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From focus on price to the pyramid of innovation, information, cooperation, value and trust: a success story of five Swedish building material manufacturers.

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ABSTRACT

In the building sector, value for the customer, is often regarded as being value for money and this, in turn, is achieved by means of competitive tendering. However, there are companies that also focus on innovation as a competitive parameter in their contribution; hereafter referred to as innovative companies. Five managing directors from innovative companies in Sweden were interviewed about how innovation is dealt with in their respective companies. As well as the importance of information, this study points to two additional important factors for innovation, namely cooperation with a carefully chosen partner and the transference of values to the employees. Those innovative companies made careful choices and use means of information, cooperation, value and vision to create innovation in order to build trust for the company and for its products and services.

Keywords: innovation, information, benchmarking, cooperation, value, vision, trust

INTRODUCTION

The construction sector has shown to be capable of building complicated structures. However, it has also, at the same time, been accused of being non-innovative and conservative. Governmental reports have been written on the subject, such as, for instance, *Rethinking Construction*, (Egan Report in UK, 1998) and *Skärpning Gubbar* (Pull up your socks chaps, SOU 2002:115 in Sweden). The complaints came about due to low innovation and high costs in the sector. Innovation research connected to the building sector is, however, very small and undeveloped compared with other businesses. (Winch, 2003; Barrett and Sexton, 2003)

The building sector comprises of many activities from numerous groups of people such as contractors, designers, architects, subcontractors, material manufacturers, engineering companies and so on. This

variety of actors, each with their own task to perform, makes the building sector both complex and fragmented. The sector can also feature strongly coupled networks involved in projects and loosely coupled networks outside the projects. Those involved cooperate intensely while the project is running, but stop when the project is completed (Dubois and Gadde, 2002). Cooperation within the sector can often be characterised by the exchange of standard products and concentration on details such as delivery dates and the colour of cabinet doors (Dubois and Gadde 2000). Idea generation and problem solving, therefore, rarely exist between contractors and material manufacturers. Cooperation with diffusion and the adoption of ideas is, more or less, only seen between material manufacturers (Sundqvist et al, 2007, Gann 2000).

Value for the customer in the building sector is often regarded as value for money that, in turn, is achieved by means of competitive tenders whereby "the works are procured to the lowest-price bidder with little or no guarantee (or even incentive) of future work" (Cox and Thompson, 1997, pp 129). Consequently, relations often have a short-term focus where both parties try to get as much out of a contract as they can.

Some companies use generic management methods such as Total Quality Management (TQM). They are oriented towards continuous improvements (Chen and Jones, 2007) and have a built in system to acquire new ideas of products and services. The employees are encouraged to suggest changes in production and improvements of products or services in order to improve performance.

Some companies, however, perform better in terms of new products and services. They have, for instance, better innovation processes while others have poorer performance i.e. poorer innovation processes. These processes are connected to management decisions and, as they are established from experiences of what works well for the company, they follow on from learning and knowing in action. This knowledge is, therefore, vital

for innovation processes. The activities involved in these processes are very much a management decision, as the companies must resource and hence pay for them (Tombesi, 2006). The use of information, as well as the processes to manage it, varies greatly (Drew, 1997). Innovation is more about knowing than acting (Drucker, 2002), which means that information is vital. The knowledge of innovation in the building sector is mainly based upon other industries and has not been sufficiently remade into a construction field to accomplish a firm framework (Barrett and Sexton, 2003).

Innovative companies often use values and vision to promote specific behaviour among the employees. Among those values, the following are often found: honesty, willingness to change, and being open and non-hierarchical, being decisive, and setting clear responsibilities (Ministry of Economic Development 2002).

The purpose of this study is to study processes of innovation, information, cooperation, value and vision used in innovative companies within the building sector.

METHODOLOGY

The empirical base in the study is interviews with managing directors from five building material manufacturers in Sweden. The Managing Director (MD) is the leader of a company, just as a conductor leads an orchestra. The MD is responsible for how the company is run as well as the resources that are used (Tombesi, 2006). This is achieved by means of allocating resources such as employees and machines and, also, by using his or her experience and interest; for instance, their experience of managing innovation processes because innovation is more about knowing than doing (Drucker, 2002). The Managing Director, therefore, puts his or her mark on the company and positively or negatively influences the processes of the company, depending on how experienced the MD is.

