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**Practical Application of Corporate Finance and Strategic
Management in Global Management Challenge**

Bachelor's thesis

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I declare I have written the bachelor's thesis independently.

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ABSTRACT

The Global Management Challenge (GMC) gives a unique opportunity for participants to run a global corporation in a very competitive environment where every company has the same level playing field. Participants assume the position of top executives that have to make 75 different management decisions in order to drive their respective companies into the brighter future. It is in this context that the author has been actively researching the best ways on how to succeed both in virtual environment of GMC and, which is better, in real life. The goal of this paper was to find the answers on how to increase the value of company and test the theory on practical field of GMC.

In the theoretical part of the paper the author gives an overview of the latest corporate finance thinking with regards to value creation and introduces the strategic management framework developed by the author. The introduced approach bases its roots on the theory of increasing value of companies through corporate finance thinking and then implementing and achieving performance edge through business frameworks approach.

As a result the developed strategy was successfully used in the Estonian GMC Final 2014. The national GMC championship had many different real life teams representing industries such as banking, software development, FMCG, logistics etc. Still by employing the knowledge presented in this paper the author's team won the first place by substantially outrunning competitors.

Keywords: Global Management Challenge, value creation, business frameworks, Tao of corporate finance, strategic decision-making model.

INTRODUCTION

“What's the use of running if you are not on the right road”

German proverb

Global Management Challenge (further “GMC”) is the largest strategic management competition that has involved more than 500 000 university students and company managers worldwide since 1980. Each year more than 30 000 participants from 30 countries compete for the title of the world winner.

In 2012 Estonian team was able to become 5th best team globally by employing a combination of corporate finance theory, strategic thinking through frameworks, and employing different modeling tools. In 2014 the same team has successfully won the national championship and is waiting to take part in the international finals. This thesis will give introduction into bottom line thinking on strategy employed by the author and the captain of the team during the competition but will not go into technical details of how the actual modeling was done.

The competition as such is a complex business management simulation of a joint-stock company in a virtual environment of European Union and NAFTA. In this environment a number of virtual companies, managed and represented by participating teams, compete in a common business environment. By managing their relevant companies each team strives to increase the investment performance¹. The team that achieves the highest value at the end of the last quarter wins the game.

Certain managerial activities and strategic management decision have proven to have positive impact on the overall value performance although there are different activities beyond the boundary of control by each company, for example, force-majeure. Having vast knowledge in different managerial disciplines such as marketing, management, corporate finance, micro- and macro-economics etc. proves to be essential in understanding the work of a company on its fundamental levels, but it is only through clear and structured use of all

¹ The investment performance reflects the value of the company to its investors. This includes market valuation of the company and also any dividends paid to investors and the value of any shares purchased minus shares issued from investors.

these disciplines in conjunction with corporate strategic vision that these disciplines start to work for the benefit of the whole company. Different scholars propose various frameworks in order to bring structure into business problem solving. It is within these vast amounts of frameworks that author strived to analyze and develop the one that ultimately allowed the Estonian team to become 5th in the World in the 2012 Global Management Challenge and win The Estonian National GMC Cup 2014 second time in a row.

The goal of the thesis is by utilizing theory of corporate finance in conjunction with strategic management to devise an approach that will maximize the value of the company on an example of GMC. Author strives to develop a very practical methodology of business problem solving that can be used in different management competitions, and, which is better, in the real life. In 2014 Estonian GMC had teams of real-life managers involved from banks (two teams from Danskebank), software development (Oracle and Proekspert), logistics (DSV), hotel management (Radisson Blu), FMCG (Coca-Cola Hellenic), human resource management (CV Keskus Ecolog) etc. It is in author's opinion and experience that the introduced approach to problem solving is an effective way of tackling the real business problems, from simple everyday problems of a small company to big challenges of a global company. The author himself has successfully utilized it in his career at Mckinsey&Co.

In the theoretical part of the paper the author gives an overview of the latest corporate finance thinking with regards to value creation and introduces the strategic management framework developed by the author. The introduced approach bases its roots on the theory of increasing value of companies through corporate finance thinking and then implementing and achieving performance edge through business frameworks approach. The thesis does not go into any particular mathematical calculations, e.g. how to calculate cost per unit through distribution of machine hours, nor does it aim to cover any topics in financial modeling. Although in order to succeed in GMC one needs to have very specific skills such as excel and financial modeling skills, ability to forecast and calculate cost per unit of goods, expected revenues etc., these topics shall be beyond the scope of this work. The author has developed a sophisticated model in order to be able to take the required 75 management decision with high accuracy, but nevertheless the author believes that utilizing clear high level vision on how to increase value of the company with the relevant strategic frameworks for implementation is by far more important than perfectly executed wrong strategy. Throughout the work and at the end of this thesis the author follows the practical applications of corporate finance theory and strategic management-decision process on the example of final round of 2014 Estonian GMC.

1 CORPORATE FINANCE AND VALUE CREATION IN GLOBAL MANAGEMENT CHALLENGE

1.1 GMC overview

The idea of Global Management Challenge is that it simulates the work of several business units in the same business environment and economic background. Business units manufacture and sell the same products in the same geographic areas. The business units produce up to three different products which are assumed to be desirable by the consumer public.

Teams in the beginning of the competition become top managers of one of the business units. This is close to simulating a case where a new CEO comes to a new business with his/her own management team with an aim to make the company best on the market. While in the real life it is very hard to simulate the level playing field, the Global Management Challenge manages to put every single team on the same footing and as such the business units are starting the competition with the same value and other variables. The new management team has to involve their best qualities in corporate finance, strategic management, decision making, teamwork and leadership in order to achieve competitive edge, manage a company, analyze its historical reports and design a strategy for the next virtual 1 year and 3 months (five quarters).

Documentation used in the competition consists of the Manual (which explains the organization and functions of the company), Company history (gives details of company's performance in the previous five quarters), Decision sheets (submits the management decisions to the simulator), Management report (consists of the outcomes in financial and operational terms). The author will not go into the details of competitions functionality due to the fact that the Manual (GMC 2013) clearly sets all the interrelations and explains the way how the business works in mathematical terms.

Overall, it is in team's best interest to organize the working flow of the company in the best possible way. The de facto standard for managing a business unit for the simulator has become a five member team functional division. The CEO of the company, who is at the same

time the team leader, manages and controls the functional streams of departments: Marketing, Production, Human resources, and Finance. This is illustrated in figure 1.

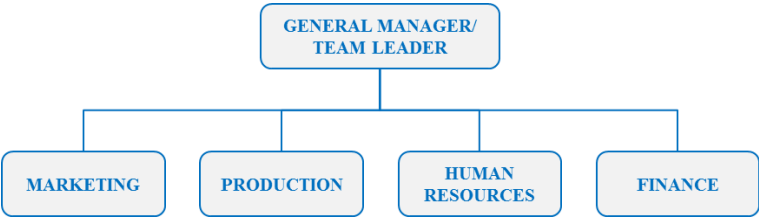


Figure 1. The generally accepted management structure in GMC

Source: (GMC 2013)

The functional expertise of each department is subject to their own separate academic books. In general within the scope of the simulation the Marketing deals with design, advertising, marketing and R&D; the Production has in its expertise manufacturing, quality control, transportation, raw materials and equipment; Human resources deal with recruitment, working conditions, and salaries; Finance deals with liquidity issues, loans, taxes and insurance. Organizational chart might be divided differently by different teams. What is true is that each of these functional areas still has to be covered.

While it is evident that every function has to maximize the value of the company (Damodaran 1997, 5), it is only with a very diligent strategic focus and comprehensive cooperation that a maximum effect can be achieved.

1.2 Historical analysis

As an initial step the author has employed a high-level strategy towards the competition. The framework for it is seen in figure 2:

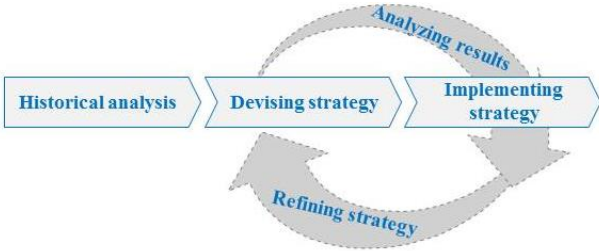


Figure 2. High level framework for GMC

Source: (Compiled by the author)

The first step in managing the company is to understand the historical numbers both of the company and the market itself. Further, upon the insights received, and with the help of corporate finance theory and strategic management frameworks the author devises long-term strategy that he and his team proceed to implement. The implementation phase for the competition consists in taking 75 management decisions and inputting them into the management decision sheet, an example of which can be found in Appendix 1.1. When the management reports are received back, the team proceeds to analyze the results and, if necessary, to refine the initial strategy.

For the illustration purposes the author shall use data from the 2014 GMC Finals in Estonia². And although not every single idea/concepts from the thesis has been used in the Estonian GMC finals due to limited nature of a single scenario played in one round of the competition, all of the concepts can be eventually used either in other simulations or, which is better, in real life.

Before the competition starts every team receives a list of data (management, operational and financial) of a virtual company for the past five quarters. This historical data can be found in Appendices 1 to 5. The author's team, named TTU (in Estonian: "Tallinna Tehnikaülikool") in honor of Tallinn University of Technology, is Company #1 in the relevant reports.

It should be noted that all the teams start from the same position and thus the historical reports for each of the company are similar. Although there are hundreds of parameters in the reports, the first question that the author tries to understand about the company is whether the market the company operates in is growing or declining.

It may be seen from the reports that the company always underperforms. In all five historical reports there are always backlog of orders left. This is the first hint on a growing market trend. Looking further it is seen that product number one and two have low levels of consumer star ratings. Both have them at a level of two stars compared to maximum of five stars. This indicates that the company's products are not the best on the market and have big potential in gaining market share by relevant improvements. Moreover, the company has

² At the point of writing of the thesis international finals were not yet held. As such these reports were the most recent materials.

already invested into R&D and received major product improvements that were not implemented. There is one major product improvement pending implementation for products one and three, and two major improvements for product number two. The marketing expenses on all the products at the level of 30,000 EUR indicate low level of expenses. While in historical reports eight companies are indicated to actively compete, in 2014 finals in Estonia only four companies competed in the actual final. In other words, in the first quarter of the competition the market shares of the four companies will be available for overall market growth. And although these market shares are not easy to acquire, they are less troublesome to capture than those of direct competitors. Another point to make is that none of the companies use premium materials in their products. Use of premium materials decreases faulty products in the plant and increases sales of products where these materials are used.

Thus high level historical analysis indicates that the market has a huge potential for growth. As a new executive of a big multinational company that has just assumed the new office, the author wants to know what is the best option in creating maximum value: start immediate aggressive growth or to wait and make internal changes within the company before taking on the growth. The answer should lie in the field of general theory of corporate finance.

