Bus and supply chain

 Business Analysis About InnoBus InnoBus is a bus building company located in Canada.

The company has customers in the United States and Canada and produces and sells a variety of buses designated for public transport within cities. Due to the bad financial situation ago the company was bought by the Dutch entrepreneur Jan e Koning 2 years. Jan de Koning introduced several new techniques and designs to the production and management process of the company. Since then the company recovered from the bad financial situation but is still not yet completely stable in regard to finance. Mission and strategy Mission The mission of InnoBus to provide the market (U. S.

A, Canada, Mexico, Europe, Rest of the world) with a world-class bus. Values •Corporate social responsibility •Unequivocal excellence in all aspects of the company •Creative innovation •Honesty & integrity StrategyThe market can be divided in the following segments: •Duty and lifetime, •Type of service (public transport, school bus, company bus, airport bus), •Transit market

(city bus, suburban bus, inner-city bus), •Heights (low-floor bus, high-floor bus), •Length (30ft, 40ft, 60ft), •Propulsion system (diesel, gas or electricity) InnoBus focuses on public transport within the cities. Within this segment of the market there is a tough competition. To cope with the competitors and gain market share, InnoBus has to differentiate itself from its competitors. Within their market they focus on the low-floor and electric trolley bus, but because they are a small company they cannot afford to specialize too much. Price is the biggest order winning factor but also warranty, parts availability, quality of manuals, service.

This all is part of the after sales service where InnoBus tries to emphasis on. InnoBus differentiates itself from their competitors by introducing the low-floor bus, and by introducing the integral concept and the multiplex system. By using the integral system they have more influence on the design of the bus. Therefore they are able to adapt the design more to the customers' specifications.

And by using the multi-plex system they save a lot on wiring in the bus which leads to and decrease in costs and eventually to an increase in profit. Another innovation was the gluing of the shells. Structure InnoBus has a combination of a functional and a divisional structure. This structure is in essence a good and reliable one, but there are some issues that we like to address.

Namely the communication, although there is a good communication between all levels of management there is a lack of taking directive actions e. g. he employees complain about unclear instructions, dirty workplace, un-

safe work. The competitive situation of InnoBus in the trade environment SWOT Analysis Strengths •Advanced (Dutch) technology When the company was taken over by Jan de Koning, InnoBus was nearly bankrupt. Thanks to the advanced technology from the Netherlands and the innovation -which is stimulated by the good technology- InnoBus was able to survive.

•Innovation Jan de Koning exported technology from the Netherlands to Canada and introduced new concepts like the integral concept, the multiplex system, the low-floor buses and the trolleybuses. This integral bus design implies that you can build a bus as a whole with a frame of pipes, so you do not need truck chasses anymore. An advantage which was combined with the integral bus design is the standardization of production. Standardization of production makes it easier to coordinate the production processes. The multiplex system increased savings with respect to the wiring systems in buses and the electronic trolleybus has environmental advantages in comparison with the standard buses. Innovation is very important for InnoBus; it can be seen as one of the main pillars where their strategy is based on.

Specialty: electronic trolley bus The focus of InnoBus is on public transport within cities, that they try to distinguish themselves from the competition with the development of the electronic trolleybus creates a competitive advantage. As stated above, the trolleybus has environmental advantages and Innobus can not have problems with new acts in America concerning the limitation of engine emission because there simply is no engine emission. Moreover, it is very likely that if the American government wants to stimulate environmental friendly products, Innobus will benefit from

subsidies in the future. Consistent and long-term relationship with their suppliers for the critical components Innobus built long-term relationships with their suppliers. They are assured of consistent quality for the critical components.

A long-term relationship also increases their bargaining power and Innobus can benefit from economies of scale. Furthermore they do not see a need in searching for another supplier which indicates that there are no problems with regard to the delivery and quality of the products. Weaknesses •Weak/bad financial position. Innobus' bad financial position raises a lot of concerns.

Their expected loss for this year is $15 million. Now they are having discussions with the bank to look for a proper solution. In these discussions Innobus is supported by a business consulting organization. This financial problem is mainly caused by the postponed Los Angles contract which has a value of $25 million and is responsible for 50% of the sales. In addition to that comes the negative capital in the consolidated balance sheet for this year which was positive in former years.

