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FILLERY'S END-USERS IN EGYPT

thesis

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ABSTRACT

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<p>The need of end-users' complete knowledge has risen to become an essential feature of a successful business. Especially, when the business depends directly on exports to some distant countries with almost no similarities in cultures, business behaviors, handling of goods and goods usage.</p> <p>As uncertainty has become the main feature of business in Egypt and Arab countries, after the Arab spring. Such a research had to be conducted directly in the field of sawmill products in Alexandria and Cairo in Egypt.</p> <p>This research gives an idea about the end-users of fillery in Egypt. It also predicts the seasonal fluctuations of demand.</p> <p>There were five main questions that were needed to be answered; Where is fillery being used? How is it being used? Several dimensions and their usages? Tapered vs straight fillery? Whether there are significant seasonal fluctuations or not?</p>		

Key words

Beams, Egypt, Fillery, Scaffolding

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1. Introduction

The need of end-users' complete knowledge has risen to become an essential feature of a successful business. Especially, when the business depends directly on exports to some distant countries with almost no similarities in cultures, business behaviors, handling of goods and goods usage.

In this research, both countries, Egypt and Finland have so many differences in business culture and usages of fillery. Therefore, business shall be monitored from head to toe, starting from importers until the end-users.

As uncertainty has become the main feature of business in Egypt and Arab countries, after the Arab spring. Such a research had to be conducted directly in the field of sawmill products in Alexandria and Cairo in Egypt.

This research kind of gives an idea about the end-users of fillery in Egypt, as it also predicts the seasonal fluctuations of demand.

There were five main questions that were needed to be answered; Where is fillery being used? How is it being used? Several dimensions and their usages? Tapered vs straight fillery? Whether there are significant seasonal fluctuations or not?

Most of the practical information has been collected in the field by interviewing importers and architects who have shown an interest to answer and even comment in current strategies.

Interviews' methodology:

All the interviews that I have done have taken place in Unirets main office in Alexandria and the importers' yards. Twenty six interviews have been done exclusively in April with twenty two different importers and agencies, most of the interviews had pretty much the same answers, therefore, not every interview was included to the thesis.

The answers were recorded by me and mr. Amr Shahin, the sales manager of Unirets according to the previously designed questionnaire.

Of course, nothing could have been achieved without the help and support of Mr. Ossama Talaat and the rest of the crew of Unirets, Alexandria along with Mrs. Riikka Mustonen and Dr. Kaija Arhio. To them go all the credits.

2. Hasa oy

There are long industrial traditions in the towns of Haapajärvi and Haapavesi where HASA is based. Sawn timber has been produced in Haapavesi for over 70 years. Today HASA is a modern timber company with production plants in Haapajärvi and Haapavesi. Hasa group's capacity is 300 000 m³ Annually.

Hasa group consists of three sawmills:

Veistämö sawmill: The new chipper-canter circular saw line installed at Haapajärvi in 2008, represents the most up to date sawmill technology. Its 275 mm head is able to cut big dimensions.

Haapajärvi's sawmill: The new chipper-canter line at Haapajärvi for sawing small timber produces sawn timber from cants with a crown diameter of 9-15 cm. The main products from the saw line are sawn timber for the furniture industry, infrastructure construction and the packaging industry. The line also produces special square sawn timber for building.

Haapavesi's sawmill: The chipper-canter circular saw line at Haapavesi is specialized in sawing medium sized timber. The mill produces high quality sawn timber for the furniture and construction industries and the glulam industry.

Drying technology: HASA's kilning capacity is ensured by six progressive kilns and 22 batch kilns.