1.3 Corporate finance at a glance

Corporate finance is about how businesses make decisions that affect their financials. The secret of making the “right” decisions is in increasing the value of business. As it may seem to be easy in words it proves a very difficult task to achieve in the real life. While many understand that “buying low and selling high” might be a formula for success, the way how to do it is unclear. (Brealey and Myers 2000, 11)

It is through the vast experience and time that most managers and executives have developed through intuition, observation and experience their own wisdom in how to best increase value of their respective companies. Regretfully, such wisdom did not prevent recent financial crises. (Ehrhardt and Brigham 2014, 274)

Most business decisions require both strategic and financial analysis to assess the projected value for shareholders. It is therefore essential for business managers be able to

utilize these core skills in a complementary manner in order to foster the increase of value for businesses under their management. (Hill and Gareth 2008)

When people invest their money they hope and desire a value of their return that compensates them for the risk taken as well as for the time-value of money. It is empirical for executives as such to understand what decision drive the value up and those that have no effect on it (Brealey and Myers 2000, 56). Regretfully, the examples of the past crisis have ruthlessly punished those executives who through financial engineering and excessive leverage tried to create value where none has actually been created at bottom-line (Koller, Goedhart and Wessels 2010, 14).

The guiding principles of value creation have been already set down by Alfred Marshal in 1890 (Marshal 2004). The companies are able to created value when they use the capital raised from investors in order to generate/increase the future cash flows at rates of return higher than its WACC (weighted average cost of capital). The better companies do this and higher returns they can produce the more value is created. Tim Koller, Marc Goedhart and David Wessels in their book “Valuation: Measuring and Managing the Value of Companies” (2010) have indicated four basic principles of value creation that drive businesses to increased wealth to their shareholders and economies.

1.4 Tao of corporate finance

In corporate finance the well-known cash flow formula (Copeland and Weston 1988) is used for valuation purposes:

$$Value = \frac{FCF_{t=1}}{WACC-g} \quad (1)$$

Modifying the basic formula T. Koller (Koller, Goedhart and Wessels 2010, 41) states the key drivers of value of company to growth and ROIC:

$$Value = \frac{NOPLAT_{t=1}(1-\frac{g}{ROIC})}{WACC-g} \quad (2)$$

$$ROIC = \frac{NOPLAT}{Invested\ Capital} \quad (3)$$

where

NOPLAT - Net operating profit less adjusted taxes

WACC - Weighted average cost of capital

ROIC - Return on invested capital

(g) - Growth

The formula for value (the key value driver formula) is referenced by authors as the *Tao of corporate finance* as it corresponds to the very basic principles of corporate finance: growth, ROIC, and the cost of capital (Koller and Huyett 2010, 239). Another way to look at this formula is through an economic profit analysis (Wessels 2011):

$$Value = Capital + Capital \left[\frac{(ROIC - WACC)}{WACC - g} \right] \quad (4)$$

Analyzing the formula it is clearly seen how Tao of corporate finance works. One might see that Economic Value Added (EVA) is also present in the formula:

$$Value = Capital + \frac{EVA}{WACC - g} \quad (5)$$

The four cornerstones/principles of corporate finance are based on the Tao of corporate finance. Applying these principles and understanding the underlying value creating fundamentals allows executives to find answers to most vexing corporate finance problems and combine them with strategic management frameworks in order to drive the best implementation (McKinsey & Co 2010, 2). It is through combination of these principles and strategic frameworks that the author was able to outperform by substantial margin competitors in Global Management Challenge Estonia's final.

1.5 The Four Cornerstones

The four disarmingly simple but often-ignored financial principles can be summarized by the following figure 3:

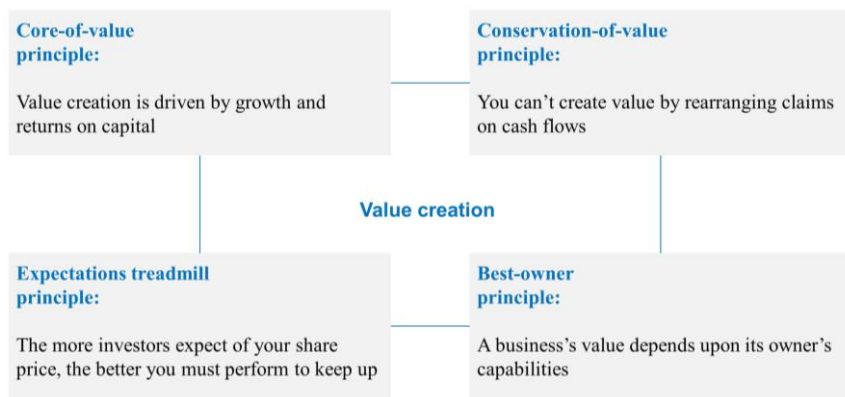


Figure 3. The four cornerstones of corporate finance

Source: (Mckinsey & Co 2010, 112)

1.5.1 Core-of-value principle

The core-of-value principle states that „companies create value by investing capital from investors to generate future cash flows at rates of return exceeding the cost of capital” (Koller and Huyett 2010, 4). Value and value creation is achieved by combination of growth and return on invested capital (ROIC). Moreover, for businesses with high ROIC growth creates the most value, and for business with low ROIC, improvements in ROIC provide the most value.

Visually the core-of-value principle looks as following:

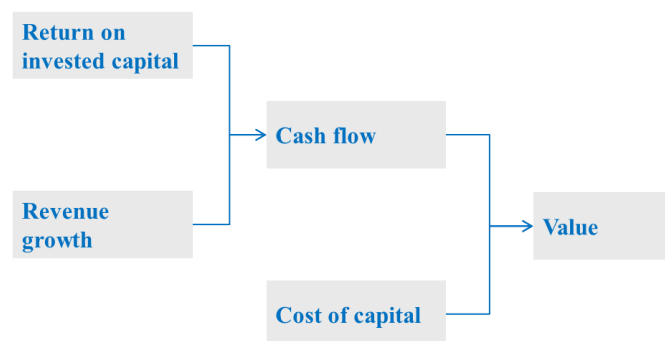


Figure 4. The core-of-value principle

Source: (Koller and Huyett 2010, 16)

From strategic point of view this means that executives aimed at increasing the value of their respective companies understand that although growth is good, ROIC can be an equally, and even more important factor of value creation. It is a far harder task in real life to find the right balance between growth and returns. An example of such a struggle is where

executives are hesitant to allow high ROIC to decline in order to foster faster growth. At the same time there are companies where executives with low ROIC are working in increasing growth instead of improving their ROIC. (Mckinsey & Co 2007, 12)

T. Koller synthesizes these findings in a table of ROIC and growth where value is shown by discounting cash flows to the present value at company’s WACC³:

GROWTH	3%	900	1 100	1 400	1 600
	6%	700	1 100	1 600	2 100
	9%	400	1 100	1 900	2 700
		7%	9%	13%	25%
		ROIC			

Figure 5. Growth/ROIC matrix

Source: (Koller, Goedhart and Wessels 2010, 21)

It can be observed that improvements in ROIC always bring improvements to value; which is not always the case for growth. When ROIC is high then faster growth substantially improves value, whereas with low ROIC, faster growth actually decreases the value of the enterprise. In other words, if the ROIC is below the WACC there is no value creation in the enterprise.

From practical point of view this means that a company has to find ways first how to earn higher ROIC compared to its competitors. A representative formula for ROIC that shows the connection between strategy and competitive advantage is following:

$$ROIC = (1 - Tax Rate) \frac{(Price\ per\ Unit - Cost\ per\ Unit)}{Invested\ Capital\ per\ Unit} \tag{6}$$

A company is able to have a higher ROIC than competition either because it charges a price premium or has less costs producing its products, or both (Porter 1985). With regards to price premiums the company can get it by having innovative products, better quality, brand

³ In that case T. Koller assumed a 9 percent cost of capital and a company that earns a \$100 in the first year with growth slowing to 4,5 percent after 15 years.

recognition, customer lock-on, and rational price discipline. As to cost efficiency, this is achieved through innovative business methods, unique resources, economies of scale, and scalability (Porter 2008). The longer higher ROIC is sustained the better is for company and more value is created. The next part of the thesis will provide different strategic frameworks for devising the best strategies in order to increase value.

When higher ROIC is achieved the next step is to pursue growth. With regards to growth according to T. Koller the most value is achieved by creating a “whole new product categories than from pricing and promotion tactics to gain market share from peers” (Koller and Huyett 2010, 139). This makes sense as creating new markets through new or modified products, convincing existing customers to buy more of a product, and/or attracting new customers to market allows avoiding competitors’ retaliation as no market share is taken directly from them. From strategic point of view it is a “win” situation for the enterprise with no apparent direct “loss” situation to competitors. The next value creation opportunity in growth is achieved by gaining market share in a fast-growing market. While competitors may lose their overall market share they still are able to grow and as such there is only a moderate risk of retaliation or price war. The least desirable way for growth is through either direct product promotions and pricing or through incremental innovation. While direct promotion and pricing will be responded by competitors with the same tactics, incremental innovation can be replicated in future and customers may return back to competitors. While this way of growth might be least sustainable in the long run it still provides an edge over competition in a short-term that can be then transformed into other growth strategies.

Final point in growth is that it is harder to sustain the same growth level over the longer period due to natural life cycles of products. It is through strategic frameworks that appropriate strategies should be implemented for products in their different life cycles, e.g. Growth-Share framework (Henderson 1973) that will be looked upon in the relevant chapter of the thesis.

1.5.2 The conservation-of-value principle

Overall, the conservation-of-value principle states that it doesn’t matter how you arrange/slice the financial pie of the company with different financial engineering strategies, it is only bottom-line improvement of cash flows that will create value (Mckinsey & Co 2010, 3). Any decisions of management that do not increase cash flows cannot create value. The “conservation” here means that value is unchanged when the company changes the claims

towards its cash flows but does nothing in order to increase the actual cash flow. One might think about this on an example of an apple. When an apple is divided among different people it really does not matter how the apple is sliced. There will be no more than initial apple even if some unique way of slicing is invented. As such the principle allows to bypass different accounting treatments in order to understand whether at the end the value of company has changed or not.

Initially the conservation principle has already been discovered by Franco Modigliani and Merton Miller in 1950-1960th (Modigliani and Miller 1958). They were able to show that buy changing the capital structure of the company, by changing debt-to-equity ratio executives are not able to increase share prices unless they also increase cash flows of the company. Later the same principle was described in Richard Brealey and Stewart Myers's textbook (Brealey and Myers 2000).