The perspective of Managing Directors has been utilised in a large study (Sundqvist, 2002) and this has led to four articles that have used data from the study (Sundqvist et al, 2003; Sundqvist et al, 2004; Sundqvist, 2004; Larsson et al, 2006). In addition, there has been one

additional article based on interviews (Sundqvist et al, 2007).

The interviews in this study were semi-structured and lasted 60–90 minutes. They were tape-recorded and transcribed for analysis. All interviewees were asked the same questions. The companies are active in the following areas of manufacturing see Figure 1:

Company	Type of Production	Employees
1	Kitchen cupboards	450
2	Reinforcement	200
3	Prefabricated wood elements	770
4	Prefabricated wood elements	140
5	Prefabricated concrete elements	1200

Table 1 Companies interviewed

Companies that could be regarded as innovative, due to continuous development of new products and processes or services, were looked for. Innovative in this sense mean that at least 1 new or significantly improved product, service or process must have been achieved per year. Innovativeness was not allowed to be thought of as new colours or change of hinges or similar minor changes of more or less cosmetic type. The companies were chosen in two steps: 1) companies suggested by experienced people knowing building material products and 2) studies of the suggested companies and their products over the internet. There were no pre-interviews, or any other kind of pre-checking of the companies before the interviews. All five selected were chosen and interviewed. They are briefly presented below.

Company 1: Change in range of kitchen products, such as cupboards, doors etc.

Company 2: New wall elements for passive houses

Company 3: New solution system for reinforcement work at site

Company 4: New shower floor for bathroom volume elements

Company 5: New facing of houses

FOCUS OF INTERVIEWS

The interviews covered four processes: innovation, information, cooperation, and values & vision. Two of the processes, innovation and information, had been studied before and were described in an article by Larsson et al (2006). The article claimed that better processes in innovation seem to be linked to better processes in information/benchmarking whilst poorer innovation is linked to poorer benchmarking processes. Since benchmarking is a way of dealing with information, there was an obvious interest in information. Consequently, there were expectations regarding the issues of innovation and information but no expectations at all for the other issues. The five issues are presented briefly below.

Innovation. How do the companies work with development in terms of developing new products or new services or adapting to more effective processes? Development activities in a company are dependent on the beliefs and experience of the managing director.

Information. Some companies, more than others, try to find information about the environment surrounding the company such as, for instance, competitors and their products, and about new building projects. Some companies go further than this and use benchmarking. How often are requirements from the customers incorporated when developing goals?

Cooperation. With whom does the company have long-term cooperation? Why are those partners chosen? Is the cooperation used to develop products, services or processes?

Values and vision. To what extent are values and vision used in the company and why are they used? Is development included in the vision?

PRESENTATION OF COMPANIES

In order to give background information about the companies involved and the ideas that have come from the managing directors interviewed, a brief presentation of the companies is given below.

Company 1 was founded in 1929 and began by manufacturing all kinds of cabinets. During the Second World War, the company changed to produce kitchen cupboards in standard modules that could be assembled according to the needs of

the customer. Currently, the company has approximately 450 employees and an annual turnover of SEK 680 million (EUR 73 million.).

Company 2 was founded in 1919 to produce steel. In the early 1930s it began producing reinforcement products. Over the years, it has developed into a company that manufactures by the processing of steel into reinforcement products. The company has approximately 200 employees and an annual turnover of SEK 700 million (EUR 75 million.).

Company 3 started in 1944 as a local saw mill. Since then, it has developed into a company with its own forests, sawmill, planing mill, villa production, the manufacture of prefabricated wood elements, and a real estate section with dwellings for letting. The company has an annual turnover of SEK 1.4 billion (EUR 150 million.) and has 770 employees

Company 4 was founded in 1924 as a local sawmill with some house construction during summertime when there was no snow. Today, the company has developed into a major producer of multi-storey timber frame buildings. It has 140 employees and a turnover of SEK 350 million (EUR 38 million).

Company 5 is a manufacturer of prefabricated concrete elements. It was founded in 1942 to manufacture concrete. It currently employs 1200 persons and its annual turnover is SEK 2 billion (EUR 214 million). The company carries through projects of frame erection from idea to final mounting. Its aim is to develop and bring industrial methods to the building process. The company produces complete frame buildings including outer walls. These elements are combined with building concepts for dwellings, offices, parking, multi-storey car parks, hotels and schools. A French group now owns the company and has factories all over Europe. The primary components are slabs, walls, beams and columns

INTERVIEWS

The material is treated process by process to create a picture of how these companies act. A provisional presentation was done in this way. It gave a good view of management thoughts in innovative companies. The same concept is, therefore, continued.