Kiln drying: In kiln drying, lumber is placed in a chamber where airflow, temperature, and humidity are controlled to provide as rapid drying as can be tolerated by the lumber without increasing defects. (Nyle 2012)

Transport connection: HASA's products are supplied to over 20 countries all over the world. (www.hasa.fi)



GRAPH 1. Hasa's exports to the world (adapted from Hasa's website)

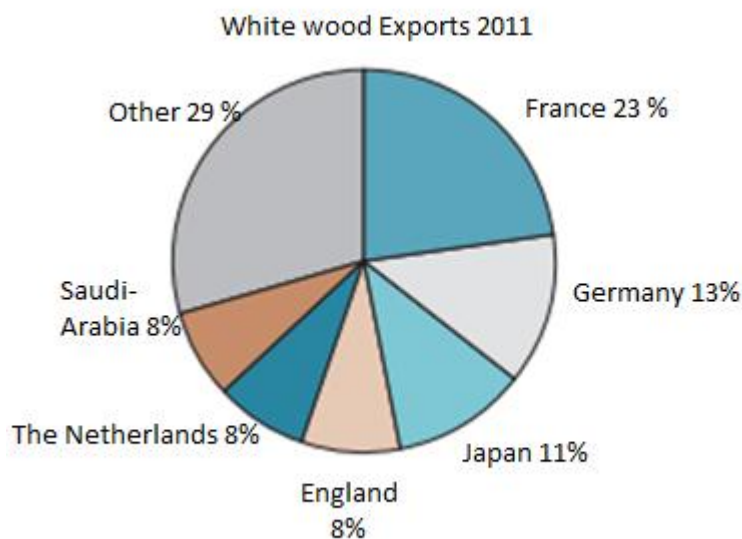
3. Finnish sawn wood market

3.1. Europe

The total Finnish sawn wood exports has grown by 11 per cent in 2010 gaining momentum in key export markets of Finland. Pine sawn timber exports increased by 10 per cent and white wood by 12 percent. However, in 2010, the average export price was 16% per cent higher of previous year. (Metla, the custom board)

In 2010, the housing construction in Europe has slowed down for winter season due to the world financial recession; recovery from the construction recession has been regionally diverse. In Germany, the construction has begun to grown in 2011 while the UK housing market remained uncertain.

Southern Europe countries still hold relatively low housing construction level, in the other hand, there's a noticeable growth of renovation. (Markkinakatsaus Puutuoteteollisuus, Antti Mutanen, Riitta Hänninen ja Jari Viitanen, 04.2011)



GRAPH 2. Finnish spruce lumber export volumes (Adapted from Metla, the Customs Board 2010)

3.2. North Africa and Japan:

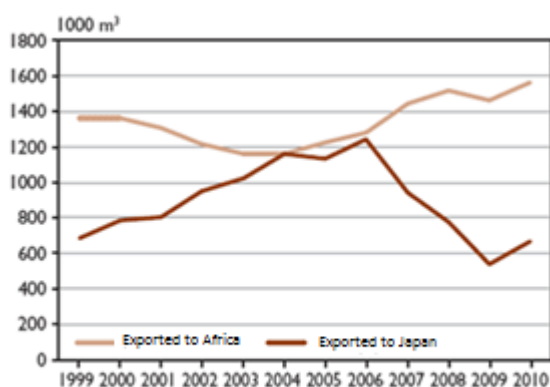
North Africa and Middle East unrest and Japanese earthquake have rapidly changed the Finnish sawn timber export requirements. Since almost one third of Finland's total exports of sawn timber were exported last year to North Africa and 12 percent were exported to Japan.

North African unrest has reflected negatively in the short term, especially for pine sawn timber export market. While Japan's reconstruction has started and will last for months and it's expected that soon pine lumber exports to Japan will grow rapidly.

North Africa's export markets are really important since the largest importer of 2010 was Egypt.

Egypt-oriented over 760 000 cubic meters of sawn timber exports consisted almost exclusively of pine lumber. North African countries including Algeria and Morocco are

also the major pine lumber exports targeted countries.



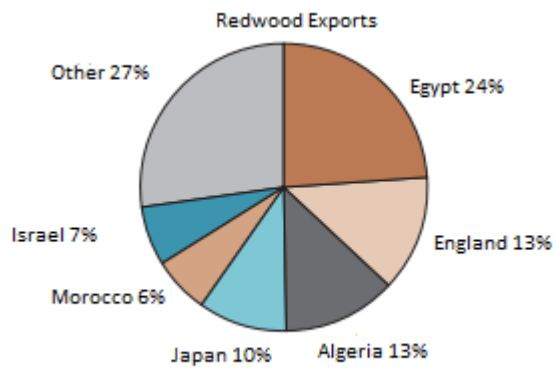
GRAPH 3. Finnish sawn timber deliveries (1000m³) Africa (including Algeria, Egypt, South Africa, Morocco and Tunisia) and the Japan 1999-2010 (adapted from National Board of Customs and Metla).