The GMC allows executives to buy or issue shares. While the conservation principle is very straightforward, it is highly useful to understand the share repurchases strategy on the underlying value of the company. Repurchasing shares does not in itself create value for the company. While executives might try to buy the shares at their low level and then resell them when the price goes up, this strategy just shifts the value from those shareholders that sold their shares to those that did not sell. At the end no value has been created, as some shareholders became richer, but shareholders as a whole did not benefit. The share repurchase really can help in preventing the destruction of value. Where executives have cash that they otherwise would invest at returns lower than WACC, share repurchase would allow preventing value destruction by increasing the operating cash flow (Koller and Huyett 2010, 207).

1.5.3 The expectation treadmill principle

Under the expectation treadmill principle the share price of the company is directly influenced by the expectations that the stock market has towards company's performance. The higher the expectations are the harder it is for the company to perform on the level expected by the market (Ehrhardt and Brigham 2014, 278). While the "core-of-value" and the "conservation-of-value" principle directly influence the real value creation in a company, the "expectation treadmill" principle deals with increasing share prices by beating up the market expectations. It is quite hard to always beat the market expectations and as such a treadmill is a good analogy for the principle:

“The speed of a treadmill represents the expectations built into a company’s share price. If the company beats expectations, and if the market believes the improvement is sustainable, its stock price goes up, in essence capitalizing the future value of this incremental improvement. But this then accelerates the treadmill, so as performance improves, the treadmill quickens, and the company has to run faster just to keep up and maintain its new stock price.” (Koller and Huyett 2010, 41)

The contrary is also true, if the expectations are low then they are easier to beat and increase the share price. An interesting fact is that according to M. Ehrhardt (2014) market will not decrease the stock price when the company has lower than expected quarterly earnings due to the fact that research and development expenditures have increased. Basically, the market gives a credit for future increase in cash flows; whereas, the market will negatively react to decrease in earnings due to the fact that a new product does not meet the expectations of the market. Overall, it is information and actions of the company that are communicated to the market that influence the share price. Understanding this, executives can influence the stock prices by gradually building the market expectations and avoiding when unnecessary big promises that might not be fulfilled.

1.5.4 The best owner principle

This principle explains that there is no inherent value in itself in any particular business. The same business has different value to different actual or potential owners/executives. This value is based on how each business owner manages the business and what strategy is pursued. Some owners can add value through e.g. replicating distinctive skills as operational or marketing excellence, linkages with other activities in their portfolio, better governance and incentives for the management team etc.

Moreover, there is “best owner lifecycle”, where the different owners of businesses are best at certain stages of business development: start-up, growth, maintenance of empire and terminal stage of dismantling the assets and selling them to other “best owners”. In the words of T.Koller:

“[...] executives need to continually look for acquisitions of which they could be the best owner; they also need to continually examine opportunities for divesting businesses of which they might no longer be the best owner”. (Koller, Goedhart and Wessels 2010, 417)

Different managers will generate different cash flows from the business and eventually will have different value of the business. While in GMC teams have limited use of the “best owner” principle in having lack of options in selling the business, the unique skills of team

members and consequently of business executives can lead to substantial increase in value of the business. The correct executives with distinct skills across relevant functional areas of business system will certainly make a difference in driving value of the business up. Executives with insights into how the market or industry will evolve can with the correct team of executives fully capitalize on such a knowledge/intuition by expanding the existing businesses and achieving higher ROIC and/or growth.

1.6 Implications for GMC

There are several basic implications from the corporate finance theory that can effectively be used in GMC.

Firstly, before aggressive growth the company has to increase its ROIC. While specific calculations are not provided in the thesis, the strategic frameworks from the next chapter show the underlying line of thought in receiving price premiums or decreasing the costs below the level of competitors. These frameworks also serve as a basis for different modeling systems, e.g. for data analysis tables and other sensitivity analysis.

Secondly, no share issue or repurchases in itself create value. They can influence the market expectations, but not create the value. With regard to market expectations the treadmill principle warns about aggressive unsustainable growth prospects. As such author should be careful in his calculations in order to keep the up-trend of high growth and high ROIC until the final quarter of the competition. Moreover, having something to increase the market expectations at the end of the final quarter of the competition will help boost the value of the company.

Thirdly, it is important to have right people at right roles for the competition. Having stronger team that can successfully deal with their relevant tasks and manage their functional fields would create more value than the weaker team in the same functions.

At this point there is a general understanding of how to move forward with the company after historical periods: increase ROIC, aggressively grow and beat the market expectations. This level of knowledge has to be complimented by strategic management decision approach in order to equip the executives with relevant tools for decision-making. The author will give an overview of different available and fundamental frameworks and then introduce the framework that was used by his team in the GMC.

2 DEVISING STRATEGY

“The typical 1,200 page calculus text consists of two ideas and 1,198 pages of examples and applications“

Michael Starbird

2.1 Introduction

A great strategy in bundle with a great execution involves a clear and defined short-term planning that is consistent and aligned with 3-5 year goals of the company.

Very illustrative example of utilizing short-term planning with companies long-term aims is Amazon. CEO Jeff Bezos has a clear strategy on utilizing one competitive advantage in short term into other competitive advantages over a longer time-frame. One might even say that he is brilliant at this. Amazon was first to offer 1 million books on sale online. The competition was fast to move and within a year there were 3 000 competitors that were offering the same service.

Bezos had his own strategy on battling the competition market. He was utilizing his “first mover” advantage and transformed it into a “brand” advantage. The next move was to take this brand advantage and to turn it into financial advantage through an IPO. By accumulating money he turned it into infrastructure advantage by building 6 distribution centers in the US.

The idea behind these centers was to strategically place them in such a manner so Amazon could ship any of its good within the US in 2 days. As such an infrastructure advantage was transformed into a shipping cost and delivery time advantage.

Compared to its competitors Amazon could deliver goods cheaper, faster and more reliably. Taking this to a next level Bezos made delivery for orders over \$25 for free. Then free 2-day delivery was offered on all goods for members of the Amazon Prime loyalty program. As such infrastructure, shipping cost, and delivery time advantages were transformed into a membership advantage.

This strategy of utilizing advantages one over another – “competitive advantage sandwich” – is what allows Amazon to stay ahead of the competition (Stone 2013, 341)

The example of Amazon is very impressive and applicable to Global Management Challenge, as it shows that it is a combination of created and utilized advantages that give the final competitive edge.

The big issue that still remains is to understand what this advantage could be and utilize it early in the competition with the aim on building upon it further. This is where different frameworks become of the most use, as this allows structuring the problem and analyzing different possibilities.

2.2 Different types of business problems

The first step in solving business problems and challenges is to understand what type of business problem has to be solved. Different academics group the problems in various ways. According to David Ohrvall (Ohrvall 2011) all the cases fall to five broad categories or “zones”. Zone 1 includes “strategic cases” where making a change will have a large impact on the business as a whole. In this zone management has to decide whether to expand/reduce scope of the business, change direction or maintain status quo. Zone 2 includes “operations cases” which focus on the internal operations of the company. In this zone management decides how to increase revenue and/or reduce costs. Zone 3 includes “Organization, Systems and Process” cases. This zone involves impacting people in organization, changing the process/systems, and measuring the organization’s capabilities. Zone 4 – „Finance cases“ - covers company’s financing and balance sheet items. This zone generally deals with impacting the balance sheet and increasing equity returns. The last zone deals with “External Forces” such as supplier issues, public attitude, economic changes etc.

Marc Cosentino (Cosentino 2013) goes into a more detailed list in describing various case types. According to him there are 12 case scenarios. Strategy scenarios include: 1) Entering a new market, 2) Industry analysis, 3) Mergers and acquisitions, 4) Developing a new product, 5) Pricing strategies, 6) Growth strategies, 7) Starting a new business, 8) Competitive response; Operation scenarios include: 9) Increasing sales, 10) Reducing costs, 11) Improving the bottom line, and 12) Turnarounds.

It is important for a decision-making manager to understand the variety of different business problems. The best managers are able understand the exact problem that must be solved, and find the best way how to solve it. A very powerful tool for a business decision-maker in structuring and solving business problems are business frameworks.

2.3 Frameworks for solving business cases

Business framework is a management concept that enables managers to think about various problems in a structured and holistic way to enable them to systematically make best possible decisions. It is a mindset and an algorithm that helps companies allocate resources, develop strategies, and accomplish various company and performance targets (Ohrvall 2011, 26). Most frameworks are standardized approaches in breaking down a problem into smaller manageable pieces that can be then solved by the relevant knowledge and appropriate academic discipline.

It is through the use of frameworks that one is able to tackle most vexing and challenging business problems. It is by using frameworks a new CEO of a company is able to structure, localize and solve almost any problem.

The most known of all the frameworks is the Porter's five forces covering the techniques for analyzing industries and competitors (Porter 2008, 27). Another framework is the Mckinsey 7S Framework that helps to diagnose and analyze how well is the organization positioned to achieve the intended objective (Michalski 2011). The strength of this framework is that it takes into account the importance of aligning different parts of organization in order to achieve overall success. The framework addresses several areas of an organization (strategy, structure, systems, staff, skills, style, and shared values) that must be addressed in order to ensure a successful transformation into a leading world-class organization. (Peters and Waterman 1984)

Other popular frameworks include but are not limited to Value chain analysis, SWOT analysis, Profit framework, the product/market expansion grid or the growth 2x2 matrix (Ansoff 1957), PEST analysis, 4 P's etc.

2.3.1 Intended archetype

As a manager one has to solve certain business problems. By employing different skills and tools successful managers solve problems of different complexities. In order to effectively solve different types of problems, or specialize on certain types of problems, organizations devote specific people and departments for the achievement of company's performance targets. Mainly such a specialization is clearly seen in an organization's chart. These charts can be with different names but mostly they revolve around five main competencies. In Global Management Challenge these competencies are following: General

Manager/CEO, Marketing, Production, Human Resources, and Finance. The problems that each of the departments is faced with is different but in general these problems fall into one of the five “zones” or 12 types of business problems mentioned above.

As to the CEO it is his/her main duty to coordinate the work of departments and maximize the shareholders’ value of the company (Drucker 1973, 31). As a leader and a visionary the CEO after understanding overall situation and capabilities has to identify a target archetype of the company and align the work of departments and/or ongoing initiatives in the organization around key attributes for that archetype. These target archetypes include the following:

- Leadership driven (Pepsico) – leaders are the performance catalyst
- Market focus (e.g., Apple and Google) – organization shapes market trends and innovates to beat competitors
- Execution edge (e.g., Toyota and Walmart) – organization relies on discipline/execution as foundation of performance
- Talent/knowledge core (e.g., Goldman Sachs) – talent and knowledge are its most critical assets

These archetypes can be used as a guide to help leadership align and prioritize efforts around the key attributes it wants to be “known for” and drive the company to its maximum shareholder value.