InnoBus is now trying to cover the deficit with increasing the accounts payable and accounts receivable while they are bargaining with the bank to get extra bank loan. However the Los Angles contract has a negative side aspect, until next year this will cause an increase in inventory. The biggest negative consequence of the bad financial position is that InnoBus is not able to do any investments which certainly would improve their financial position and increase profit. •Human resource management The last couple of weeks

InnoBus is facing employee absenteeism and the employees were not delighted when a plant had to shut down for three months. Bob Mac Carthy, the plant manager receives a lot of complaints by the employees. They say that the work which they have to carry out is dirty and unsafe.

Furthermore, they complain about unclear instructions. •Conservatism Bill Seaborne, the manager planning and purchases says that they build long-term relationships with their suppliers and do not need to look for other suppliers. However, InnoBus is approached by vendors for the supply of the less critical components. We think that if Innobus would have a better look at their offerings concerning the supply of the less critical components, they maybe able to save money. Opportunities •Expand internationally If Innobus finds a new market their sales will increase and improve their financial position.

•Creating more equityAn opportunity for creating more equity is by attracting another company to do business with them. Innobus can also issue more shares and apply for an extra bank loan (which they already do). •Improve SCM Improving their supply chain management is of great relevance, the bottle-necks in the supply chain should be solved because InnoBus can lose customers by not delivering on time. Furthermore, Jan de Koning wants to produce 15 buses per week with the same workforce this is possible by relocation and restructuring of the production processes, but this costs money and unfortunately they don not have the money yet. Improve HRM InnoBus can make sure that they take care of their employees and reduce their complaints. If the employees feel more comfortable with their job, they will be more motivated and satisfied with their job.

In the end this will also increase their productivity. •Focus on R&D activities. Advanced technology and innovation is important for InnoBus, they could focus and specialize in R&D activities and become the best innovative bus build company. •Ensure contracts with customers. As a result of the postponed Los Angles contract, InnoBus is now dealing with a deficit.

For the contracts made in the future they should ensure that these contracts can not be changed, so that they are not coping with an unexpected bad financial situation. •Search for suppliers for the non-critical components. As said before, by doing this they could save more money. •Search for alternative fuels. Making their buses (and possibly their production processes as well) more environmental friendly leads to a competitive advantage.

Innobus is already using alternative fuels, but they should continue developing in this area so that in the end a great part of the products becomes environmental friendly. Threats •Tough competitionInnoBus faces tough competition, their biggest competitors are NAB, North American and Black top industries. •Lack of demand There was a considerable growth of sales until the year before. The causes for the decrease in demand for buses is that their customers received less federal transit funding.

•New act for engine emission. The new act for engine emission limits the emission, so if a large part of the buses produced by InnoBus are running on fuels which damage the environment, the demand for these buses will decrease. •Postponed contracts with customers. There is always a risk that the contracts with customers are postponed or cancelled.

InnoBus has to try to limit the risk. They can take insurance in case this will happen. 5-Forces Model by Porter After the S. W. O.

T analysis we want to take a look at the external environment, we divided it up into 2 categories: Bargaining power Customer: there are 2 types of bidding systems for ordering namely 1: Invitations for a bid (Transit authority invites bus builders and gives them a chance to offer a bid, lowest bid wins) 2: Request for proposal (the transit authority asks the bus builders to come up with a bus and a price) in this last one there is more room for negotiationSupplier: there is no room for negotiation with the suppliers of the special parts because they have to be custom made. But for the standard parts InnoBus is approached by vendors which means that they have the choice which ultimately gives them some bargaining power. Threats New entrants: the threat of new entry is very low. That is because the entry level is very high.

To enter this market and setting up a bus building plant requires huge capital investments. Therefore it is most unlikely that there will be lots of new entries. Competitive rivalry: like stated before there is a lot of competition within the public transport market. With a total production capacity of 6250 busses per year and a total of 7 competitors InnoBus possesses 8% of the market share (like shown in the pie chart). Source: PDF “ Capacities Competitors”.