Japan has traditionally been the Finnish sawmill industry's main trading partner. However, the market has suffered from slow decline in demand for sawn timber. Japan's post-earthquake reconstruction will speed up only after the summer and next year. It is obvious that the construction leading to a massive increase in timber import. (Peltola 2011)

4. Wood Trade between Finland and Egypt

Egypt is the largest sawn timber importer, mainly pine lumber. Egypt-oriented over 760 000 cubic meters of sawn timber exports consisted almost exclusively of pine lumber. Trade between Finland and Egypt started in 1930 when both countries signed a temporary trade agreement. The agreement was put in action when the ship, Suomen Jousten sailed to Alexandria in December 1933. (www.finland.org.eg)

Right after Suez crisis in 1956, the trade relations revived again with forestry products, sawn timber and paper as Egypt was the most important export country in Africa for Finland.



GRAPH 4 Finnish redwood exports to the world, 2011 (adapted from National Board of Customs and Metla)

5. Egypt's construction industry:

5.1. Market Overview

Egypt, the most populous country in Middle-East and North Africa region, has become a popular destination for investors as it has made efforts to enlarge its economy and offer a quick growing environment to foreign direct investments (FDI) through regulatory changes and establishing large scale economic zones to increase trade and all economic activities. Very recently, many Gulf investors had said that they saw Egypt as a promising investment opportunity.

However, It's believed that the high political uncertainty after the former president's resignation might change the trend, since many investors have put projects on hold until a new president is elected, to avoid political risks that could change the market direction.

Egypt's GDP growth has moderated over 2011 to only +1.2% (imf). The current situation is getting a bit better as the GDP growth of 2012 is 1.8% so far.

Following the Egyptian Revolution in February 2011, construction has quickly resumed, with Egypt's largest construction company, Orascom Construction Industries reported only 10 days of total no activities on most of its projects.

It was quite impossible for domestic players to stop all activities on existing projects; however, those contracted to international companies have suffered from a prolonged disruption, thanks to their fears over further unrest.

In general, construction activities have actually resumed gradually in the months following the revolution to gain its full power in July 2011 after a lull in the previous months.

With such a strong performance in the first half of 2012, we remain optimistic on Egypt's construction industry and predict the same year-on-year growth of 3.3% to reach the value of LE56 billion (around €7 billion).

The previously said facts don't necessarily mean that there are no upside risks which could cushion the sector. Some negatives for growth also exist. (Egypt Business Forecast Report Q1 2012)

5.2.Negatives for growth

The transition period government focuses only on day-to-day operations, that has frozen most of the public sector projects, except for the low-budgeted already existing projects, meaning no significant contracts are expected until the new elected government and president find their feet on the ground.

Lack of financing for new construction projects: The transitional government is trying to meet the immediate demands while the banks don't want to lend thanks to the political uncertainty.

Domestic construction backlog at Orascom Construction Industries shows a huge drop off in contracts awards in the first quarter of the year, with just US\$330 million in new orders booked- the lowest number in three years.

5.3.Positives providing some upside

Loan agreements offered by Gulf countries: loans consist of two parts, long-term and immediate loans to finance projects and investments. Qatar has offered US\$10 billion funds for constructing two new ports. Emirates is considering a US\$670 million investments in projects.

The European Investment Bank (EIB) is willing to lend US\$ 900 million a year to support the Public-Private Partnership in the country.

The need of infrastructure projects in the country forces the government to accept international funding, which are most likely job intensive. These funds will offer some solace to the construction market.

6. Wood demand/supply situation in Egypt

Egypt is a large importer and user of softwood. Since Egypt lacks a saw-milling industry, most of its needs of softwood is imported as lumber. Some logs are imported for the plywood and match industries. Russian and Scandinavian redwood and white wood, (i.e., spruce and fir) are the major types of softwood lumber imported). Softwood consumption is split into 75% / 25%, as red woods over white woods. However, Chilean lumber continues to be the cheapest in the market although it has inferior quality compared to Scandinavian lumber. (Food and Agriculture Organization of the United Nations)

Although concrete, rather than wood, is the main structural building material, softwoods including some plywood are used extensively for scaffolding, forming and joinery. Approximately 70 % of softwood is consumed by the construction industry and the balance is used by the furniture industry and for making doors and windows. The increasing trend towards using more softwood in the furniture industry is attributed to its relatively low price compared with hardwood.