Innovation

The managing directors of Companies 2, 4 and 5 said that they put several million Swedish kronor into development each year. Two of them, Companies 4 and 5, talked about a specific percentage of their turnover aimed for development. This way of allocating money for development gives me an impression that development is seen as a possibility and, therefore, as an asset, instead of a cost affecting the economical balance. See Table 2

Development is also done together with universities. Three of the companies (2, 4 and 5) claim that they have a university as a partner. Company 4 said: "the products get more trustworthy when a university is behind you". This statement is interesting because it pinpoints the importance of trust in a company and what it has to offer. This is important for the company, as well as for the customer. Through the involvement of a university, products and other solutions will be regarded as being derived from, or connected to, research and, thus, will probably be regarded as being more respected and trustworthy than other products without those contacts. The value, however, of this connection in terms of money is difficult to estimate. Last summer, representatives of the company and the university made a trip to the USA and presented multi storey buildings made of wood. A Canadian company became interested in the way these houses were being erected, perhaps influenced by the presence of, and cooperation with, the university. A Danish company has already started production of this system in Denmark. Another example of cooperation with the university is a newly developed prefabricated bathroom floor. "In all of our developments, we ask ourselves", the MD said, "does this idea benefit the customer?" With this statement the MD emphasized the importance of having the benefit of customer in mind when developing products.

The foundation on which product and process innovations are created is the technological knowledge in the company. Technological knowledge, however, is not only built up via internal learning processes. Many companies are turning to external sources to find the knowledge needed to bring in product and process innovations. Subsequently, successful organising and the accomplishing of partnerships with external technology source organisations can often be of major

importance to success in technological dynamic surroundings (Sherwood and Covin, 2008).

Two managing directors (Companies 2 and 4) explained that they use the technique of continuous improvements. The MD of company 2 said that their company needs to improve productivity by 3-4% each year. The MD continued to explain about their building process and how they had lowered the administration cost for building projects. Their construction partners, he said, have no administration, or none in principle, at least. The administration is run by Company 2. Their staff follows a calculation model given by the construction partner. The two companies trust each other and let the construction work go ahead on an open account. The cost is lowered, due to less administration and the competitiveness is, thereby, increased.

The Managing Director of Company 3 explained the problem they have when marketing reinforcement. "There are many traders that just offer bulk products", he said, "and they offer these at low price and no service". Company 3 will not go down to the price level of the traders. Instead, the company is testing a new way of tendering their products. Their idea is to transform their product into a service by, namely, producing and mounting the product on site, with their people doing the work. The MD has also extended his thinking to include other companies in order to discuss mutual tenders from a combined group of companies, whose tender to the customer would be reinforced concrete poured into a mould with reinforcement mounted and all that is required. Their idea seem to be quite close to what companies offering sliding form casting do: building a mould, mounting reinforcement, and pouring concrete. In sliding form casting this is normal procedure, but not elsewhere. The MD of Company 3 is thinking "outside the box".

The Managing Director of Company 1 focuses on the employees instead of products. He said: "One doesn't have to work with development of the company if one works, instead with the development of people. Other things come automatically. Everyone has a built in power". His idea is to make the internal work run smoothly. Development is in their strategy plan. He aims at promoting certain behaviour and, thereby, respect for each co-worker as an

individual. Company 5 expressed a similar opinion. More of this can be seen under the issue of promoting values.

