total Quality Management);
- TPM (Total Productive Maintenance)
- CR (Customer Relations);
- VSM (Value Stream Mapping);
- PPCT (Production Planning and Control Technology).

Many organizations that take the lean initiative fail to implement the lean concept properly in the organization and they tend to forget that lean is an ongoing process and it needs to be adopted at every level of the organization, from bottom up. The reality is that lean on its own cannot be a competitive differentiator, which many organizations forget this fact<sup>24</sup>. Lean is a tool, just like any other tool, it is the method of application and the skill of the wielder that counts in the end. Due to this lack of proper application by many organizations, some have considered lean a fad phenomenon<sup>25</sup>. Some organization view lean as a method of cutting cost, which is true, but lean is not a short term concept that an organization adopts but an ongoing process. It can damage customer value or a company's competitiveness if for example process change effect or lead to outsourcing of core competitive activities<sup>26</sup>.

As with any concept, there are benefits and limitations, below are some limitations of lean, if proper understanding is not there by the management<sup>27</sup>:

1. Lack of correct identification of waste: value is only defined by the customer, and to be able to correctly pinpoint that value is difficult, and also reduce the innovativeness of the organization if they constantly produce product or service which the customer identifies that it needs. Customer identification can be short term, and can result in the organization missing opportunities for the future. Another aspect is, lean can sometimes mean reduction in the workforce, which can increase the responsibilities of the remaining workforce, and ultimately reduce their creativity;
2. Human Resource management: one principle of lean is to utilize the workforce, which means to increase their job scope, which in the end can increase stress, and reduce creativity from the workforce, as they will not have the opportunity to continually learn and improve;
3. Distributed product design: some organizations let their suppliers be responsible for some aspect of the product parts, which increases the responsibilities of the supplier, and reduce the awareness of the product by the workers, which can reduce their awareness of the product and make the organization fail to see areas of improvement in the manufacturing process;
4. Supply chain management: one of the concepts of lean management is JIT. It can be effective in reducing inventory and storage pace, but can become a hindrance if the parts needed do not arrive on time, which can lead to the stopping of the whole process;
5. Customer management: to maintain a long relationship with the customers by calling them and keeping in touch can be expensive for countries where the customers do not buy the product frequently, for example cars. In Japan the customers buy cars every 4 years whilst in some countries it is longer.

Despite the summary of the limitations of lean management, there are quiet some major benefits of lean management<sup>28</sup>:

1. Reduction in cost
2. Increase in efficiency
3. Increase in productivity
4. Increase in customer satisfaction
5. Environmentally friendly

These are some of the benefits of lean management, but the list can exhaustive. Lean manufacturers are much stronger and better able to weather a downturn than their non-lean counterparts, the benefits can only really be sustainably attained when lean is properly applied and it can be translated to the bottom-line. There are many factors that can help in the successful implementation of lean management and service; which are, lean is about the people as they are the ultimate implementers of the concept, communication is critical. Make every one understand the principles of the organization<sup>29</sup>. Lean needs to be aligned with the most critical goals of the organization and a sound leader should be able to integrate it fully into all aspects of the organization. The leadership capabilities are the key ingredients to the successful implementation of the lean concept. Lean can be a very powerful tool if organizations understand the ongoing nature of continuous improvement and also have a very strong leader to implement it<sup>30</sup>.

## II. Methods:

The approach taken was qualitative methodology. Firstly, In-Home Visit (IHV) was the main method in this study. In-Home Visit is a research method in which researchers visit the research sites and observe their real-life environment. We can see the sites usual life with our own eyes, thus it is effective in analyzing their actual usage of products and perception behind it. It is also possible to understand their values through observing their life. Besides, visiting the store give the authors the chance to observe IKEA's consumer directly. Secondly, documentation technique was used to cast further insight into lean management practices in IKEA Malaysia. During our visit to IKEA Malaysia, we have been able to acknowledge and observe the lean practices in the store. IKEA is mostly renowned for the quality and model of its home furniture.