Substitute products: there always will be substitutes for the bus, train, taxi, subway, bicycles. When people start to use these alternatives more, there will be a lower demand for busses thus also a lower demand for InnoBus. And

when there is less funding from the federal transit authority there also will be a lower demand for InnoBus. The Unique Selling Proposition of InnoBusThe unique selling proposition, also known as the unique selling point, is the unique product benefit that a firm aggressively promotes in a consistent manner to its target market. Best quality, best services, lowest price and most advanced technology are examples of functional superiority, which is usually reflecting the unique product benefits. The unique selling point of the company InnoBus is related to the functional superiority of one of their buses.

As one of very few bus- building companies, InnoBus has an electric trolley bus in their assortment. The electronic trolley bus is an interesting specialty. InnoBus sells the bus in two lengths- in 40 and 60 foot length. The functional superiority of the bus is related to the environmental advantage it offers. Like other companies in a variety of industries, the company InnoBus addresses recent developments in the field of alternative fuels with their production of the electronic trolley bus.

Through the use of technology in the form of an integral concept, which the company obtained when a company from the Netherlands bought it, it gained influence on the design of the buses in addition to their previous dependability on the truck industry regarding the design. Apart from the technology aspect, the Dutch company also gave InnoBus the opportunity to have a look at engineering processes from a different perspective- the perspective of the Dutch company, which was three years ahead of InnoBus at the time the company was bought. In this context, engineers were sent to the Netherlands to work on the redesign of standard 40 foot buses and the

implementation of the integral concept. Through the just mentioned aspects, the company was able to improve its processes and gain advantage.

Due to the company` s interest on change and innovation, it was able to see the opportunities of the electronic trolley bus and apart from that also the low floor bus which offers functional superiority in terms of good quality, influence on design and improved features and service, and able to find ways to implement their ideas. Apart from the integral system which lead to improved processes, the company also found other ways to do so, for example with a so called “ multiplex system”, which brought savings in the wiring system of the buses and the gluing of the shells, developed in the Netherlands and applied to the business. Competitors of InnoBus The unique selling proposition, also known as the unique selling point, is the unique product benefit that a firm aggressively promotes in a consistent manner to its target market. Best quality, best services, lowest price and most advanced technology are examples of functional superiority, which is usually reflecting the unique product benefits. The unique selling point of the company InnoBus is related to the functional superiority of one of their buses. As one of very few bus- building companies, InnoBus has an electric trolley bus in their assortment.

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The Stakeholders of InnoBus Stakeholders are persons, groups and institutions which are directly affected by an organization’s performance. They belong to the specific environment of the company and are constituencies that have a stake in the organization’s performance, are influenced by how it operates and can influence it in return. Stakeholders could be: private owners, employees, suppliers, shareholders, government,

senior management staff non-managerial staff, trade unions, customers, creditors and local community. Their interests might be the profit, performance, direction, targets of the company, the taxation, legislation or VAT, rates of pay and job satisfaction, job security, working conditions, minimum wage, value, quality and customer care, credit score, new contracts and liquidity, jobs, involvement, environmental issues and shares. The stakeholders of InnoBus are in the first place the transit authorities and the customers because they rely on the production and service of InnoBus as they need the buses for public transport. The transit authorities always need to renew their fleet (buses have a life time of 12-15 years) and in the utlook this will happen in the coming year.

They pose the demand for the buses and the bus builders have to create a bit. A special system of selecting the best bit (either by lowest price or by points given to the features of the bus) is used. The employees are as well stakeholders of InnoBus. They have work at the company and heavily depend on customer orders. They will be the first ones who are affected by a possible bankruptcy because they would lose their jobs.

The workers are represented by the Canadian Auto Workers Union with which InnoBus has an agreement and which expires in the coming year. The government plays another important role. They implement the legal rules such as quality standards, security and safety regulations, norms etc. which InnoBus has to follow.

The bank is another stakeholder of the factory since they provide the money for further developments and in the current situation they are having

negotiations with the company's consultant about a new bank loan. InnoBus has had suppliers for a great number of years now and does not need to look for new ones. The vendors of the company offer their services to the company in a reliable and regularly way. The Legal Aspects InnoBus is operating in the bus industry which has to deal with local government authorities.