	Company 1	Company 2	Company 3	Company 4	Company 5
Innovation in SEK millions or % of turn over		We spend some millions on Research and Development plus our own time		We have a written aim that 3% of our turnover shall go to Research and Development	I think that 1% of our turnover, which means 20 - 25 million SEK are spent on development
Innovation together with university		We have a joint project (CBBT) together with some other companies. The project is run by Växjö University.		A year ago we went to the USA together with a professor from Luleå university. The products become more trustworthy when a university is involved.	We work a lot with CBI, because of their knowledge of cement and concrete. When it comes to our concepts we mostly cooperate with the Royal Tech, but also with Chalmers and Lund
Innovation examples	One doesn't have to work with development of a company if one works, instead, with the development of people. The other things come automatically. Everyone has a built in power.	Continuous improvement is part of our culture. We deal with it all the time. We need to improve productivity by 3-4% per year.	We are working on a joint solution for reinforced concrete i.e. selling reinforced concrete to the user instead of only one product as concrete, reinforcement or moulds	We try to improve and develop our products continuously and we always ask ourselves does this idea benefit the customer	Building of Arena concepts such as ice hockey-stadiums, sports centres, football arenas and such like have grown. It has become a new product.
Innovation examples	My role is to make the internal cooperation function, because then there will be innovation as a consequence	In our building process we lower the cost of administration. Our partners on site have no administration. We run it for them, at least most of it. There is a calculation model to use, showing the costs for each operation. No running double.	We are offering reinforcement mounted and ready for pouring the concrete, as a test for the joint solution.	Our leaders of projects work closely with the University both to influence and to be influenced. In this way a bathroom floor has been developed.	We want to have 10% new/changed products a year and at least one new facade
Innovation examples	We don't have any unique products in our range, so we must be competitive with what we make, produce and brand.			We have worked a lot with our brand.	
Innovation examples	Development is in our strategy. We use Balanced Score Card			Does this increase the value to the customer?	

Table 2 Uses and examples of innovation

Information

All companies collect information, for instance, via subscriptions and data showing future construction projects. They also get information from their Market Department when visiting customers. The MD of Company 1 explained that their products are quite simple. See Table 3. According to him, everybody knows each other on the market and news travels fast. He said: "The technical level of our products is low and there are no unique products, so we have full control". Companies 2 and 3 go a little bit further. They benchmark. The managing director of Company 4 was eager to receive

information about faults in production that could be due to faulty production planning. He has regular meetings every month with people from the market and production department. His interest in development is regarded here as taking care of improvements. These improvements can also be seen as being of value to the customer; improved products, in the long run, often mean better products. Company 5 keeps an eye on competitors' new products by inspection. The action of the managing directors shows that they regard information gathering as important.

	Company 1	Company 2	Company 3	Company 4	Company 5
Reflections on information	We don't have any formalised routines regarding the handling of information. We use intranet, extranet and internet. Information is perishable stuff to be handled continuously.	Our company publishes something called "Saw-blade", twice a year. All companies present their subjects. The paper is distributed to customers and employees.	In general terms we take in subscriptions for information, we use publications, and we get info directly from the customers.	I get information continuously. I have all the info in my head. My ideas are there. I get reports from all the sites every month.	
Obtaining information			Information is obtained from the sales people. They are supposed to bring back ideas and information from the customers. They are obliged to bring information in writing.	When we get information about faults, we often try solutions on an apartment to see how it works.	
Use of information	We market products that are quite simple. Everybody knows what the others are doing on the market. News travels fast. Therefore, it could be said that there are no unique products.	We use benchmarking for some areas and we also have a profitability list, where we compare them against us.	We benchmark our sister companies.		We watch our competitors' products by inspection.

Table 3 Use of information

Cooperation

All of the MDs explained that they have ongoing cooperations. Some of these have been going on for many years. Company 2 gave an example of a consultant firm that has been working with them in developing their multi-storey timber constructed building. See Table 4. The MD gave another example of their construction partner, whereby they developed a mutual administration; namely, that Company 2 would run the administration for the construction company. Company 2 has a real estate firm within their group of companies, with whom they cooperate

Company 3 offered a similar example about a transport company that takes care of all their logistics, including developing internal processes. The Managing Director of Company 5 explained that their company has long term agreements connected with stairs and service for mounting equipment such as cranes and hoists.

Cooperation with real estate firms was on the agenda for both Companies 4 and 5. It seems as though both companies see possibilities in cooperating with real estate firms, opportunities for new ideas and solutions and also, hopefully, for future sales.

Three of the companies (2, 4 and 5) claim that they have the university as a partner with whom they cooperate. Company 4 said: "the products get more trustworthy when a university is behind you". This statement points at trust in a company and what it has to offer, which is important for the company, as well as for the customer. Through the engagement of a university, the company and its offerings will probably be regarded as being more respected and trustworthy than other companies without those contacts. Last summer, representatives of the company and the university made a trip to the USA and presented the company.