The most commonly used quality in Egypt is grade No. 2 and better, as well as 10-15% of No- 3. This grade is similar to the Scandinavian 5th & 6th grades, and the Russian 4th & 5th grades. Egyptian importers and ensures prefer to buy rough sawn lumber with size to be measured after kiln drying. They do not accept nominal sizes; rather, goods must be invoiced and delivered in actual metric sizes. Moisture content should not exceed 19% at time of import inspection.

Since Egypt has neither forests nor a saw milling industry, all softwood lumber is imported. The private sector imports about 75% of Egypt's softwood lumber needs and the only public sector firm is Société Commerciale Des Bois (FABAS), imports the balance. Before 1992, about 60% of FABAS imports were through barter agreement with the former USSR. Under the agreement, Egypt supplied agricultural and petroleum products in exchange for lumber and other Soviet goods. Yearly supply contracts were negotiated in May with price denominated in U.K. Pounds at L.E. 3,03/each English Pound. The balance, mainly redwoods, was imported from Sweden, Finland, Chile through international tenders. (FABAS) receives its allocation of foreign exchange from the government based on government determined priorities). Construction materials are accorded a lower priority than food and industrial imports.

In addition to FABAS, several large private sector firms play a major role in the lumber trade. Most of the private sector importers are traders not end-users, and are located in the port city of Alexandria. Finland, Chile, and Canada are the main softwood lumber suppliers to the private sector. In 1993, FABAS brought in close to 230,000 cm. of softwood lumber (red & white woods), all on cash basis. In accordance with the economic structural reform,, the company must now procure foreign exchange autonomously, and it must achieve profits in order to continue business.

The continuous increase in prices of both Scandinavian and Russian woods has stimulated the demand for whitewood. (FAO 2007)

7. Scandinavian Timber Grading

The basis for Scandinavian timber grading rules is that the sawn timber to be graded has been sawn according to the Nordic Sawing Practice and that the grade is defined from a sawn timber piece trimmed to the final length, or if not trimmed, to the intended length.

Redwood (Pine) and Whitewood (Spruce) are graded separately. Unless otherwise agreed, sawn timber pieces of wrong species, which are by mistake mixed with other species will be graded into GRADE VI

The GRADE is determined on the basis of the number, location, type and the maximum permitted values of the wood features.

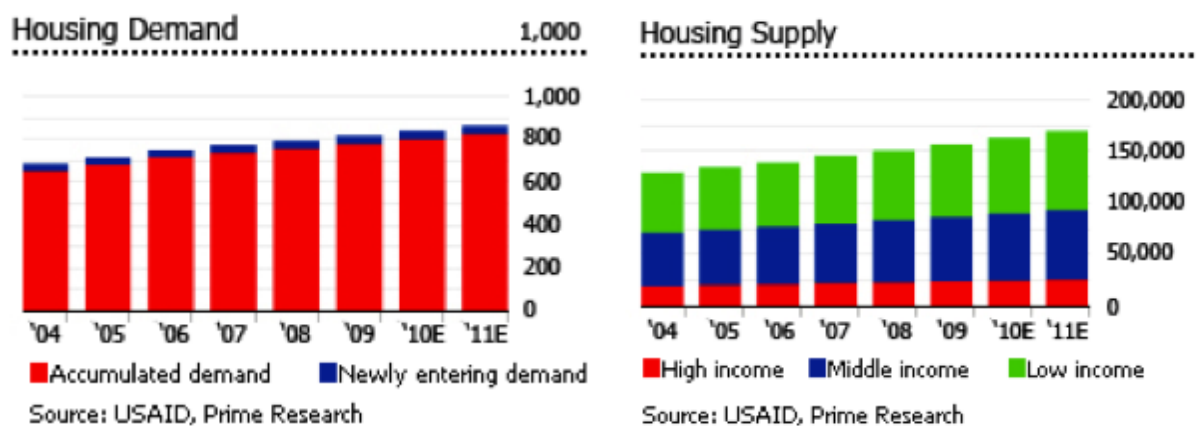
8. Egypt's housing market

The Egyptian housing market faces a supply shortage, especially in the low-income segment, which has a shortage of about 40,000 units per year.