It is through balanced, comprehensive approach and clear alignment of the whole company that a company can achieve its best performance. For the GMC it means that the company as a whole has to move in one direction. The whole team has to work in unison and enforce the company’s strategy in order to effectively increase the value of the company.

2.3.2 Porter’s Five Forces

An excellent framework for analysis of industry is Porter’s Five Forces (Figure 6). Porter’s Five Forces allow managers to understand the balance of powers within industry. As such it gives managers, if properly conducted, information about what the company’s competitive advantage is at the current moment, and more importantly, where the strength of competitive position is likely to be. Managers using this tool are likely to answer what products, services and/or businesses are likely to be profitable. One should understand that using this framework gives a qualitative evaluation of a company’s strategic position. This

framework is designed to be used at the industry group or industry sector level. In other words Porter's Five Forces is a high level analysis where the framework is used as a starting point in evaluating the strategic position. (Porter 1980, 120)

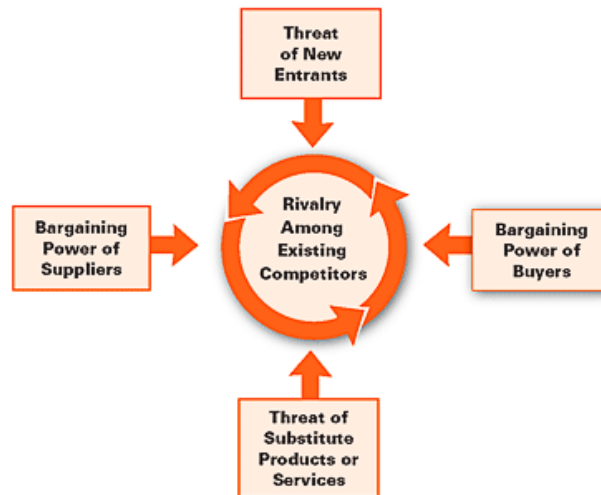


Figure 6. Illustration of Porter's Five Forces

Source: (Porter 2008, 27)

Managers have to determine the competitive power by going through each of the five forces. M. Porter further proposes three generic competitive strategies to be utilized depending on the competitive strength of the company: overall cost leadership, differentiation, and focus.

In Overall Cost Leadership it is suggested to use the existing and/or projected competitive advantages in experience curve effects, technologies, economies of scale in order to get the upper hand over competitors. The company has to plough back the generated high returns in order to sustain the advantages in the future. This strategy is basically the “competitive advantage sandwich” employed by Amazon. The main risks involved are that technological innovations will nullify past investments and that the low cost focus might deteriorate the customer service.

In Differentiation strategy main strategic drivers are brand image, technology, differentiating features of products and services, customer service. A very good example of this strategy is Apple. The unique products produced by the company differentiate it from the rest of the market and build loyalty among customers that is transferred to different products within the market proposition. The risks here are the time factor where differentiating factor

might become outdated or where competition imitates the product to the point where differentiation ceases to exist.

In Focus strategy the company choses to focus on a particular buyer, segment of the product or service line, geographic market etc. The risks here involve high dependence on one particular customer, segment where in a long run competition from other sectors might expand into the focus market.

2.3.3 Product/Market Expansion Grid

The Product/Market Expansion Grid was introduced in 1957 and empowered the marketers and business thinkers with a simple and powerful tool to think about growth (Ansoff 1957). Marketing introduces many various ways on how to sell more products, e.g. opening new markets and channels, launching advertising campaigns and market researches (Kotler and McDougall 1984, 52). The Expansion Grid introduces a strategic approach in structuring the options and aligning them with other variables of organization in order to choose the one that best suits the company.

Matrix introduces the four ways in which the growth can be achieved. The figure 7 illustrates these options.

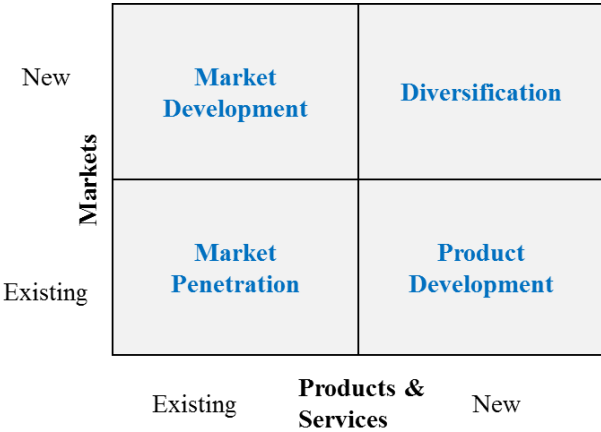


Figure 7. Product/Market expansion grid

Source: (Ansoff 1957)

The current situation of the company is the low left quadrant. By staying in the “market penetration” zone company stays in the “comfort zone” where it knows how the product works and who the customers are. By moving out of it either horizontally or vertically the company exposes it to new types of risks. By moving to other quadrants the management

takes risks of developing new products and/or dealing with new customers. The new market might turn out to be different in terms of needs and dynamics. As such each quadrant needs a thoughtful strategy and understanding of potential consequences and trade-offs.

In a “market penetration” quadrant company sells more of the same product/services to the same people. This is achieved, for example, by advertising and encouraging more customers to buy the existing product/service. Other tool is a loyalty scheme that ties customers to the product. Price and other special offer promotion allow increasing the sales during certain periods, e.g. Christmas and Happy New Year sales. Additionally, increasing the sales force of the company or by buying-out a competitor helps achieving the aim of growth.

In a “product development” quadrant the idea is to modify the existing product and target the existing customers. Company can introduce different variants of products, or modify packaging in order to increase their sales. A good example of this strategy is with Gillett razors where slight modifications are in core of product development strategy. Development of related products also allows achieving growth by cross-selling.

In a “market development” company is targeting new markets or segments of the market. The product or service does not change but the scope goes beyond the existing customers. An example of this is targeting new geographical markets, use different sales channels, both online and offline, target different customer segments with different age groups, demographic profiles and gender. An example of market development is a market entry of an existing business into a new country.

“Diversification” quadrant is the riskiest quadrant out of all, as company targets new customers with a new product. The main risks are lack of expertise and lack of knowledge. Such a move from a company needs a thorough preparation and usually is taken via pilot projects. The main advantages that a company gets with a diversification are that company is less influenced by downfalls in one area of the business if it sells in several different quadrants.

General strategy for managers is to carefully research each move from one quadrant into another. Such a move might use a 7S framework in order to understand what capabilities are necessary in a new quadrant and prepare beforehand in order to build them. Companies have to account for different internal and external risks that might be associated with the move.

2.3.4 The growth-share matrix

The Boston Consulting Group (BCG) matrix is another framework used in the business world to help companies to better analyze business units and product lines (Henderson 1973). As such this matrix helps managers to analyze different product lines available and allocate the company resources for the best brand marketing, product and strategic management, and portfolio analysis. As B. Henderson put it:

“To be successful, a company should have a portfolio of products with different growth rates and different market shares. The portfolio composition is a function of the balance between cash flows. High growth products require cash inputs to grow. Low growth products should generate excess cash. Both kinds are needed simultaneously” (Henderson 1979)

The BCG matrix places products into four distinct categories: Stars, Cash Cows, Dogs, and Question Marks. Cash Cows represent products that have high market share in already mature and slowly growing industry. It does not make a lot of sense to plow money into developing such a market further, and as such generated cash from this product should be used to invest into other business products.

Stars are products with a large market share in an industry that is growing fast. Star products generate cash but at the same time need investments to preserve their market share in a growing market. When the industry matures a Star should transform into a Cash Cow.

Question Mark is a product that has small market share in a market that is growing fast. In order for the product to gain market share it needs resources. Whether the product will be able to become a Star is questionable and depends on many industry factors.

Dogs are products that were not able to become Stars and remained with their small market share in a market that has matured. These products do not require substantial cash investments but they do tie in capital. Generally, Dogs should be liquidated unless they serve some strategic purpose in company’s portfolio of products.

The natural cycle for products is that they start with question marks. While the industry’s growth slows down the products become either cash cows or dogs. Finally, the market stops growing, matures and the product becomes a cash cow. At the end of this cycle a cash cow turns into a dog. It is management’s responsibility to assess each product and devise corresponding strategy on which products to fund, which to sell and what balance to keep.

2.3.5 Value chain framework

While previous frameworks mostly related to increasing sales and revenue, there is a framework that allows capturing the cost of creating the value. This framework was introduced by M.Porter in his book “Competitive Advantage: Creating and Sustaining Superior Performance” (Porter 1985). One of the key ideas behind the framework is to understand how a company transforms business inputs into business outputs in such a way that the final consumer is willing to pay more for the product than the sum of its components.

The value chain is a set of activities that a company undertakes in order to create value for its customers (Hill and Gareth 2008). The value that a company creates and captures transforms into its profit margin (Value created and Captured – Cost of Creating that Value = Margin) (Porter 1980). Logically, the more value a company can create with less costs the better its margins become. As a result a competitive advantage is built.

Porter has divided activities by a company into primary and secondary ones. Primary activities are Inbound Logistics, Operation, Outbound Logistics, Marketing & Sales, and Service. Secondary activities are Procurement, Human resource management, Technological Development and Firm Infrastructure. (Porter 1985)

The premise of value chain framework is to disaggregate the work of a company into its strategic parts and understand the cost side of these activities. This is a good way to benchmark company’s activities to those of industry standards and competitors and analyze the reasons of gaps. After the analyses company can devise appropriate strategy to diminish the gaps where it can and use competitive advantage where it performs better than industry.

2.4 Strategic Decision-Making Model

For strategic decision-making and actual modeling in global management challenge the author has employed a four-step iterative process of analysis and problem-solving. The four steps model included: profitability analysis, business environment analysis, external forces analysis, and financial analysis (which included different financial modeling, scenario analysis and excel tools). While this chapter illustrates the backbone thinking and analysis behind the decisions, it should be noted that the actual number crunching takes a lot of time and knowledge from different managerial disciplines, e.g. cost accounting, valuations etc. The Illustration of the iterative process is given in figure 8.



Figure 8. Overall framework for analysis in GMC

Source: (Compiled by the author)

It should be mentioned that there is no one-size fits all framework that allows getting the best decisions all the time, and as such managers can/might/should rely on their intuition as well. The author after going through the strategic decision-making cycle corrected the decisions, even though marginally, upon his intuition. The first step in the process was analysis of profitability. Profitability analysis used for taking decisions in the Global Management Challenge by the Estonian team is illustrated in figure 9.