	Company 1	Company 2	Company 3	Company 4	Company 5
Cooperation examples		We have a long-term agreement with a transport company. They take care of our logistics.	We have worked with the designing consultant for some years now, but there is no long-term agreement for the next 10 years or so.		There are long term agreement connected to sales of stairs with two major contractors, but no agreement connected any product other than stairs
Cooperation examples					We do roadmaps and trends and check now and then.
Cooperation examples	We talk with our retailers and tell them how we want our products to be presented and distributed, and the shops to be built, thereby, finding ways to do this together.	We are discussing a joint solution / cooperation with a group of concrete producers. It is one matter to market concrete and reinforcements separately and another matter to market them together.		We are setting up cooperation with a real estate company that has not kept up with the development.	We make concrete stairs and we have some 3-years based agreement with two major contractors.
Cooperation examples	It is important to make our internal cooperation function smoothly, and how to look at me as an individual.			We cooperate with a competitor in a developing project for a 7-flat multi-storey building. It is mixture of their system and ours.	We are discussing starting up cooperation with two major real estate owners. We have some cooperation concerning our mounting devices such as cranes and hoists.

Table 4 Cooperation

Values and vision

Transferring values seems to be important to these managing directors. The MD of Company 1 remarked: "Values are the fundamentals to act from". The MD of Company 2 said that "everybody in the company must be down to earth and have a sound economical thinking". See Table 5. The MD of Company 4 commented: "Everybody in the company should get into the way of thinking how their counterpart will react to what they are doing". The MD of Company 5 was on the same track when he explained: "Our values are connected to relations in the work processes in our company. Honesty and openness are two examples. Learning and responsibility are two more. In total, there are six values". It would appear that the managing directors consider values as tools to steer the behaviour of the employees, thereby, also influencing the outcome.

As well as regarding values to be the fundamentals from which to act, Company 1 also indicated that personal development

is important to create innovation – "if one works, instead, with the development of people, the other

things will come automatically. Everyone has a built in power".

Vision involves planning. The Managing Director of Company 1 said: "Our company has a normal planning process, where one looks for changes that might be there. Is there a need for an introduction?" See Table 4. The MD of Company 2 showed his new 3-year plan for the company. It was to be launched one year earlier than expected because their goals were reached in the year 2007 instead of in 2008, as planned. "We use long term planning in terms of yearly budgets", he said, "usually a 4-5 year perspective". Company 5 also deals with 3-year plans as well as using roadmaps and trends that are checked now and then. Planning seems to be a lower priority than development.

	Company 1	Company 2	Company 4	Company 5
Transferring values	Everyday happiness, to me, is very much about how we humans behave towards each other. It is important. It is about how we should cooperate and how things should function. It's also about how to see each other as an individual. Values are the foundations to act from.	Everybody in the company should be down-to-earth, and have sound economical thinking. Everything that the company gains will be invested in the business.	Everyone in the company should get into the way of thinking how their counterpart in the same situation would react to what you are doing. This way of thinking must be done without being unnatural	Our company is a merge of many firms with their varied cultures. Therefore, we try to create a common culture of our own. Our values are connected to relations in the work processes within our company. Honesty and openness are examples of this. Learning and responsibility are others. There are six such values.
Vision	We want to be the obvious choice for customers seeking bon vivance and everyday happiness via their furnishing.		We are going to be the leading producer of prefabricated multi-storey timber buildings in Scandinavian countries.	We are going to be the leading supplier of concepts and frames based on concrete, with good economy for us and for the customers. Architectural freedom and security.
Culture	Our products should represent everyday happiness, both when using them and in contact with us. Everyday happiness stands very much for how we humans behave towards one another.	Anyone from the shop floor can come in at any time. We say that often, and we want to have the same spirit in the whole company. We want to down-to-earth and set a good example.	There are three core values at Lindbäcks: knowledge, engagement and driving force. Another fundamental principle when being a shareholder in Lindbäcks is to be active in the company. We don't want any passive shareholders.	
Reflections on planning	We have a normal planning process where we look for changes that could be there. Is there a need for introductions?	We use long term planning in terms of yearly budgets. Usually we have a 4-5 year perspective.		We have long term aims, but not for longer than 3 years.