About 90% of the country's housing supply is built informally, while only 10% is built by professional property developers. More than 11 million people, out of the country's total population of almost 82 million, live in informal slum settlements meaning that, there is no accepted plan and building permit, although the land is owned by the builder. Permission is sought after the fact. These are single building sites, and the construction is carried out mainly by smaller local construction companies.

About 44.4% of Egypt's housing stock is occupied by owners, while about 35.7% of the housing stock is rented. Other tenure types are gifts, and in-kind privileges (14.1%), and public housing (5.5%). (Jones Lang LaSalle 2011.)

With a population of 82 million and growing, Egypt has one of the largest domestic markets in the region. The housing market is expected to grow at a combined annual growth rate of 4.3%. The Egyptian construction sector is expected to experience strong and stable growth between 2010 and 2014.¹ Growth is going to continue as the population growth continues (1m people per annum, 1.8%) and young families need their own accommodation.



GRAPH 5. Egypt's housing demand and supply (adapted from USAID 2011)

Real construction industry value growing at an average of 4.91% year-on-year, expected to reach €12.52b in 2014. The positive outlook for the sector is based on the expectation that there is a strong and sustainable demand for infrastructure projects, high-levels of government investment and rising private investment, and in the hope the country manages the political events that previously rocked its economy.

Public private partnerships (PPP) are beginning to proliferate as the government steps up its efforts to engage the private sector in infrastructure projects as part of its long-term infrastructure investment strategy. The strong demand for building materials is an increasingly import driver for growth in Egypt's cement industry. The 25% year on year increase (adjusted for inflation) in Egypt's cement demand in 2009 highlights the importance of the cement industry in supporting the country's housing and construction industries. (El Kafrawy 2012.)

Materials:

The construction is predominantly concrete, steel and bricks. We found virtually no use of wood for main structures. The costs for some major construction materials are continuing to rise in 2012, with steel taking the lead with a 42% increase over the last year to reach an average of LE 5,093 (€636) per ton, but the cost of timber and water supplies remained stable. (Hassanein & Khalil 2009.)

Egypt has own supply of cement and steel but there are no preferences between local and imported materials. Cost efficiency is what matters the most. Construction companies that own cement/steel factories get subsidies from their factories but they will still go for the cheaper solutions if any.

There is a renovation segment that seems to be growing and offering opportunities to use more wood of higher quality. In addition to being more ecological wood is also considered.

9. Fillery

Fillery is the dominant scaffolding material all over Egypt.

Filleries are large square pieces of timber, center yield, with four sawn sides, intended for structural purposes, such as floor joints and load bearing elements in wall and rafter constructions. The difference between the width and thickness is usually more than 25 mm.

It is usually a requirement for structural timber that it is graded for strength, according to special rules. (Suomen Sahateollisuusmiesten Yhdistys 1997, 14-5.)

Usages of fillery:

9.1.Scaffolding

Scaffolding is an elevated single- or multilevel working platform to help support the weight of machines, people and various materials. Scaffolds are also known as temporary structures that support buildings and painting in construction work. While steel is often used for scaffolding in many countries, wood scaffolding still remains the dominant in most North African construction sites.

Other materials, like bamboo, are also being used in Asia, as the nature provides it and due to its strength properties.



GRAPH 6. Fillery used in construction, Alexandria, Egypt (Source: Author)



GRAPH 7. Metal scaffolding has been introduced lately to Egypt's constructors (Source: Author)



GRAPH 8. Bamboo scaffolding in China (adapted from www.blogcdn.com)

9.2.Shaders

Shaders are temporary set-ups that are used in occasions like public consolations, street weddings, elections' candidates' campaigns and street sellings.