The company is subject to certain legal rules like tendering, quality rules, safety norms (which are not set by the company but by the United States and the federal transit authorities. The biggest bus market is in the United States where InnoBus is selling to as well. In the American market InnoBus has to face the " Buy American Law" which means that 60% of the added value of anything bought with public funds has to be produced in the States. The International Trade EnvironmentThe international trade environment InnoBus is proceeding in is mainly influenced by the NAFTA because InnoBus is located in Canada and Canada is a member of the NAFTA.

The NAFTA is the North American Free Trade Agreement linking Canada, the United States and Mexico in an economic alliance. With the creation of this agreement the flow of people, workers, goods and services became much easier and the European Union got some kind of competitor. As a consequence InnoBus has to follow the rules and regulations of the NAFTA which often can cause problems. Canada has experienced as well s Mexico and the United States the elimination of import tariffs and most national trade barriers, the protection of intellectual property rights, dispute settlement procedures and side agreements on environmental protection & labour laws. Canada maintained its preferences in the US market and hoped

for future access to South American markets. The competitive advantage of InnoBus Innovation and advanced technology The main pillars of InnoBus' competitive advantage are innovation and technology.

Innovative aspects include the electronic trolleybus, the multiplex system, the integral bus design, low-floor buses and gluing of the shelves. We will elaborate on these innovative aspects. The integral bus design implies that you can build a bus as a whole with a frame of pipes, so you do not need truck chasses anymore. An advantage which was combined with the integral bus design is the standardization of production. Standardization of production makes it easier to coordinate the production processes.

Furthermore, the multiplex system increased savings with respect to the wiring systems in buses. Innobus shows with their electronic trolleybuses that they are already thinking about the future and they successfully adapted to the changing trends in society. Taking care of the environment is becoming a more important subject because natural resources and the environment can not be used infinitely. The electronic trolleybus provides no air and no noise pollution and because of this the electronic trolleybus is an environmental friendly solution to city bus transfer! The low floor bus is considered as Jan de Koning's baby and is completely different from the Canadian bus designs. The low floor bus is also called the TUF (transit user friendly) bus. Jan de Koning designed this bus with the customer in mind.

The low entrance and the exit with no steps (which is very unusual in the conventional buses!) makes it easy for the elderly, the young and the physically challenged to enter and exit the bus. The wide opening doors and

the low floor height helps the passengers get on and off the bus quickly. Another advantage is that the design requires less maintenance than a wheelchair lift and is more efficient. CRM CRM implies building long-term relationships with their customers and add value to these relationships.

This can be done by maintaining a high level of customer service. Companies can also use IT connections to improve CRM. The bus designs are made with the customer in mind, especially for the low floor bus. Besides price, Innobus tries to deliver a good after-sale service which they consider as more important than the technical part and quality control.

They also make sure that their employees are well trained for the production process which is essential for the quality of the buses. Marketing They focus on a special segment of the market, namely public transport within cities. Because they are a small company they can not specialize too much. Within this segment they try to develop buses in which the customer forms the most important aspect. The logistic process at InnoBus The Process Planning and purchasing: when the order is accepted by the customer the order goes to the order back log list. Every week they make a production schedule for every station based on a production rate of 8 to 10 busses a week.

MRP (materials requirement planning) is a program which is used to calculate the material requirements on a weekly basis. Master production schedule: before the line entry all the engineering work must be completed, along with the delivery and manufacturing of the assemblies and components (this takes about 6 months). The line entry schedule depends on the availability of the purchased and the pre-manufactured parts.

Assemblers use so called routings (in these routings they mention the start dates which are derived from the line entry schedules and from the standard lead times). 60% of the costs of the bus are the purchased parts, most of these are specified by the customer (they have to be individually designed and manufactured).

The bill of materials accounts for around 4500 part numbers around 3000 of these numbers are customer specific (custom made). 0% of the coaches' interiors come from vendors and this all is stored in the warehouse. The electric equipments are made in the bench electric department, from there the finished products are delivered to the warehouse. The electric cables are stamped with codes. At the InnoBus workshop they work with a 2 Bin system, when the first bin is empty they use the 2nd one and the 1st one gets a refill order. Now we are going to give you an brief inside in what the different stations do.