Table 5 Transferring values (no comments from Company 3)

SUMMARY OF INTERVIEWS

It would appear that the managing directors of these companies eagerly look for ideas for development. They use techniques and activities that aim for development. The following points are prime examples of innovative ideas for a company to avoid standing still:

- Cooperation with important partners for development of the company: firstly, universities and, secondly, real-estate firms.
- No cooperation was found between the innovative building material manufacturers and contractors to develop products
- No communication was found between the innovative building material manufacturers and contractors connected to development of products.
- The use of continuous development as a means to small improvements,
- System solutions, meaning joint offering from a few companies to customers instead of each company offering their product.
- Developed administration as a way of developing processes and, thereby, cutting costs and becoming more competitive
- The development of new concepts.
- Research & Development (R & D) as a percentage of the companies' turnover.

Universities are chosen as the number one partners for development as they contribute not only with knowledge, but also with reliability and through the transferring of trust to products and customers.

Values seem to be seen as carriers of important messages, which have influences on outcomes of the company.

FINDINGS

Development is important to these managing directors. It appears to be a tool to win customers instead of focusing on price. New solutions for products, concepts, continuous improvements and services seem continuously to be put forward. The managers give the impression that they seek possible ways in which to avoid a price focus and they use development as a tool to do it.

The managing directors seem to have found important partners for future development of their respective

companies. Three out of five of the innovative companies had partnership with universities. Three out of five of the innovative companies had cooperation with real estate firms or were in the opening stage of it.

No cooperation was found between the innovative building material manufacturers and contractors to develop products, and therefore it was natural that no communication was found between them in connection to development of products.

Four out of the five companies use generic management tools such as Total Quality Management, Benchmarking and the Balanced Score Card

The concept of value also seems to be used to transfer certain behaviour to the employees and is, perhaps, also used as a tool to convey information and create a reliable company. The value of the customer seems to be kept in mind, because a company should act and appear to be trustworthy

The managing directors actively seek information about market needs, products, and performance.

Development not only applies to products but also to the employees; the latter in terms of education and transferred values.

CONCLUSION

Innovation processes and information processes influence each other. It would appear that better innovation processes are connected to better processes of information and, conversely, poorer information processes lead to poorer innovation (Larsson et al, 2006). This study indicates two other factors that are connected to innovative companies i.e. innovative managers: cooperation and transferring of value, which means that relations to customers as well as employees are involved.

The managing directors apparently act to influence the employees in their companies in a certain way. They want their companies to develop, to be attractive to customers and also to employees. They seem to have been successful because innovation as well as information combined with cooperation and transferring values at these companies, appear to have created trust for products and for what the company represents.

Trust, in this sense, means partner trust, which can be defined as “the extent of trust placed in the partner organisation by member of a focal organisation” (Zaher, McEvily and Perone, 1998, pp 142). However, “trust is a psychological state comprising of the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another” (Kadefors, 2004, p176). It is considered to be a psychological state.

DISCUSSION

The overall train of thought in this discussion is whether the “pyramid” of innovation, information, cooperation, value and trust could be a way to move from the hitherto almost exclusive price focus in the building sector, to an approach that focuses on the benefit of value to the customer through development of products.

It has been shown that all these five innovative companies act in a rather similar manner. The thought-processes of their managing directors seem to be similar. Somehow, these managing directors seem to think more broadly and have more unusual thought processes than less innovative managing directors. Three out of five companies have universities as a partner to develop products. Three out of five companies had started, or were about to start, cooperating with real estate firms, presumably to develop their company and increase the compatibility

This article attempts to grasp some of the thinking that is done by managing directors. To start with, it would be fair to say that the article agrees with the fact that innovation in a company very much depends on what kind of developmental ideas the MD has for the company. These ideas require to be translated into action in the company. Innovation is, therefore, a management question (Tombesi, 2006). Perhaps managing directors use the company’s vision as a tool to guide and influence their employees towards the future, whereby the future involves some kind of development. The MD of Company 4 said: “We are going to be the leading producer of prefabricated multi storey timber buildings in Scandinavian countries”. Their previous vision was to be leading producer in Sweden. Both visions have a built in guide and an aim for development to influence and inspire their

employees for the future. However, this is not quite enough to reach this objective. The MD of Company 5 expressed that they need a common culture in their company. In Company 4 an important maxim is: “Always remember how the customers would react upon what you are doing”. Company 1 expresses it very direct by saying “values are the foundations to act from”. This way the companies have a vision to inspire and influence and a foundation to act from through the values that are transferred to the employees. Everything seems very straightforward.