GRAPH 9. Public consolation shaders are very noticeable in Egypt (adapted from www.almasryalyoum.com)



GRAPH 10. Occasional candies' selling shaders are also a tradition in the Upper Egypt (adapted from www.hamaki.me)



GRAPH 11. Ramadan's -the Islamic holly month- famous shaders are everywhere (adapted from www.e7l.blogspot.com)

9.3.Roofing:

Another usage of fillery has appeared in the Upper Egypt. Due to the low wealth of that distant part of the country, a huge amount of population uses the fillery for roofing their homes before winter. El-Menya, Abo Sueif, Fayoum and Luxor are the main towns of fillery roofing. The increasing prices of steel, cement and bricks are their main reasons to use it, although it is not a practical solution due to its low efficiency and durability.

Villagers from the previously mentioned towns typically renovate their roofs yearly before the winter. Wheat harvest season starts in the beginning of July and takes around a month or two. After the harvest, villagers are financially able to renovate their homes using fillery.

November, December and January are the regular months when roofing renovation activities are recorded.



GRAPH 12 Poorly made roof of an Egyptian rural house (adapted from http://mirathlibya.blogspot.fi/2010_02_01_archive.html)

10. Scaffolding and fillery:

Lengths:

2.7-3 meters long fillery:

Fillery's largest usage in Egypt is scaffolding. As scaffolding is a temporary supporting platform, it is necessary to have the length of a regular floor in a normal Egyptian building, which is 2.7-3.0m.

Dimensions of 75x75 and 70x90 of 2.7-3 meters are the highest priority for the importers as they are more involved in vertical scaffolding, especially in the underground structures. Those also are being sold with a relatively good price compared to other dimensions.

Importers complain about those lengths and dimensions availability as they prefer to have a higher percentage of them in shipments.

There are almost no seasonal fluctuations of those lengths and dimensions, as Egypt's construction sector doesn't get affected by seasons due to the stable warm weather.

Dimensions of 25x100 and lengths of 2.7-3 meters are used in topper floors.



GRAPH 13. Egypt's importers favorite timber product stored in the dry yard of Hawas, Alexandria, Egypt (Source: Author)

4-4.5 meters long fillery:

Fillery is also used by Egyptian carpenters who are designing and making windows, doors and shutters thanks to its cheap price. Lots of carpentry work is needed to be done though.

Carpenters prefer 50x150 dimensions and 4.5 m length for this purpose.



GRAPH 14. Wooden door of 1 meter width and 2,50 meter long. The cheapest possible in the market (adapted from www.kenananonline.com)

Scaffolding requires vertical (2.7-3m long beams are used for it) and horizontal beams that are joined together with ropes or metal nails. Beams of 4 meters long are used as horizontal fixtures together with the vertical beams, forming the whole temporary structure of a scaffold.



GRAPH 15. A 4 meters long beams waiting in Bolty's yard to be finally sold to some constructor (Source: Author)

5-6 meters long fillery:

Lengths of 5-6 meters are mostly used for roofing in the Upper Egypt, bridges and heavy structures' scaffoldings and occasional shaders.



GRAPH 16. Bridge construction in the midway between Alexandria and Cairo. 6 meters long fillery is used intensively (Source: Author)

Most of the importers believe that steel tubes scaffolding is gradually replacing fillery, as many construction companies started already using it due to its low depreciation value compared to fillery (20% for fillery and 13% for most steel tubes).

Dimensions of 70x90 and 90x90 of 6 meters long beams are used intensively in heavy construction sites.

The majority of Egyptian importers didn't appreciate the amount of 5-6 meters long beams they are receiving.

They have been pushing really hard to reduce its percentage in shipments or reduce its price.



GRAPH 17. Steel tubes are rarely used for bridges scaffolding, will that last forever?
(Source: Author)

During the elections season, 6 meters long of 90x90 and 100x100mm are very well seen all over the country due to the massive campaigns of candidates.

Pictures, names and logos have to be as high and visible as possible for voters. This is why 6 meters long fillery is needed.