**II.1. Background of IKEA:** IKEA is a private, world's largest furniture retailer and international home products company that designs and sells ready-to-assemble furniture such as appliances and home accessories. It was founded by a young 17 years old Swedish, Ingvar Kamprad in 1943. IKEA got its name from the initials of founder Ingvar Kamprad and the first letter of his farm (Elmtaryd) and his village (Agunnaryd).

The first IKEA store was opened in Sweden in 1958, while the first stores outside Sweden were opened in Norway (1963) and Denmark (1969). At the end of 2009 financial year, the IKEA has grand total of 301 IKEA stores in 37 countries with 123,000 co-workers. The IKEA Group itself owns 267 stores in 25 countries: Australia, Austria, Belgium, Canada, China, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Japan, Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Spain, Sweden, Switzerland, United Kingdom and USA. The other 34 stores are owned and run by franchisees outside the IKEA Group in 16 countries/ territories. These are Australia, the United Arab Emirates, Cyprus, Greece, Hong Kong, Iceland, occupied Territories of

Palestine, Kuwait, Malaysia, the Netherlands, Romania, Saudi Arabia, Singapore, Spain, Taiwan, and Turkey. An important feature of IKEA stores are their long opening hours. Many stores are in operation 24 hours a day with restocking and maintenance being carried out throughout the night. However, public opening hours tend to be much longer than most other retailers, with stores open until the evening in many countries<sup>31</sup>. See appendix 1.

**II.2. IKEA mission and vision:** IKEA's mission is to offer a wide range of home furnishing items of good design and function, excellent quality and durability, at prices so low that the majority of people can afford to buy them. The company targets the customer who is looking for value and is willing to do a little bit of work serving them, transporting the items home and assembling the furniture for a better price. The typical IKEA customer is young low to middle income family. About IKEA vision is to create a better everyday life for the many people. their business idea supports this vision by offering a wide range of well-designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them\*.

**II. 3. IKEA heritage:** The IKEA concept, like its founder, was born in Småland. This is a part of southern Sweden where the soil is thin and poor. The people are famous for working hard, living on slender means and using their heads to make the best possible use of the limited resources they have. This way of doing things is at the heart of the IKEA approach to keeping prices low. But quality is not compromised for the sake of cost. And about Swedish lifestyle many people associate Sweden with a fresh, healthy way of life. This Swedish lifestyle is reflected in the IKEA product range. The freshness of the open air is reflected in the colors and materials used and the sense of space they create: blond woods, natural textiles and untreated surfaces\*.

**II. 4. Business performance:** IKEA Group is not a publicly listed company and therefore never issues an annual financial report, which is make information to financial standing not very clear. However in January 2010 and for the first time, the privately owned Swedish furniture retailer, IKEA Group, has disclosed its financial results and the news was good. The company's fiscal year revenue jumped 7.7% to €23.1 billion and net profit increased by 6.1% to €2.7 billion from a year ago, an impressive feat during tough economic times<sup>32</sup>.

The reason for the growth comes from IKEA's strategy of reinvesting profits from 2009 to open up new stores around the world. IKEA has been slowly rolling its stores out across the world for (close to 50) years; and yet nobody has copied IKEA. The success of IKEA is all the more perplexing because it seems perfectly defensible. Nobody has tried to duplicate or undermine IKEA. The author found that business strategy of IKEA is similar to Apple Company. Apple's entry into retail depended on a clear job-to-be-done, design, carefully selected merchandise and retailing as an experience. Similar to IKEA, Apple also became a dominant player in its segment and even achieved seventeen times better performance than the average US retailer in terms of sales per square foot.

IKEA recorded a sales 21.5 billion euro in 2009, an increase from 21.2 billion in 2008, Where most of the sales were in Europe especially Germany, the biggest market for IKEA\*. The explanation can be seen in the charts in Figure 1 and Figure 2.