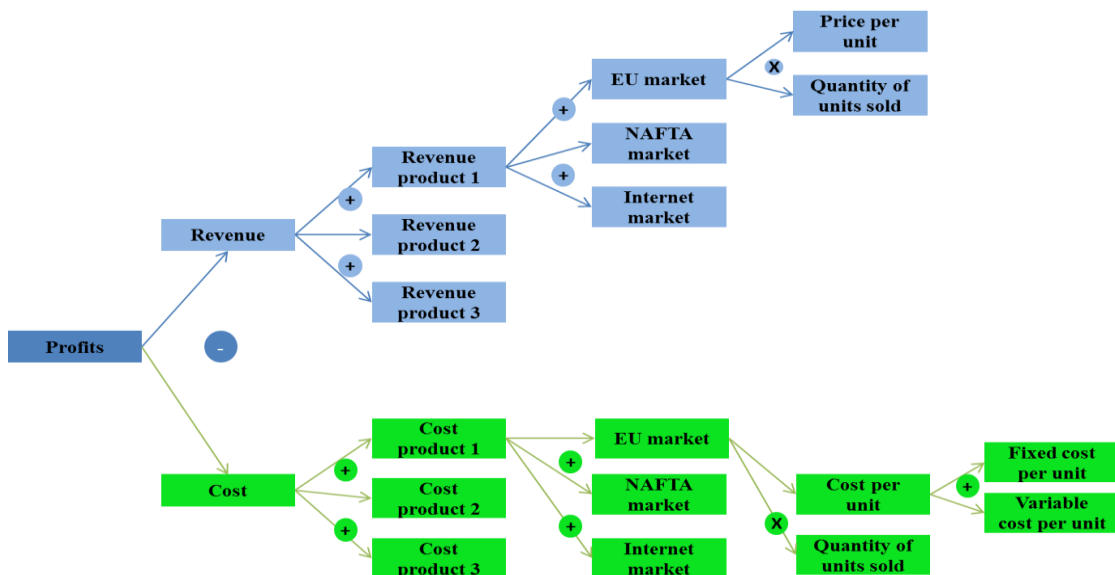


Figure 9. Profitability framework for GMC

Source: (Compiled by the author)

In order to better devise the strategy and understand potential sources of competitive advantage in a long-term period the author always decomposes the profits up to the last level. Here profits were divided into their respective Revenue and Cost sides.

On the Revenue side on the next level analysis was done on product revenue streams. As competition involved three distinct products, the three revenue streams were analyzed. On each of the product revenue streams a further division was made into their respective markets. At this point there were already nine points of analysis – three products with three markets each. Each market was further decomposed into its components: price per unit in a particular market and quantity of units sold.

On the Cost side the similar approach was taken. Cost was decomposed into cost for each of the three products and further separately for each of the market. A level down each market's product was divided into cost per unit and the quantity of units sold. To better understand drivers of cost for each product, analysis of fixed and variable costs is made.

One should understand that such an analysis is made for different time periods: for previous time-frames, current situation and projections into future profits. The author used the profitability analysis as a backbone for all the other frameworks.

“Price per unit” block was analyzed through comparison to competition, company capabilities and previous history. The minimum price that the product should be sold was the cost per unit. The benchmarking is made to the pricing strategies of the main competitors.

In “quantity of units sold” block the author uses product/market expansion grid for analysis, which proves to be very straightforward way of looking into growth opportunities. Both “prices per unit” and “quantity of units sold” are subject to overall sensitivity and scenario analysis through modeling tools.

A level higher in the “market zone” for each product, author uses BCG matrix in order to strategically make decisions in what products and what markets to invest and what products to use as a cash source for other strategies. To effectively prioritize the products and see what the best product mix is possible, author used contribution margin of each product as the main indicator. The products with higher contribution margin were given priority for development, while lower contribution margin products were analyzed for their potential and necessary efforts to achieve the highest returns.

For the Cost side the author used Value chain framework and cost accounting principles in order to analyze production costs for each market and each product. In general author tied direct costs into relevant products and markets, and allocated indirect costs according to appropriate allocation base, e.g. machine hours or working hours of personnel. In

“variable and fixed cost” block the author used McKinsey 7S framework in order to align the strategy of buying machinery and hiring people with overall strategy of the company. The 7S framework was also used on a high level analysis of general performance of the company and within the management team to align the company in one direction.

After the profitability analysis of company is made through historical management reports author devised his first hypothesis of future projections. The next step was to analyze the business environment through a modified Porter’s Five Forces framework and ensure that the future projection will not be influenced by unaccounted factors.

At this stage of analysis the two main blocks play primary role. Firstly, the products are compared to expectations of consumers; secondly, company’s capabilities are compared to competition and projected business environment in future.

In analyzing the consumers and products, the author seeks to understand particular segments of customers and their preferences and desires in connection to particular products. One example of such an analysis is to understand how many customers currently there are for each of the product, what they are willing to pay for a particular product, how their behavior will change in case the product is modified or enhanced, and what will be their likely behavior in future.

In comparing company and competition, the author looked into what the current capabilities of the company are, what is the structure of distribution and agent chains, what are the main drivers of cost, and what financial leverages are available. All this is benchmarked against competition. In analyzing the competition, main focus was made in understanding through financial indicators what likely strategy is employed by the competitors and how their behavior is likely to change the competitive landscape.

After finishing this level, the first strategy is devised. This strategy takes into account the market history and likely projection of the market, competitors and company’s capabilities in the future periods. The strategy might be from aggressive market expansion or just focusing on certain segments and increasing prices. There is a high-level strategy that allows increasing the value of the company, but it should be noted that at implementation phase the executives should be ready to show flexibility in each quarter.

The third step is correction of strategy for external factors through PEST (political, economic, social, and technological) analysis. In case it is believed that external factors are unfavorable certain actions may be taken by the management team, e.g. the company’s activities can be insured.

At the end of the cycle, the author employed a complex excel modeling tool in order to project the behavior of the company in future periods mainly in financial terms. This modeling tool used variety of tools from balance sheet building, ratio analysis to scenario planning, sensitivity analysis and regression building. The explanation of model building is outside of the scope of this thesis, but every strategic decision-making has to do its best in order to closely emulate the likely behavior of different parts of the company in future depending on strategic choices taken at different points of time. After modeling is finished the process might begin from profitability framework again and corrected to different insights received from modeling stage. When the cycle is repeated several times and the results of the employed strategy satisfy the management team, the particulars such as prices of products, advertising budgets, number of people employed etc. is inputted through the decision sheet. The process repeats for the next quarters where modifications and adjustments are made relevant to changes in profitability, business and external environment until the competition reaches its final round.

A practical application of this business thinking in action is shown in summary in the next chapter from the Estonian GMC final 2014.

3 PRACTICAL APPLICATION IN ESTONIAN GLOBAL MANAGEMENT CHALLENGE FINAL 2014

3.1 First quarter decision

The author’s team (further “the team”) armed with the four cornerstones of corporate finance and after thorough analysis through strategic decision-making model has employed the following strategy: the company should firstly increase its ROIC (initially by increasing prices and then by decreasing its cost per units). After this the aggressive growth should be utilized in order to maximize the value (“Overall Cost Leadership”). To fully utilize the treadmill principle the team employs gradual increase in market share, payment of dividends for the first time only in the last quarter and by issuing new shares in the fifth quarter in order to signal the market upon further growth prospects. Moreover, through careful computer modeling the team plans on employing less capital for achieving more profit and as such have higher ROIC through the “execution edge” archetype. By constantly utilizing acquired advantages the team plans to create the “competitive advantage sandwich”.

The team has started by employing all the major product improvements. This leads to boost in market demand for products, basically growth. As the company is not ready for the growth and after careful analysis through cost accounting (“Value chain framework”) and strategic decision-making model it was apparent for the team that subcontracting is a cheaper alternative for the production of machine components for the plant. The team acts accordingly and orders substantive quantities of components (4000 units for the first product, 9999 for the second, and 7000 for the third product).

Quality:			
Take up product improvements	1	1	1
Product development (€'000)	60	55	50
Assembly times (minutes)	115	165	325
Premium materials (%)	0	0	0
Subcontracting:			
Components to order (units)	4000	9999	7000

Figure 10. Quality and subcontracting in the first quarter (columns represent products 1, 2, 3)
 Source: Game report 1 (Appendix 6.1)

In order to sustain the execution edge over competitors the management budget for executives has been more than doubled – from 115 000 EUR to 240 000 EUR. Additionally,

by utilizing Mckinsey 7s framework the team leader made sure that everyone in the team is on the same page as to the overall strategy. This will ensure highest motivation of top management in drastic changes that appear in the company. Teams’ analysis has also shown that for the growth prospects there are not enough assembly workers. While the executive can always subcontract machinery parts, there is no way in subcontracting assembly. The team made an attempt to hire as much as 55 assembly workers in order to comfort the growth prospects. To balance the increase in workers it is necessary to increase the space of the factory. Through the calculations it was decided to initially increase space of the factory by 800 sq. m. In case competitors will not be very aggressive in their growth plans, the team will proceed in capturing available market shares by increasing the number of assembly workers and space in the factory also in the second quarter. While most of the decisions employed will not take effect immediately in the next quarter, but in the quarter after next, it made sense for the team to not employ premium materials in the first quarter and to increase advertising expenses only for the corporate image.

	Corporate	Product 1	Product 2	Product 3
Advertising: (€'000)				
Europe	70	30	30	20
Nafta	20	30	30	20
Internet	80	40	40	30

Figure 11. Advertisement expenditures in the first quarter

Source: Game report 1 (Appendix 6.1)

To be able to sustain high growth over the period of the competition it was vital for the company to invest into product developments and web-site development (directly and through number of ports). These investments were calculated according to previous experience of the team in qualification and semi-final rounds in order to maximize chances of major product improvements throughout the five quarters.

Everything was set down to increase the future ROIC (decreasing cost per unit) and increase growth of the company. The key point in the first decision was to understand that immediate growth was not desirable, instead, the better thing was to fully utilize high market demand towards the company’s product by substantially increasing prices and present ROIC. The team had highest prices in the whole group in their first decision, e.g the prices for the third product were 999 EUR, which is maximum allowed by the rules.

Prices (€):			
Europe	390	695	999
Nafta	385	695	999
Internet	390	690	999

Figure 12. Prices in the first quarter decision (columns represent products 1, 2, 3)

Source: Game report 1 (Appendix 6.1)

These moves seem counterintuitive as one would expect to try and capture as much market share as possible in the beginning of the competition. The team strongly believed that the four cornerstones of corporate finance provide strong basis for long-term value creation, and thus employed their strategic decision-making model in order to achieve excellence in the implementation phase. The market has reacted by decreasing the company's investment performance, as a lot of money has been spent into preparing the basis for aggressive growth and increasing ROIC without the relevant improvement in the cash flows in the first quarter. After the first round the team (company #1) was the last in its group.