GRAPH 18. A 6 meters long beam used by the Islamist party in Egypt in order to convince the public to vote yes on the constitutional changes (adapted from www.forums.fatakat.com)

11. Risk Analysis

Risk analysis is the process of defining and analyzing the dangers to individuals, businesses and government agencies posed by potential natural and human-caused adverse events. (www.searchmidmarketsecurity.techtarget.com)

Risk analysis is a technique to identify and assess factors that may jeopardize the success of a project or achieving a goal. This technique also helps to define preventive measures to reduce the probability of these factors from occurring and identify countermeasures to successfully deal with these constraints when they develop to avert possible negative effects on the competitiveness of the company. Reference class forecasting was developed to increase accuracy in risk analysis. (www.balancedscorecard.org)

11.1. Identifying the risks

Risk identification is the first step in a complete risk analysis. There are a number of techniques used to help formalize the identification of risks. This part of formal risk analysis will often prove to be the most informative and constructive element of the whole process. (Vose 2010.)

11.2. External and Internal Business Risks

Internal business risks: Internal Risks are those risks which arise from the events taking place within the business enterprise.

Since the study is about the end-users only, thus I will focus only on Fillery's external risks.

External risks refer to risks external to the business itself. These risks are largely outside your control once you have bought the business, and can include all or some of the following:

- Shutting down the harbor due to security reasons.
- The main wood storehouse in the importing countries can be totally full at times.
- New regulations of house building industry could be issued in new parliaments.
- Strong competition with Russian and Swedish fillery producers.

- Not enough information of end users' needs.
- Agents based problems.
- Political unrest.
- Shipping failures.
- Importers' hard-to-achieve specifications.
- Low quality due to storing failure.
- Low construction activities.
- Prices war.
- Customs-based problems.

External risks of fillery export to Egypt:

TABLE 1. External business risks

External Risks

Risk Description	Probability	Effect	Prevention	Recovery
Shutting down the harbor due to security reasons.	very low	no more fillery can be transported to Alexandria	Not preventable.	Not recoverable.
the main wood storehouse in Alexandria's harbor can be totally full in times	medium	no more fillery can be transported to Alexandria	Better understanding of the market needs in the importing countries	new dates of ship loads from Rahja
new regulations of house building industry could be issued in new parliaments	very low	not a steady market of fillery	Not preventable.	Opening new markets in other countries.
Strong competition with Russian and Swedish fillery producers	high	forces hasa to lower its prices	Not preventable.	Not recoverable.
Not enough information of end users' needs	high	Firm's strategy may not fit the customers' needs	effective and accurate market researches	using a "channel" company to predict and act quickly to changes
Agents based risks	low	Delay in processes and lack of trust	Trustworthy agents have to be chosen	Not recoverable.
Political unrest	medium	low construction activities	Not preventable.	Not recoverable.

Shipping failures	very low	uncertainty	Not preventable.	Not recoverable.
Importers' hard-to-achieve specifications	medium	changes in production plans	better planning and predicting methods	consider in production plan
Low quality due to storing failure	high	Compensation might be asked for	Not preventable.	Not recoverable.
Low construction activities	low	low demand	Not preventable.	Not recoverable.
Prices war	medium	forces hasa to lower its prices	Not preventable.	Provide more desired lengths
Customs-based risks	very low	Delay in goods receivals	Make sure that all papers travel along with shipments	Quick response from Hasa and agent

11.2.1 Risks of high probability:

There are only two risks of high probability which are related to Hasa, as storing fillery in Alexandria is the importers' responsibility although it might happens that importers could ask for some compensation even if they didn't provide a good environment for storing.

- Strong competition with Russian, Latvian, Canadian, Swedish timber and timber from other Finnish suppliers:

Egypt is one of the largest markets of pine wood, as it has no forestry production at all, along with the huge housing market. Therefore, Egypt's timber market is very attractive to exporters from several countries such as Russia, Latvia, Canada, Sweden, Chile and Finland.

Hasa's market share in the Egyptian market is in quite good conditions thanks to its long history of exporting fillery and other products to Egypt and its high quality.

In spite of Hasa's good reputation among importers, end users aren't aware of quality issues. "End users believe only what they see" says Mr. Hawas during an interview on the 12th of August 2012.

Therefore, tapered beams aren't well-appreciated for most of the end-users as they believe that it's a quality failure.

In all scaffolding applications, tapered and straight beams can equally do the same job as there is always a space of approximately 15 cm left from both sides to form joints.

Several importers have suggested sending the full shipment to few importers on turns, instead of sending the whole shipment to all of them with slightly different changes in specifications. This way, prices will rise and it's a win-win case to all importers.