**II. 5. IKEA Malaysia:** There is only one IKEA outlet in Malaysia and it is found in the state of Selangor, more precisely in Mutiara Damansara, Petaling Jaya. IKEA Malaysia has opened in August 2003 (after moving from 1 Utama) and is the largest branch of IKEA in

Asia, taking the land area of approximately 25,100th square meters, offers more than 7000 products and decorative needs housing. The operating hours of IKEA is 9.30a.m. to 10.00p.m. from Monday to Thursday and on Friday, Saturday, Sunday and public holidays, the store are opened from 9.30a.m. to 11p.m. As all IKEA outlets around the world, the Swedish style is the common color for all IKEA items available at IKEA Damansara. Most of the products carry Swedish touch with plain, fresh, and simple colors like white, blue or black. This is how IKEA differentiate itself from all other furniture companies. However, minority of people criticize IKEA that they should add some designs that comes from the host country. This will help them to get closer to the people's taste. While for others this was invalid criticism as IKEA's success proved around the world without changing any of their concepts\*.

### **III. Explanation of lean management activities at IKEA Malaysia:**

Nowadays, companies have to constantly look for ways to reduce costs and increase efficiency. As a result, more businesses, including IKEA, are turning to lean methodology and processes to minimize the use of their resources plus providing best services and create good products. We have seen many activities during our visit to IKEA Malaysia and we are going to explain each activity and the relationship with lean management.

**III. 1. The Building and Parking:** We have seen so many buildings across Malaysia, and the designs are all stunning. Conversely, the store of IKEA in Damansara, is not astonishing in term of design but has well built consuming all the space in the corner of the road to fill in all the products inside. As we can see, the building does not cost a lot financially, but is very efficient. The concept of Lean talks about using less resources to produce better products or services and we can see it in the building itself. They have a free parking space for customers who have purchased something in the store. What you need to do is very simple, just pay for the product you have bought, your parking ticket will be validated by the personnel at the check-out counters.

**III. 2. Pencil and Measuring Tape:** It is amazing at IKEA! Once you enter, you will see a rack where you can find pencils and measuring tapes. To start your visit in the store, you can take one of each, for your own use. The pencil is made up of wood, engraving IKEA on it and the ruler is made up of paper which cost the company very little. This idea is very useful when talking about Lean management, because it helps all customers to come in without a measuring tape, then you can take note of all the items you see inside and also measure the chair, table, bed, and sofa etc. This idea is creative and unique in the sense that IKEA has been able to give.

**III. 3. The Catalogue:** Whenever we are going to a big store or shop to buy something, we can find catalogue everywhere and it is free for all customers. These catalogues contain all the details about the products and the price. At IKEA, catalogue is not given to any customers, but you can borrow it.

The reason is that one, it cost a lot to give each customer a catalogue, and also secondly, the customer will throw it away once he finished using it. Consequently, IKEA provides all the information of the products clearly on the product itself. So a waste has been avoided!



**III. 4. The Arrangement and Placement:** The incredible and the great thing in IKEA is the way how they arrange items inside for each room in the house, Kitchen, living room, dining room, bathroom etc. in different spaces wide or small and different items sizes, so they can give an idea to customers how these items should be organized depending upon customer's houses space, they demonstrate it to show customers how they should use items at home such as books, pictures frame, kitchen elements etc. This is also one of the unique strategies of IKEA to attract customer and by using the lean concept making the efficient use of resources available.

**III. 5. No Employee Around:** Our visit to IKEA has been marked with something quite strange. While walking around, we have not seen very few employees for assistance or help. This was a very good way of lean management for the company because they have cut down cost and at the same time, put all the information about the products, clear and visible for customers to read and understand. Employing many workers to walk around, and provide assistance to customers cost a lot, especially during weekend, where overtime cost a lot. As we have noticed, along the way during our visit, all the details, price of products was clearly seen on the product itself. As we have said, there are many big signage, cards, about the details of the products and also their corresponding price. This is another way of marketing to make customer aware of the product and the price. A customer can check the product, measure it, discuss with friends and families before making a decision about whether to purchase or not. Buying a complete set, for example, an entire bedroom set, cost a customer less than buying only one item which is there.