The process: 1. machine shop: here you will have such a equipment such as the break press, the punch press, cheers, saws, tube binder 2. ench assembly: here they assemble the entrance and exit doors, interior equipment, the panel boxes, the drivers barriers, etc. 3. bench electric session: wiring/warming of the harnesses, they have just started the PLC for the multi-plex system 4.

welding shop: frames are welded together 5. dip tank: sub-assemblies are dipped in the tank to prevent corrosion, finally all parts are welded together to create the coach box 6. assembly line: all things put together that it looks

like a bus, 32 different stations on the ass. line, at each station different components are put into the bus (windows, chairs, etc.) 7.

nspection area: final inspection, there are individual customers inspectors and the inspectors from InnoBus jointly do a final inspection of the bus 8. distribution: buses are towed to their facility in Buffalo: install engines, axles and wheels as a part of the “ Buy American Law” Time-to-market The term Time-to-Market describes a very important aspect of the management of global logistics. Time-to-market is related to product obsolescence and inventory-holding costs. The extended lead time inherent in international logistics means that products run the risk of becoming obsolete during their transit time. The main area of industry where this occurs is the technological branch where products are rapidly developed, innovated and changed such as in the computer, electronics or fashion branch.

Lead time is one of the big cost drivers within logistics in regard to the inventory of a company. As well as the transit of the products costs a lot of time the international travelling of the goods can do so because of delays. These occur at the consolidation within the process like in the warehouses where the goods are stored until they can be assembled to transport with for example a container. Another delay can occur when the products cross the border to another country when they have to pass customs and excise procedures.

Innobus faces problems with the on-time delivery of their products, so there is a bottleneck in their supply chain. Sometimes orders are placed before the engineering work has been completed. The production line then has been

scheduled earlier because the management decides to deliver the buses much earlier. However this is not efficient and effective. In the end the buses are not delivered on time because instructions and specifications are missing.

The chance that the customer will return the bus is high, because it did not meet the customer's requirements. Innobus has to adjust the bus again which in the end takes more time than waiting for the finished engineering work which clearly points out the customer's requirements. As mentioned in the following paragraph the " Planning and Master Production Schedule" it takes 6 months until an order can be turned into a production process and the production rate of the company is 8 to 10 buses a week. Jan de Koning intends to Planning and Master Production ScheduleInnoBus gets their orders by the use of two bidding systems through which the transit authorities pose their order to the bus builders: With the invitation for a bid the transit authorities invite the bus builders to put in a bit. They give very specific technical and contractual specifications. The bus builders put together a bid and the lowest bid wins the order.

The second bidding system is the Request for proposal. The transit authorities literally ask the bus builders to come up with a bus or to design a bus, and to put in a proposal for it. This system gives much more room for negotiation on features like price, technical features, service and liabilities etc. The transit authority awards points to each of those aspects and the bus builder with the highest number of points wins the order. From the moment the bid is accepted by the customer the order goes to the order backlog list. Every week they make an outlook for the whole year for each station and the

line entry schedule based upon a production rate of between 8 and 10 buses a week.

Before the line entry all engineering work has to be completed along with the delivery and manufacturing of all the assemblies and components. Altogether this takes about 6 months. The earliest the line entry can start is 6 months after the bid has been accepted, because the line entry schedule depends upon the availability of the purchased and manufactured parts. For the manufactured parts and assemblies they use so-called routings in which they mention the start dates, which are derived from the line entry schedules and from standard lead times. A MRP program is used to calculate the material requirements on a weekly basis.

Since Jan de Koning took over the company their Master Production Schedule has become much easier because the scheduling of the buses has changed. In the past they relied on the truck builders who provided them with the chasses on which the buses were built on but this caused several times problems and as a result there was confusion and delay in the production process. The position of InnoBus in the supply chain A supply chain is formed of a group of partners, who collectively convert a basic commodity into a finished product, which is of value for the end-customer. Apart from converting a basic commodity into a finished product, the individual partners also manage returns. At each stage of the conversion process, returns are possible, for example in the form of rejected materials or waste, which needs to be recycled.