There have been cases of "almost" violating the rights of Hasa by a Canadian company called "Masa" which also uses the blue color as a seal. Therefore, it's recommended to keep the seal as visible as possible.

- Not enough information about the end-users' needs:
Generally speaking, firms should know their end-users' needs and be ready to satisfy them. Culture also is a big deal when it comes to business, as the Egyptian eye sees things differently.
- Low quality during to storage failure:
"The average amount of time for importers to sell their share of a shipment is around 3 months" says El-Bolty during an interview on the 15th of August 2012. This means that Hasa's beams will be exposed to the hot Egyptian weather in their yards for 3 months, which could cause some damage to some of the waiting goods.

11.2.2. Risks of medium probability

the main wood storehouse in Alexandria's harbor can be totally full at times:

There are few occasions when there is almost no work in the whole country.

Ramadan –the holly month for Muslims- is one of those occasions when people don't get to eat nor drink from sunrise to sunset.

Very large unplanned supply might also cause the storehouse to be full, this happens very rarely in a huge port of area for containers approximately 155,905 sq. m.

Political unrest:

After the 25th of January 2011, Egypt has fallen into a situation of political unrest damaging the economics of the country severely before it starts to gradually heals. Thanks to the long transitional period governed by SCAF (Supreme Council of Armed Forces), Egypt has lost many opportunities of quick democratic transition and what comes along with housing programs and new investments.

Now after the Egyptian population have voted for Morsi for presidency, the situation has become much better. Yet, the new government hasn't announced their social housing strategy.

Importers' hard-to-achieve specifications:

Small-sized importers try to have the maximum profits possible with 2.7-3 meters long beams. This might not fit to the productions plan of Hasa nor the forest type that surrounds Haapajärvi.

But this is nothing hard for the Unirets people –the agent- to deal with, as all the importers show a big deal of respect to Unirets and its crew.



GRAPH 19. UNIRETS's logo fixed on the wall next to the office, Alexandria.

(Source: Author)

11.2.3. Risks of Low/Very Low probability

- Shutting down Alexandria's harbor due to security reasons:
Alexandria is considered to be the second important city in Egypt and its main port, moreover $\frac{3}{4}$ of Egypt's foreign trade pass through it, further more in Alexandria there are two ports, one is located eastwards and entitled the eastern port and the other westwards and entitled western port and there is a T-shaped Peninsula separating them. (Alex Port website 2008.). Thus, Egypt can't afford to shut down the whole main port of Alexandria even in storms.



GRAPH 20. Alexandria's port (adapted from <http://www.apa.gov.eg>)

- new regulations of construction industry could be issued in new parliaments:
It's very unlikely for any coming parliament to change the regulations of construction. New governments will try solving the housing problems by constructing more houses at least to fill the huge backlog of housing in the country.
- Shipping failure:
Very unlikely. Insurance covered. FOB (Free On Board) method used; therefore, accidents of any kind on deck wouldn't interest the exporter.
- Agent-based risks:
Very rarely, such a situation occurs that agents change.
- Low construction activities:
Now after Egypt has passed the hard and long transitional period, the country tries to solve it's growing housing crisis. With a shortage of 1.5 million housing unit and growing, governments have to act quickly and start constructing huge social housing projects.
- Customs-based risks:
Highly unlikely. Hasa isn't responsible of any of its goods once they have cross the ship's gate.

12. Conclusion

Due to moderate climate in Egypt, construction and all the processes that come along are quite continuous all over the year without any seasonal fluctuations. Therefore, scaffoldings are needed almost equally year-around.

Customers and end-users' preferences are not so tricky as lengths of 2,7 and 3 m are more needed and appreciated thanks to their scaffolding applications.

In all scaffolding applications, tapered and straight beams can equally do the same job as there is always a space of approximately 15 cm left from both sides to form joints.

Risks of the business are not so significant except for the political unrest which has been quite unpredictable since the 25th of January 2011.

There is a strong competition with Russian and Swedish fillery producers, which will always raise the question about the customers' preferences quality and price wise.

With a shortage of 1.5 million housing units and growing, high construction activity will always appear if there is no a political unrest. Most of the housing supply in the country is built informally.

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