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4
Stock market data:				
Share price (cents)	138,47	150,63	148,85	148,78
Market valuation (€)	5538800	6025200	5954000	5951200
Dividend paid (cents/share)	0	0	0	0
Investment performance (€)	5786439	6272839	6201639	6198839

Figure 13. Financial positions of companies after the first decision

Source: Game report 1 (Appendix 6.4)

3.2 Quarters two to four

The initial analysis of competitors has shown that teams number two and three have bought additional machines in order to increase their output capacity (the increase in Property, Plant and equipment indicates the acquisition of machines). Such a move will decrease their ROIC, and thus the value of their respective companies. While company number four has sold their machines. From the team's analysis, selling of machines sustains heavy costs due to decommissioning payments and leads to increased expenses. It is in team's belief that the best strategy is to employ all the machines that company already has and to increase its capacity through the use of subcontracting and increase in assembly workers.

COMPANY BALANCE SHEETS				
for Company:	1	2	3	4
Assets				
Property, plant and equipment	3016178	4452306	3644430	2366178
Inventories	3112294	930531	831363	837055
Trade receivables	2580223	1777047	1647438	1241978
Cash and cash equivalents	0	555191	1054826	2312369

Figure 14. Assets of companies in the second quarter

Source: Game report 2 (Appendix 7.5)

The team continued to use subcontracting and moved forward in using 100% of premium materials in all of its products. Additionally, the direct advertisement into each of the products was increased almost twice.

	Corporate	Product 1	Product 2	Product 3
Advertising: (€'000)				
Europe	70	78	53	52
Nafta	20	52	32	31
Internet	80	68	46	40

Figure 15. Advertising expenses in the second quarter

Source: Game report 2 (Appendix 7.1)

The company continued to hire assembly workers and acquired additional space of 500 sq. m. in order to accommodate them. The second quarter proved the team to be right in its initial calculations. The investment performance of the team (and thus the company) has been more than eight mln. EUR - this is substantially higher than that of the closest competitor. The basis for growth has been laid down in the first quarter and it was team's duty to beat the market expectations ("the treadmill principle"). The market has reacted to increase in ROIC of the company.

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4
Stock market data:				
Share price (cents)	195,7	162,94	159,87	143,32
Market valuation (€)	7828000	6517600	6394800	5732800
Dividend paid (cents/share)	0	0	0	0
Investment performance (€)	8078115	6767715	6644915	5982915

Figure 16. Financial positions of companies after the second quarter

Source: Game report 2 (Appendix 7.4)

In the third quarter the components from the subcontractors have been delivered and almost all the assembly workers were hired. The team through the BCG matrix analysis decided to continue buying subcontracting components only for the first product, while supply product number 2 and 3 with the plants own capacities.

Subcontracting:

Components to order (units)	6000	0	0
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Figure 17. Components order in the third decision (columns represent products 1, 2, 3)

Source: Game report 3 (Appendix 8.1)

The company had comparable star ratings of products to the competitors, but had lower cost per unit production cost.

Competitors' business activity

Company number:	1	2	3	4
Total advertising expenditure (€)	614000	690000	640000	420000
Total product development (€)	125000	110000	40000	90000
Consumer star ratings:				
Product 1	*****	****	****	****
Product 2	*****	*****	****	****
Product 3	*****	*****	*****	*****
Web-site	*****	*****	*****	****

Figure 18. Consumer Star ratings of products

Source: Game report 3 (Appendix 8.5)

It was in this quarter when the aggressive growth was the best to be taken from the core-of-value principle. And the team was prepared to take this opportunity: all product prices have been substantially discounted.

Business intelligence:

Product prices (€)				
Product 1: Europe	328	365	354	375
Nafta	328	365	354	375
Internet	328	350	342	360
Product 2: Europe	540	635	601	630
Nafta	540	635	601	630
Internet	540	585	523	630
Product 3: Europe	800	870	857	900
Nafta	800	870	857	900
Internet	800	795	745	850

Figure 19. Product prices by companies in the third quarter (each column for respective company from 1st to 4th)

Source: Game report 3 (Appendix 8.4)

Competitors were not prepared for this. As the result the team was able to gain on average 20 percent market share on each of the product, compared to 10 percent that each competitor had.

Company number:	1	2	3	4
Market shares (% by volume sold)				
Product 1: Europe	22.1	7.5	8.2	3.3
Nafta	20.1	9.9	8.6	4.8
Internet	27.7	14.5	13.0	7.7
Product 2: Europe	20.9	7.6	7.5	4.0
Nafta	19.0	10.0	8.9	5.7
Internet	24.2	15.6	16.5	7.0
Product 3: Europe	22.7	13.8	11.6	7.6
Nafta	20.4	17.2	12.7	10.4
Internet	21.9	21.1	19.8	11.9

Figure 20. Market share after the third decision

Source: Game report 3 (Appendix 8.5)

In the fourth quarter competitors tried to strike back by decreasing their relevant prices. This proved to be ineffective as core-of-value principle was not followed: growth with low ROIC did not create substantial value. In this quarter the team continued to sustain growth through product improvements and advertising. The team has also ordered additional subcontracting which shall be delivered in the sixth quarter. Although the competition will already be finished at the fifth quarter this move continues the treadmill principle and signals the market on the growing nature of the business even after the competition is over. The spread between the team and the nearest competitor has increased to almost 1,5 mln EUR.

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4
Stock market data:				
Share price (cents)	237,18	194,9	145,4	151,46
Market valuation (€)	9487200	7796000	5816000	6058400
Dividend paid (cents/share)	0	7	7	0
Investment performance (€)	9742152	8333612	6353612	6313352

Figure 21. Financial positions of companies after the fourth quarter

Source: Game report 4 (Appendix 9.4)

3.3 The final quarter

At the point of the final quarter the team was able to increase the initial cumulative product orders from approximately 5000 in the first gaming quarter to 14 000 units. At this point the market has stabilized and further aggressive growth would be hard to achieve.

Orders from:			
Europe	2734	1507	622
Nafta	1718	938	379
Internet	2524	1350	540

Figure 22. Orders in the final quarter (columns represent products 1, 2, 3)

Source: Game report 5 (Appendix 10.2)

The team was able to receive higher profits and employ less capital for the last three quarters. Moreover, the successful R&D strategy allowed to constantly receiving product improvements throughout every quarter. The final quarter was not an exception with having two major product developments and one minor.

There had to be something given to the market to boost the investment value of the company. Having never paid any dividends in previous quarters the company announced 10 cents per share payments for the first time in its gaming history. Additionally, new shares were issued indicating to the market the raise of capital for continuing growth. The expectation treadmill combined with proven core-to-value principle and operational excellence of the team resulted in booming investment performance of the company. The team has achieved investment performance of 11 mln EUR.

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4
Stock market data:				
Share price (cents)	262,96	187,04	150,82	153,15
Market valuation (€)	11044320	7481600	6032800	6126000
Dividend paid (cents/share)	10	15	7	0
Investment performance (€)	11226672	8630303	6858383	6383437

Figure 23. Financial positions of companies at the end of final quarter

Source: Game report 5 (Appendix 10.4)

3.4 After the final quarter

It is easier to analyze the reports when the competition has been completed; while it feels totally different when every quarter the team has to wait for reports to see what results the decisions brought and what the competitors had to offer. From the practical point of view the above analyzed five quarters in GMC created a very real feeling of running a big multinational corporation and did a great job in simulating the real life feeling of competition between top executives.

Previously the author has already mentioned the “competitive advantage sandwich” that J.Bezos employed for Amazon. Bezos had courage to move forward in a highly competitive book industry and was able to stick to his own strategy. The author took inspiration from Amazon when devising his strategies and overall thinking towards running the company both in GMC and real world. It can be seen from the management reports in the Appendixes that the team had gradually build quarter by quarter different advantages and successfully utilized upon them to build the next layer of competitive edge. There is no easy answer in running a multinational company and executives have to employ very different skills and knowledge in order to succeed in creating more value. As it was demonstrated in the paper different tools and disciplines are available to executives in order to prosper. The author employed corporate finance thinking in conjunction with different approaches and frameworks to solve the problems posed by GMC.

It is in this light that the author fully acknowledges the indispensable value that the “best owner” principle had on the team “TTU” in competition. It is through the team-work and sleepless nights of every single team member that the corporate finance and business frameworks found its way into the practical application at GMC where the team was able to outrun competition and succeed.

CONCLUSIONS

Global Management Challenge gives a unique opportunity in creating a level playing field for the competing teams and allows to see how different strategies and schools of thought lead to increase or decrease in the investment performance/value of the respective companies. The author has turned his sight onto the general theory of corporate finance in order to find the best understanding on how companies create value in modern markets.

It is through the use of four basic principles that the author's team was able to devise highly effective strategy at the Estonian GMC finals 2014. The four principles are the "core-of-value", the "conservation-of-value", the "expectation treadmill" and the "best owner". It is through the use of corporate finance understanding of value was the author able to make the decision to increasing ROIC and only after that to aggressively grow.

Although the right strategy is a fundamental part of any successful business, it is the right implementation that divides the best performers from those that are average. An amazing tool for any manager is to employ different strategic frameworks. These frameworks allow disaggregating the problem that the executive faces into its component parts. It is through this disaggregation that the most important insights into the problem are discovered. It is the next step in the process to use those insights in creating the value for the company.

The author has developed his own strategic decision-making model in order to effectively tackle the challenges of the GMC. This model allowed analyzing different value creating opportunities within the GMC. Combined with overall understanding of how the value in company is created this framework proved to give a performance edge over other companies in the competition. While no particular mathematical calculations were given within the thesis, by employing the strategic framework one can develop his/her own models in order to sustain the correct decisions either in the real world or in the GMC.

By employing the four cornerstones in the Estonian GMC finals 2014 the author was able outperform the market by substantial margin. The team was able to increase the company's ROIC in the beginning of the competition and then to aggressively grow in order to gain the biggest market share. By always beating the market expectations and employing the operational excellence strategy the author's team gained first place in the national competition with the difference in value performance of more than 2,5 mln EUR to the nearest competitor.