The supply chain is a network, which can best be seen as a system of interdependent processes, which extend across organizational boundaries and where actions in one part of the network affect the actions of the other parts. The supply network can be structured around four main factors, the flow of information, materials and funds, and the time dimension, the time it takes to respond to the demand from the source if supply. The supply chain ranges from basic commodities to selling the final product to the end-customer to the process of recycling the product. All stages of the supply chain are involved, directly or indirectly, in fulfilling a customer request. Each company, which is operating in a supply chain, is a partner, who has a collective and individual role in the conversion process of a basic commodity into a finished product.

Each of those partners is directly responsible for an individual process, which adds value to the product by transforming inputs in the form of materials or information into outputs in the form of goods. Through logistics a coordination of the material and information flow across the supply chain is gained. Links between a focal firm and its tier 1 suppliers fall into the field of inbound logistics and the links between a focal firm and its tier 1 customers fall into the field of outbound logistics. The supply chain is tiered in that the supply and the demand side, the buy and sell side, can be organised into groups of organisations with which we can deal. The focal firm can be seen in the centre of the network of upstream and downstream organisations, where cross-links are possible between the different partners.

The operational processes of the focal firm, which happen inside of the organisation, must coordinate with other organisations that are part of the

same supply chain. In the downstream part of a supply chain, downstream partners of the focal firm, the end- customers or wholesalers and retailers, who connect the firm with the customers, can be found. This side of the supply chain is the sell side. In the upstream part of the chain, the suppliers of raw materials, components, parts, information, finance and expertise, can be found. This side is the buy side.

The company InnoBus operates as a focal firm in the supply chain and represents the centre of a network of upstream and downstream organizations. It adds value to the product by transforming inputs in the form of raw materials and information into outputs in the form of the finished buses. Apart from converting basic commodities into finished products, the company also manages returns in the form of waste that needs to be recycled at different stages of the conversion process. The downstream partners of the company InnoBus are transit authorities, the first tier customers of the company. An example of a first tier customer of InnoBus is for the City of Los Angeles.

The company mainly serves customers in the United Stated and in Canada, but is trying to enlarge their scope in other countries. The second tier customers in the supply chain are the people using public transportation. The customers of InnoBus represent the sell side of the supply chain. The suppliers of raw materials, components, parts, information, finance and expertise represent the upstream partners of InnoBus and apart from this the buy side. A supplier of finance for InnoBus is the bank Innobus operates with.

The consultancy firm, with which InnoBus works together, supplies Innobus with information and expertise. The suppliers of raw materials are very important for InnoBus. Around 60% of the total costs of building the bus incur due to the purchased parts. Most of these parts are specified by the customers and have to be individually designed and manufactured.

Due to this it is very important for the company InnoBus to communicate their requirements to their suppliers. The bill of materials of the parts InnoBus needs for the manufacturing of their buses, accounts for around 4500 part numbers, of which around 3000 are customer specific. Most of the components especially the more expensive items like axes, engines and transmission systems are specified by customers, and so are the suppliers. Generally, InnoBus works with suppliers, which the company used for a great number of years.

Due to that, it is not necessary for InnoBus to go and look for new suppliers. For less critical components the company is approached by vendors who offer their services to the company. In regards to some materials, the suppliers not only deliver the raw materials, but they also cut them into right sizes, like for example the structural tubes, or they deliver subassemblies, which cannot be done by the company due to the amount of time this would take. The materials and components, which the company gets from its suppliers, are stored in a warehouse.

When viewing a supply chain in the form of the cycle view, a different picture of the supply chain is possible. There are several cycles, which build the supply chain. Each of those cycles occurs at the interface between two

successive stages. The cycle view of a supply chain clearly defines the processes involved and the owner of each process.

Furthermore it specifies the responsibilities and roles of each partner inside the supply chain and the desired outcome of each process. In general, the customer order cycle, between the customer and a retailer, the replenishment cycle, between the retailer and the distributor, the manufacturing cycle, between the distributor and the manufacturer, and the procurement cycle, between the manufacturer and the supplier can be found, analysing the cycle view of a supply chain. Applied to the company InnoBus, the following cycle view is appropriate. The company InnoBus is responsible for the manufacturing process and converts basic commodities into basic products. To be able to do this, the suppliers deliver raw materials, finance, information, parts, components and expertise to the manufacturing company. The customer orders the product he/she would like to have from the company and gives details on his needs and wants regarding the product.