**III. 6. Reusable Bag:** Before June 2009, IKEA was giving free plastic bag to customers whenever a purchasing was done but to commemorate the environmental day in 2009 and to save the planet, a price of 0.20 Malaysian ringgit was charged for each yellow bag. The big yellow bag having the word IKEA written on it is easy to use and to carry. A customer can put many items inside and it is very solid. The bag can be used many times and it is made by renewable materials to protect the environment. As we can see, to reduce cost but at the same time, give something good and solid to the customer to use is all part of the lean mindset.

**III. 7. Disposable Rubbish:** Everywhere throughout the store, we can see three different bins, one for paper, one for plastic and one for other waste. Whatever a customer wants to throw away, he can easily throw it into the respective bin depending on the waste, and this is going to help IKEA people to classify the rubbish for the rubbish collector later on. It is simple as that for them to avoid taking one item by one, to classify and arrange in such a way to put paper stuffs on one side, plastic material on the other side and this will help them a lot in their daily process.

**III. 8. Information Check on PC:** As we have explained above, we can see very few workers walking around to help customers, but we can see desktop computer in different place to check for information. In the developing computerize world, it's a must to have computers in all shops and IKEA has successfully implemented this idea. Instead of asking an employee for help, you can simply look for the information about the product you are interested on the different computers. This will help IKEA reduce cost and also provide all the available information at the disposal of all customers. A simple click and search, the customers can get the information they want.

**III. 9. Space for Children:** There is a very big space for children to play inside the store of IKEA. In order to shop peacefully, a parent can simply leave their children in that place so that they can enjoy, and at the same time, the parent can do the shopping and checking of all products. This is a very good strategy by IKEA as they cared for the children and for the parent. To ease the shopping of parents, IKEA has created this space with many games so that many children can enjoy together. This space has not cost them a lot which is lean and at the same time is efficient and effective for their business purpose.

**III. 10. The Store:** There are so many big items and products which are placed inside the big store of which looks like a typical warehouse. But it is very convenient for customers to buy from it because if they don't like a product they have picked, they can take another one, and there chance is not limited. The place can be seen as not nice or convenient but customers like it and again there have been very few investment made by IKEA. For the convenience of customers, IKEA even provide trolley for them to put the product which is heavy and difficult to carry, and it is easy transported to their car.

**III. 11. Delivery Service:** If a customer has bought a big item which he cannot bring back home due to transportation problem, IKEA has the solution. The delivery service offered by IKEA is quick and easy. A product can be delivered to your house on the same day, if your purchase is before 3 o'clock in the afternoon. The charge is only RM65 and the delivery service is within the Klang Valley, Putrajaya, Cyberjaya, Kajang and Rawang. The personnel staffs will pack the product very well, so that your product is safe whenever you receive it.

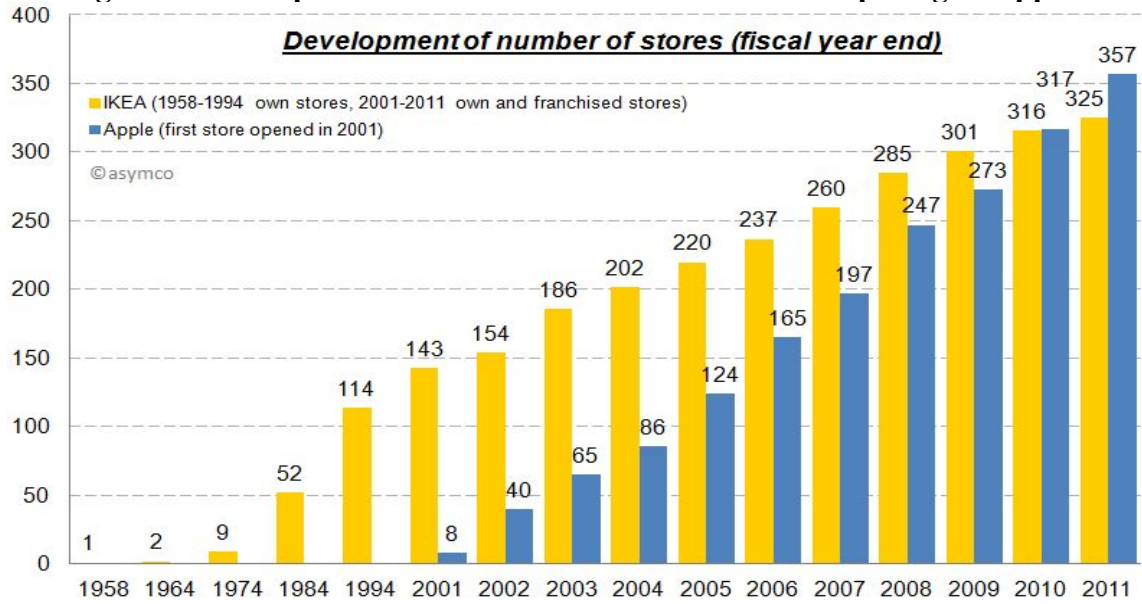
**IV. 12. Assembly Service:** When you buy furniture at IKEA, you will get it in small parts and you will have to assemble all the parts by yourself. But if customers don't know how to assemble all the pieces together, IKEA can send their staffs to do the fixing for them. You just have to pay a reasonable price of about 5% of the retail price of the item that you have bought. This service can be considered very useful and effective because if the buyer don't have the necessary equipment or materials or even knowledge of how to do assembly, this service is very useful for them. Thus, again, we can say that IKEA has been able to develop a service which is considered lean.