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KOKKUVÕTE

ÄRIRAHANDUSE JA STRATEEGILISE JUHTIMISE PRAKTILINE RAKENDUS VÕISTLUSTEL “GLOBAL MANAGEMENT CHALLENGE”

Arutyun Arutyunyan

Global Management Challenge on suurim strateegilise juhtimise võistlus, mis ühendab rohkem kui 500 000 üliõpilasi ja ettevõtete juhti üle maailma juba alates 1980. aastast. Sisuliselt antud võistlus kujutab endast aktsiaseltsi mitmekesisist ärijuhtimist Euroopa Liidu ja NAFTA virtuaalkeskkonnas. Mitmed virtuaalsed ettevõtted, mida juhtivad ja esindavad osalevad meeskonnad, võistlevad ühises ärikeskkonnas. Juhtides oma virtuaalset ettevõtet iga meeskond püüab tõsta selle investeerimisatraktiivsust. Võitjaks on see meeskond, mis saavutab viimase kvartali lõpus kõige kõrgema ettevõtte väärtust.

Lõputöö eesmärk on kasutades äriarahanduse ja strateegilise juhtimise teooriat töötada välja strateegiat, mis maksimiseeriks ettevõtte väärtust Global Management Challenge näitel. Antud lõputöö annab ülevaadet värskematest äriarahanduse suundadest ja mõtetest, mis puudutavad ettevõtte väärtuse loomist, ning tutvustab autori poolt arendatud strateegilise juhtimise paradigmat (framework). Selle aluseks on neli põhilist põhimõtet, mida autori meeskond suutis testida, kasutades oma tõhusat strateegiat GMC Eesti finaalis 2014. aastal. Need neli põhimõtet kujutavad endast “core-of-value”, “conservation-of-value”, “expectation treadmill” ja “best owner”.

Kuigi õige strateegia on üks olulisematest ja põhilisematest osadest igas edukas äris, just selle õige rakendamine on see, mis eristab edukamaid ettevõtteid keskmistest. Erinevate strateegiliste paradigmat kasutamine on suurepärane töövahend iga juhi jaoks. Antud põhimõtted võimaldavad lahti lüüa probleemi, millega juhid on silmitsi, erinevate komponentideks. Just läbi kõige keeruliste ettevõtete probleemide jagamist osadeks ehk nende komponentideks, tekib arusaamine olemasolevatest probleemidest. Nende teadmisi rakendamine on järgmine samm ettevõtte väärtuse loomises.

Autor on välja töötanud oma strateegiliste otsuste tegemise mudeli selleks, et tõhusalt võtta vastu GMC väljakutseid. Antud mudel võimaldas analüüsida erinevaid väärtuse loomise võimalust GMC raames. Antud põhimõtte koos üldise arusaamisega, kuidas luuakse firma väärtust, andis märkimisväärset tulemuslikku eelise teiste ettevõtete ees.

Rakendades Eesti GMC finaalis 2014 varem nimetatud neli nurgakivi autor suutis oluliselt edestada turgu. Meeskond suutis tõsta ettevõtte investeeritud kapitali tootlust juba võistluse alguses ning hiljem seda agressiivselt kasvatada eesmärgiga saada suurimat turuosa. Alati ületades turu ootusi ja näidates tippaset oma tegevuses tänu rakendatud strateegilise paradigmat, autori meeskond suutis saavutada märkimisväärset ettevõtte väärtust. GMC's rakendatud strateegia näitel oli tõestatud ärirahanduste aluspõhimõtete kombineeritult koos asjakohaste strateegiliste paradigmade oskusliku kasutamisega praktilist tõhusust.

APPENDICES

Appendix 1. Historical report 1

Appendix 1.1 Management report

Management Report

This is a history quarter

Code: 12C3

for Group 1 Company 1

PLEASE CHECK ...		your decisions				Year 2011		Qtr 2		
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:	Number needed	Support (€'000)	Commn. %	
	Europe	30	30	30	30		European agents	2	13	13
	Nafta	30	30	30	30		Nafta distributors	3	13	13
	Internet	30	30	30	30		Internet distributor		11	11
Prices (€):						Operations:				
	Europe		360	610	850		Materials to buy ('000) Spot	10	3mth 0	6mth 0
	Nafta		360	610	850		Maintenance hours/machine	25	Shift level	2
	Internet		340	520	740		Number of ports operated	11	Web-site development	30
Quantities to deliver to:						Personnel:				
	European agents		550	317	234		Assembly workers to recruit	0	Number to train	0
	(Not in full Nafta distributors if starred)		698	259	197		Hourly wage rate (€c)	10,00	Staff training (days)	0
	Internet distributor		1150	850	500		Management budget (€'000)	115		
Quality:						Finance:				
	Take up product improvements		0	0	0		Shares to issue/repurchase	0	Dividend (cents/share)	0
	Product development (€'000)		30	30	30		Term loans (€'000)	0	Term deposit (€'000)	0
	Assembly times (minutes)		115	165	325		Machines to buy	0	Machines to sell	0
Premium materials (%)		0	1	0	Factory extension (sq. m.)	0	Insurance plan	2		
Subcontracting:						Information:				
	Components to order (units)		0	0	0		Market shares	0	Corporate activity	1

Appendix 1.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2011

Qtr 2

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	6300
Factory size next quarter	900
Circulation and access	225
Machining operations	175
Assembly operations	260
Material and component stocks	8
Available space (overflow if negative)	232
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	130 !
Hours worked	7007
Hours planned maintenance	45
Average machine efficiency %	89.0
Materials:	
Opening stock available	0
Bought spot	10029
Bought default	0
Lost or destroyed	0
Used	8302
Closing stock	1727
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	11
Number of visits to your web-site	49677
Estimated level of failed visits (%)	0
Number of internet service complaints	118

HUMAN RESOURCES:		
Production personnel:	Assembly	Machining
At start of last quarter	26	48
Recruited	0	8
Trained	0	
Dismissed	0	0
Left	0	8
Available for next quarter	26	48
Assembly workers:		
Hours available		14976
Absenteeism/sickness (hours)		308
Hours worked		13996
Notice of strike weeks for next quarter		0

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	2	3	1
Resigned	0	0	
Dismissed	0	0	0
Appointed	0	0	0
Active next quarter	2	3	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1434	500	300
Number of loads	5	5	10

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	8,55
Energy used in production	29,14
Total primary CO2e	37,69

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	2398	1426	931
Produced	2472	1472	962
Rejected	74	46	31
Lost or destroyed	0	0	0
Delivered to:			
European agents	550	317	234
Nafta distributors	698	259	197
Internet distributor	1150	850	500
Orders from:			
Europe	840	301	292
Nafta	706	302	251
Internet	1310	829	497
Sold to:			
Europe	795	317	234
Nafta	698	259	197
Internet	1310	829	497
Backlog of orders:			
Europe	22	10	62
Nafta	18	46	54
Warehouse stocks:			
Europe	0	0	0
Nafta	0	0	0
Internet	66	21	3
Guarantee services	85	41	27
Product improvements	Minor	None	Minor
Product components:			
Assembled last quarter	0	0	0
Ordered last quarter	0	0	0
Closing stock	0	0	0
Available for assembly	0	0	0

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Appendix 1.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2011

Qtr 2

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
	€		€		€		€
ADMINISTRATIVE EXPENSES		Sales revenue	2509810	Non-current assets:		Operating activities:	
Advertising	360000	Opening inventory values	46158	Land	450000	Trading receipts	2364254
Internet distributor	147867	Components purchased	0	Buildings	450000	Insurance receipts	1552
Internet service provider	43327	Materials purchased	365914	Machinery	<u>1706707</u>	Trading payments	2068183
Agents and distributors	235419	Machine running costs	110311	Property, plant and equipment	2606707	Tax paid	<u>205024</u>
Sales office	26302	Machinists wages	280804	Current assets:		Net cash flow from operations	92599
Guarantee servicing	18000	Assembly wages	159800	Product inventories	10383	Investing activities:	
Product development	90000	Quality control	4906	Component inventories	0	Interest received	0
Web-site development	30000	Hired transport	66000	Materials inventory	53485	Asset sales	0
Personnel department	8000	Less closing inventory values	<u>63868</u>	Trade receivables	1085374	Assets purchased	<u>0</u>
Machine maintenance	14875	Cost of sales	<u>970025</u>	Cash and cash equivalents	<u>2093304</u>	Net cash flow from investing	0
Purchasing and warehousing	8476	Gross profit	1539785	Current assets	<u>3242546</u>	Financing activities:	
Business intelligence	7500	Administrative expenses	1138847	Total assets	5849253	Shares issued	0
Credit control	5136	Insurance receipts	1552	Liabilities:		Shares repurchased	0
Insurance premiums	9438	Depreciation	<u>43764</u>	Tax due	0	Dividends paid	0
Management salaries	115000	Operating profit/loss	358726	Trade payables	680308	Additional loans	0
Other costs	<u>19507</u>	Finance income	0	Bank overdraft	<u>0</u>	Interest paid	<u>0</u>
Total administrative expenses	<u>1138847</u>	Finance expense	<u>0</u>	Current liabilities	680308	Net cash flow from financing	0
Accumulated taxable profit:		Profit/loss before tax	358726	Term loans	0	Net cash flow	92599
Profit/loss before tax	358726	Tax assessed	<u>0</u>	Net assets	5168945	Previous cash balance	<u>2000705</u>
Previous taxable profit/loss	<u>217679</u>	Profit/loss for the period	358726	Equity:		Cash balance	<u>2093304</u>
Taxable profit/loss	576405	Earnings per share (cents)	8,97	Share capital	4000000	(including a term deposit of -	0)
		Dividends paid	<u>0</u>	Share premium account	0	Overdraft limit for next quarter	778000
Insurance claimed	6945	Transferred to retained earnings	358726	Retained earnings	<u>1168945</u>	Borrowing power next quarter	1932000
Primary non-insured risk	5393	Retained earnings	1168945	Total equity	5168945		

Appendix 1.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2011

Qtr 2

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4074	4277	59	
% Unemployment rate (de-seasonalised)	7,1	5,1		
Balance of external trade	1767	1840		
Information about next quarter:				
Central Bank base rate (% p.a.)	4,4	3,4	Exchange rate in € per \$ (USD)	1,03
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	95	146	227	
to (100% premium materials)	113	182	280	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	34718	34388	33409	
BUSINESS REPORT:	Governments are looking at ways to regulate investment managers. They are concerned that the best interest of customers have been ignored in the past and wish to ensure this situation is corrected.			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	135,52	135,52	135,52	135,52	135,52	135,52	135,52	135,52
Market valuation (€)	5420800	5420800	5420800	5420800	5420800	5420800	5420800	5420800
Dividend paid (cents/share)	0	0	0	0	0	0	0	0
Investment performance (€)	5420800	5420800	5420800	5420800	5420800	5420800	5420800	5420800
Business intelligence:								
Product prices (€)								
Product 1: Europe	360	360	360	360	360	360	360	360
Nafta	360	360	360	360	360	360	360	360
Internet	340	340	340	340	340	340	340	340
Product 2: Europe	610	610	610	610	610	610	610	610
Nafta	610	610	610	610	610	610	610	610
Internet	520	520	520	520	520	520	520	520
Product 3: Europe	850	850	850	850	850	850	850	850
Nafta	850	850	850	850	850	850	850	850
Internet	740	740	740	740	740	740	740	740
Production employees	82	82	82	82	82	82	82	82
Assembly wage rate (cents/hr)	1000	1000	1000	1000	1000	1000	1000	1000
Number of agents/distributors	5	5	5	5	5	5	5	5