To continue the line of action, some of the managing directors approach universities who, in turn, are, of course, interested in working together with the industry. Who would not be? After carrying out some successful projects together, the joint working relationship gradually deepens and develops into cooperation. Consequently, these companies seem to cooperate with universities as partners i.e. being close instead of at arm’s length distance. Some kind of trust between those involved will also probably start growing (Wood et al, 2002). In this process, the company finds a partner to help with development and design, and the university finds a partner to present academic material from. It becomes a win-win situation. Everybody gets something because it benefits everybody.

There is also something for the customer in this partnership. A product that is developed and designed in conjunction with a university will probably be regarded as very trustworthy because research is involved. Research in this sense means more than just testing. There is almost an inbuilt guarantee, for instance, in the belief concerning the designing of big loads and stresses. The contacts established with a Canadian and Danish company, which the MD of Company 4 spoke of, could be examples of the trust created by partner companies through a good, well-designed, economical product. The Danish company have made an agreement with Company 4 and have started production following their design. The Canadian company have started discussions. The value of the partner, a university in this case, is difficult to estimate but the MD probably does not want to be without it. This is of importance when increasing the technological base of the company (Sherwood and Covin, 2008).

The innovative companies seem to focus on development. They have continuous

improvements. They also focus on productivity. They are competitive, which can be seen by their growth but they do not enter into the usual price tendering in the sector. Value to the customer and economy for the customer seem to be their answers. This is interesting, because there are costs connected to development; costs that will affect the price. However, development, on the other hand, usually influences the perceived value positively, because there are more points of values in the product.

This brings us back to the title as to:

whether the “pyramid” of innovation, information, cooperation, value and trust could be a way to move away from the hitherto almost exclusive price focus in the building sector, to an approach that focuses on the benefit of value to the customer through development of products. See Figure 1.

Trust, in this sense, means partner trust. This has been the focus of various researchers (Sherwood and Covin, 2008, Madhok, 1995) because it should make the partners’ technological knowledge easier to reach when it comes to knowledge acquisition. Trust is seen as being important to open up possibilities for

reaching distant co-operative processes. When people trust each other, they might, unprompted, start constructive interaction (Kadefors, 2004).

It would appear that the companies have found a pathway that has put them in a forefront position in their market niche because their sales have increased. The managing director of company 4 expressed the importance of bearing the benefit of customer in mind when developing products. The customers seem to appreciate their developed products because the sales increased. Four out of five of these companies seem to have created, or are about to create, an almost unique product and/or service that is offered to the customers. Subsequently, their products and/or services will probably not be as price sensitive as those offered by other companies. Company 5 endeavours to position itself both by developing and by branding its products. These companies, as a result, seem to have found a way to get around the focus on price at the same time as developing what they have to offer.