#### **IV- Conclusion:**

To conclude, we can say that IKEA can be considered as an organization which has implemented lean in their daily business activities. There are very few people in the store, near the products, simply because all the information and details have been well placed on the products. IKEA has been able to reduce cost, time and resources. The lean management system also concentrate on customer satisfaction, so the company gets positive feedback from the customers by good management and their products and the services are inevitably to the customers' expectation.

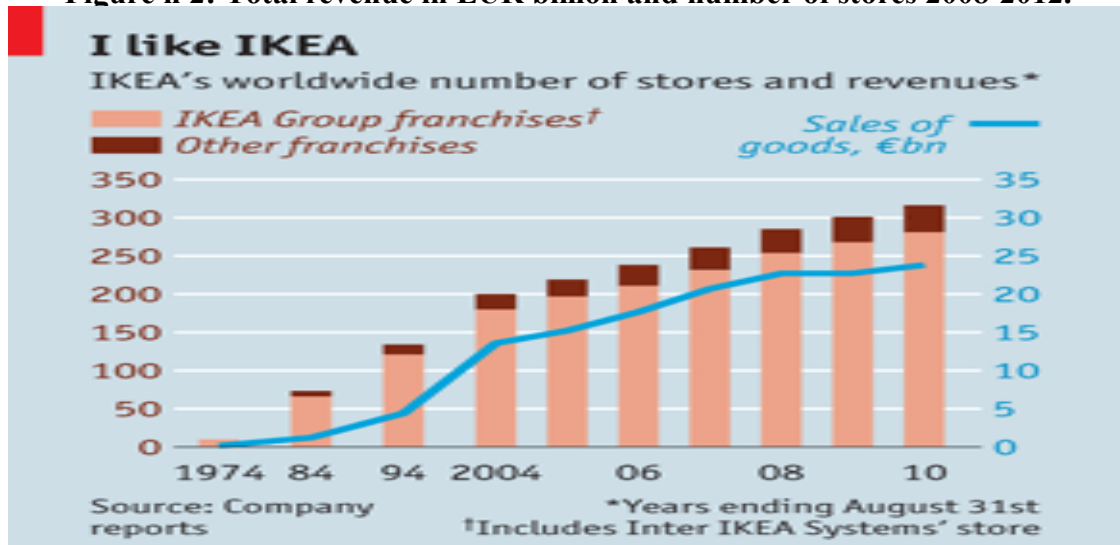
## - Appendices :

**Figure 1: Development of number of stores for IKEA comparing to Apple.**



Source: Retrieved from asymco.com

**Figure n 2: Total revenue in EUR billion and number of stores 2008-2012.**



Source: Retrieved from economist.com

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