Current problems and risks of InnoBus Global DescriptionRight at the beginning when de Koning bought InnoBus, the company had financial problems and was nearly bankrupt. At the beginning of this year they had to close a production plant which resulted from a lack of orders and had as a consequence the postponing of a big order. It was also difficult for the company to turn European designs into the North American designs. Since the introduction of the Dutch technology the company was doing better but according to Mr.

Gillis, the CEO of the company, they expect losses for the end of the year. The closure of the plant at the beginning of the year also had the decrease of motivation and moral of the workers as a result which became worse with up coming complaints about unclear instructions, unsafe and dirty workplace and increasing absenteeism. There is a very high risk of strikes that will be carried out by the workforce if the managers of InnoBus do not erase problems with material and parts availability which in turn cause mass confusion in the production process. Financial Position and Possible BankruptcyAs already mentioned above the company has to face bad times and this situation was even worsened at the beginning of the year with closure of one production plant. This has such a heavy impact on the company that the president and CEO of InnoBus Mr. Gillis expects a loss for the year.

His plans are to negotiate with the bank through their consultancy firm who are preparing an overview of the security situation of the company and he hopes that they will get some extra time to overcome their problems. Ms. Sara Jackson the vice president of finance points out that the financial problem is rather serious and she estimates the loss to be 15 million Canadian Dollars at the end of the year. She set up a draft of the consolidated balance sheet and the result is that the company will have a negative company capital at the end of the year which is in contrast to the last 5 years in which they had a positive one. They only had a slight increase in the bank indebtedness because they increased the accounts payable by factor of 5. This is only a temporary solution which has to be solved soon and therefore they need a new bank loan.

In addition to that the inventories have been increased due to the Los Angeles contract so the accounts receivable and the pre-paid expenses will be a little bit more this year. Drop in Market Demand The current bus market demand has dropped enormously by 55% due to the bad “ political climate” which influences the funding of the transit authorities which are the main customers of InnoBus. The new act in the US Engineering Mission has also its high impact on the market demand for buses. The effect of this is that customers have to wait until they can put orders. Mr. Gillis has doubts about the new emission norms which require the follow of new alternative fuels like CNG, LNG and electricity.

The CEO of the company is quite optimistic in regard to the market development because say have always seen that a dip in the market is only temporary and will recover again most of the times with a surplus in demand. The growth of the market is heavily dependent on federal funding but the positive message is that the President just has supported mass transportation. The FTA provides 80% of the costs and local matching funds will be required for the remaining 20%. Conservatism with possible Customers The bus market in Canada and the United States is quite conservative. When you take a look around you will see 10 to 15-year old buses which have not changed in design and technology.

In contrast to that the European market is much more innovative. So it is really hard to gain customers here but de Koning succeeded with the Low-Floor bus which is sold to Kitchener and St. Alberts which both are Canadian cities. Fierce Competition The 40? bus of InnoBus was redesigned with the introduction of the integral design of de Koning and it was quite a success.

But the competition in the 40’ bus branch is quite strong since the sales margins are very low.

The market for the Electric Trolley bus is very small and there are less bus builders who offer these. The growth margin for the products where there is most competition is smaller than for the products where there is less competition and these have a higher gross margin. Logistics and Time-to-marketDue to the plant shut down at the beginning of the year, there is a lack of supply and production. The customers have to wait to put in their order. InnoBus had a big contract with a company in Los Angeles but they postponed their order to the next year and a contract partner in Chicago decided to retender their contract at a break-even base on a production base of 12 units a week. At the moment it is impossible for InnoBus to fulfil this contract because their current production capacity of 8 to 10 buses a week.

In general it is currently a problem for InnoBus to redesign their production to achieve the full production capacity of 15 buses a week or to avoid the peeling off of the paint from the bus at the end of the production line. InnoBus also faces heavy on-time-delivery which results in customer dissatisfaction. Sources Literature Management, Schermerhorn, 8th Edition, John Wiley & Sons. Inc. , 2006 Logistics Management and Strategy, Harrison & van Hoek, 3rd Edition, Prentice Hall, 2008 Software InnoBus Case Study