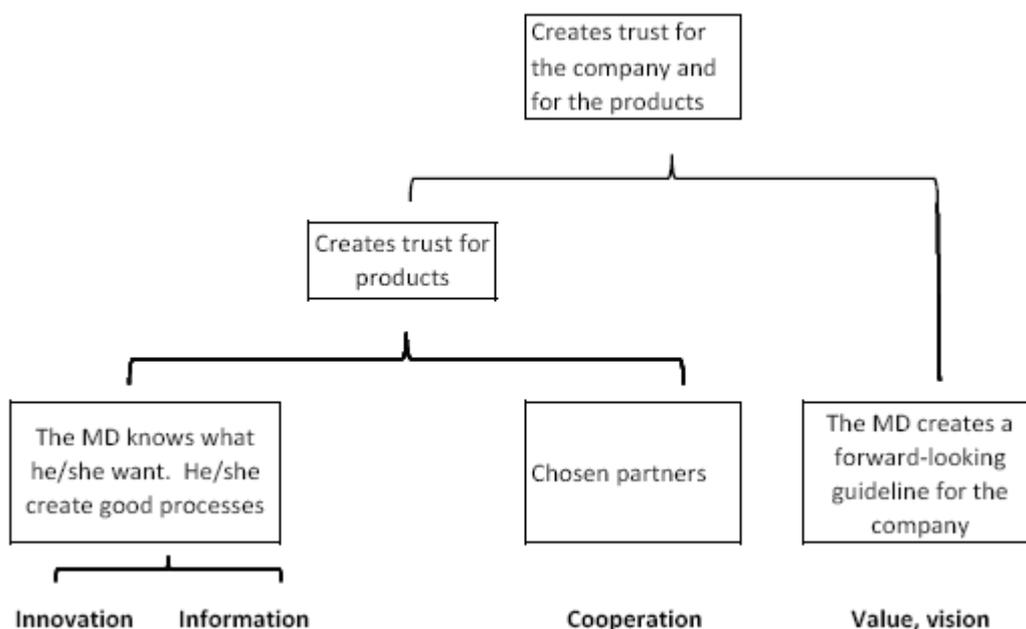


Figure 1 The pyramid of innovation, information, cooperation, value and trust.

REFERENCES

- Barrett, P., Sexton, M. G., (2003). A literature synthesis of innovation in small firms: insights, ambiguities and questions. *Construction Management and Economics*, 21, pp 613 – 622
- Chen, C. C. and Jones K. T., (2007) Management Tools. Who uses them and how effective are they?. *The CPA Journal*. August 2007. 77. 8
- Drucker, P., (2002). The Discipline of Innovation. August 2002, pp 95 – 103. *Harvard Business Review*. Harvard. USA
- Drew, Stephen A. W., (1997). From Knowledge to action: the impact of benchmarking on organizational performance. *Long Range Planning*, Vol. 30, No 3, pp 427 – 441.
- Dubois, A. and Gadde, L.-E. (2000) Supply strategy and network effects – purchasing behaviour in construction industry. *European Journal of Purchasing and Supply Management*, 6, 207–215.
- Dubois, A. and Gadde, L.-E. (2002) The construction industry as a loosely coupled system: implications for productivity and innovation. *Construction Management and Economics*, 20, pp 621–623.
- Egan, J. (1998) *Rethinking Construction*. Department of the Environment. Transport and the Regions. London. England
- Gann, D. M, (2000) *Building Innovation: Complex Constructs in a Changing World*, Thomas. Telford Books, Bodmin, Cornwall
- Kadefors., A., (2004) Trust in project relationships – inside the black box. *International Journal of Project Management*. Vol 22, pp 175 - 182
- Larsson, B., and Sundqvist, J., and Emmitt, S., (2006). Component manufacturers perceptions of managing innovation, *Building Research and Innovation*, 34 (6), pp 552 - 564
- Madhok., A., (1995) Revisiting multinational firms' tolerance for joint venture: a trust-based approach. *Journal of international Business Studies*. Vol 26 (1). pp 117 – 137.
- Ministry of Economic Development (2002) *Firm Foundations – A Study of New Zealand Business Practices and Performance*, Ministry of Economic Development, Wellington.
- SOU 2002:115 (2002) *The Swedish Building Commission, Skärpning gubbar! – Om konkurrensen, kvaliteten, kostnaderna och kompetensen i byggsektorn (Pull up your socks chaps! About competition, quality, costs and competence in the building sector)*. Stockholm
- Sundqvist, J. (2002). *Insikter för framgång*. ESI, Örebro University, Örebro.
- Sundqvist, J., Ahlström Söderling, R., Lindhult, E., Wijkman, P., (2003). From Resources to Practices – A study of the use of best practices in manufacturing companies in Sweden based on a survey from New Zealand., *Proceedings the 17th Nordic Conference on Business Studies in Reykjavik*, August 14-16.
- Sundqvist, J., Larsson, B., Sanner, L., (2004). Do Building Material Suppliers use Information Technology less often or less efficiently than other lines of business? *Proceedings 1st International Conference on Construction Project Management*, Toronto.
- Sundqvist, J. (2004). Low innovation among building material suppliers: the natural level of the trade? *The Australian Journal of Construction Economics and Building*, vol 4, no 1.
- Sundqvist, J., Larsson, B., and Lindahl, G., (2007) Cooperation in the Building Sector between Building Material Manufacturers and Contractors to Develop Products. *The Australian Journal of Construction Economics and Building*, vol 7, no 2.
- Tombesi, P. (2006) Good thinking and poor value: on the socialization of knowledge in construction. *Building Research & Information*, 34(3), 272–286.
- Zaheer., A., and McEvily., B., and Perrone., V., (1998) Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*. Vol 9 (2). pp 141 - 159