Appendix 1.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2011

Qtr 2

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4	5	6	7	8
Assets								
Property, plant and equipment	2606707	2606707	2606707	2606707	2606707	2606707	2606707	2606707
Inventories	63868	63868	63868	63868	63868	63868	63868	63868
Trade receivables	1085374	1085374	1085374	1085374	1085374	1085374	1085374	1085374
Cash and cash equivalents	2093304	2093304	2093304	2093304	2093304	2093304	2093304	2093304
Liabilities								
Tax assessed and due	0	0	0	0	0	0	0	0
Trade payables	680308	680308	680308	680308	680308	680308	680308	680308
Bank overdraft	0	0	0	0	0	0	0	0
Long term loans	0	0	0	0	0	0	0	0
Equity								
Ordinary capital	4000000	4000000	4000000	4000000	4000000	4000000	4000000	4000000
Share premium account	0	0	0	0	0	0	0	0
Retained earnings	1168945	1168945	1168945	1168945	1168945	1168945	1168945	1168945
Net Worth	5168945	5168945	5168945	5168945	5168945	5168945	5168945	5168945

PURCHASED INFORMATION								
Company number:								Not requested
Market shares (% by volume sold)								
Product 1: Europe								
Nafta								
Internet								
Product 2: Europe								
Nafta								
Internet								
Product 3: Europe								
Nafta								
Internet								
Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	360000	360000	360000	360000	360000	360000	360000	360000
Total product development (€)	90000	90000	90000	90000	90000	90000	90000	90000
Consumer star ratings:								
Product 1	**	**	**	**	**	**	**	**
Product 2	**	**	**	**	**	**	**	**
Product 3	****	****	****	****	****	****	****	****
Web-site	****	****	****	****	****	****	****	****

Appendix 2. Historical report 2

Appendix 2.1 Management report

Management Report

This is a history quarter

Code: 12C3

for **Group 1** **Company 1**

PLEASE CHECK ...		your decisions				Year 2011 Qtr 3				
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %
Europe		30	30	30	30	European agents	2	13	13	
Nafta		30	30	30	30	Nafta distributors	3	13	13	
Internet		30	30	30	30	Internet distributor		11	11	
Prices (€):						Operations:				
Europe		360	610	850		Materials to buy ('000) Spot	8	3mth 0	6mth 0	
Nafta		360	610	850		Maintenance hours/machine	25	Shift level	2	
Internet		340	520	740		Number of ports operated	10	Web-site development	30	
Quantities to deliver to:						Personnel:				
European agents		550	300	200		Assembly workers to recruit	0	Number to train	0	
(Not in full Nafta distributors if starred)		700	300	250		Hourly wage rate (€c)	10,00	Staff training (days)	0	
Internet distributor		1250	900	475		Management budget (€'000)	115			
Quality:						Finance:				
Take up product improvements		0	0	0		Shares to issue/repurchase	0	Dividend (cents/share)	0	
Product development (€'000)		30	30	30		Term loans (€'000)	0	Term deposit (€'000)	0	
Assembly times (minutes)		115	165	325		Machines to buy	0	Machines to sell	0	
Premium materials (%)		0	0	0		Factory extension (sq. m.)	0	Insurance plan	2	
Subcontracting:						Information:				
Components to order (units)		0	0	0		Market shares	0	Corporate activity	1	

Appendix 2.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2011

Qtr 3

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	6300
Factory size next quarter	900
Circulation and access	225
Machining operations	175
Assembly operations	260
Material and component stocks	5
Available space (overflow if negative)	235
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	119
Hours worked	7334
Hours planned maintenance	56
Average machine efficiency %	87.6
Materials:	
Opening stock available	1727
Bought spot	8000
Bought default	0
Lost or destroyed	0
Used	8540
Closing stock	1187
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	11
Number of visits to your web-site	56833
Estimated level of failed visits (%)	1
Number of internet service complaints	119

HUMAN RESOURCES:		
Production personnel:	Assembly	Machining
At start of last quarter	26	48
Recruited	0	8
Trained	0	
Dismissed	0	0
Left	0	8
Available for next quarter	26	48
Assembly workers:		
Hours available		14976
Absenteeism/sickness (hours)		308
Hours worked		14370
Notice of strike weeks for next quarter		0

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	2	3	1
Resigned	0	0	
Dismissed	0	0	0
Appointed	0	0	0
Active next quarter	2	3	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1434	500	300
Number of loads	4	5	10

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	8,55
Energy used in production	30,35
Total primary CO2e	38,90

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	2500	1500	925
Produced	2577	1549	955
Rejected	77	49	30
Lost or destroyed	0	0	0
Delivered to:			
European agents	550	300	200
Nafta distributors	700	300	250
Internet distributor	1250	900	475
Orders from:			
Europe	745	301	280
Nafta	725	300	249
Internet	1321	866	508
Sold to:			
Europe	550	300	200
Nafta	700	300	250
Internet	1316	866	478
Backlog of orders:			
Europe	108	5	71
Nafta	21	23	26
Warehouse stocks:			
Europe	0	0	0
Nafta	0	0	0
Internet	0	55	0
Guarantee services	86	47	242 !
Product improvements	Minor	Minor	Major
Product components:			
Assembled last quarter	0	0	0
Ordered last quarter	0	0	0
Closing stock	0	0	0
Available for assembly	0	0	0

Appendix 2.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2011

Qtr 3

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
	€		€		€		€
ADMINISTRATIVE EXPENSES		Sales revenue	2460580	Non-current assets:		Operating activities:	
Advertising	360000	Opening inventory values	63868	Land	450000	Trading receipts	2460236
Internet distributor	148662	Components purchased	0	Buildings	450000	Insurance receipts	34221
Internet service provider	48543	Materials purchased	286072	Machinery	1664038	Trading payments	2128152
Agents and distributors	238850	Machine running costs	113097	Property, plant and equipment	2564038	Tax paid	0
Sales office	26208	Machinists wages	302724			Net cash flow from operations	366305
Guarantee servicing	59522	Assembly wages	167280	Current assets:		Investing activities:	
Product development	90000	Quality control	5081	Product inventories	8305	Interest received	0
Web-site development	30000	Hired transport	63400	Component inventories	0	Asset sales	0
Personnel department	8000	Less closing inventory values	43797	Materials inventory	35492	Assets purchased	0
Machine maintenance	14875	Cost of sales	957725	Trade receivables	1085718	Net cash flow from investing	0
Purchasing and warehousing	7751	Gross profit	1502855	Cash and cash equivalents	2459609		
Business intelligence	7500	Administrative expenses	1188774	Current assets	3589124	Financing activities:	
Credit control	4960	Insurance receipts	34221	Total assets	6153162	Shares issued	0
Insurance premiums	9347	Depreciation	42669			Shares repurchased	0
Management salaries	115000	Operating profit/loss	305633	Liabilities:		Dividends paid	0
Other costs	19556	Finance income	0	Tax due	0	Additional loans	0
Total administrative expenses	1188774	Finance expense	0	Trade payables	678584	Interest paid	0
		Profit/loss before tax	305633	Bank overdraft	0	Net cash flow from financing	0
Accumulated taxable profit:		Tax assessed	0	Current liabilities	678584		
Profit/loss before tax	305633	Profit/loss for the period	305633	Term loans	0	Net cash flow	366305
Previous taxable profit/loss	576405	Earnings per share (cents)	7,64			Previous cash balance	2093304
Taxable profit/loss	882038			Net assets	5474578	Cash balance	2459609
		Dividends paid	0			(including a term deposit of -	0)
Insurance claimed	39562	Transferred to retained earnings	305633	Equity:		Overdraft limit for next quarter	770000
Primary non-insured risk	5341	Previous retained earnings	1168945	Share capital	4000000	Borrowing power next quarter	2003000
		Retained earnings	1474578	Share premium account	0		
				Retained earnings	1474578		
				Total equity	5474578		

Appendix 2.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2011

Qtr 3

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4117	4307	60	
% Unemployment rate (de-seasonalised)	7,2	5,1		
Balance of external trade	1693	1715		
Information about next quarter:				
Central Bank base rate (% p.a.)	4,4	3,1	Exchange rate in € per \$ (USD)	1,03
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	93	142	221	
to (100% premium materials)	110	176	272	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	32992	32567	32256	
BUSINESS REPORT:	European orders have been flat in past quarters. Production managers have to decide whether to reduce output. Can the marketing team increase orders or is this expecting too much?			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	138,67	138,67	138,67	138,67	138,67	138,67	138,67	138,67
Market valuation (€)	5546800	5546800	5546800	5546800	5546800	5546800	5546800	5546800
Dividend paid (cents/share)	0	0	0	0	0	0	0	0
Investment performance (€)	5546800	5546800	5546800	5546800	5546800	5546800	5546800	5546800
Business intelligence:								
Product prices (€)								
Product 1: Europe	360	360	360	360	360	360	360	360
Nafta	360	360	360	360	360	360	360	360
Internet	340	340	340	340	340	340	340	340
Product 2: Europe	610	610	610	610	610	610	610	610
Nafta	610	610	610	610	610	610	610	610
Internet	520	520	520	520	520	520	520	520
Product 3: Europe	850	850	850	850	850	850	850	850
Nafta	850	850	850	850	850	850	850	850
Internet	740	740	740	740	740	740	740	740
Production employees	82	82	82	82	82	82	82	82
Assembly wage rate (cents/hr)	1000	1000	1000	1000	1000	1000	1000	1000
Number of agents/distributors	5	5	5	5	5	5	5	5

Appendix 2.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2011

Qtr 3

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4	5	6	7	8
Assets								
Property, plant and equipment	2564038	2564038	2564038	2564038	2564038	2564038	2564038	2564038
Inventories	43797	43797	43797	43797	43797	43797	43797	43797
Trade receivables	1085718	1085718	1085718	1085718	1085718	1085718	1085718	1085718
Cash and cash equivalents	2459609	2459609	2459609	2459609	2459609	2459609	2459609	2459609
Liabilities								
Tax assessed and due	0	0	0	0	0	0	0	0
Trade payables	678584	678584	678584	678584	678584	678584	678584	678584
Bank overdraft	0	0	0	0	0	0	0	0
Long term loans	0	0	0	0	0	0	0	0
Equity								
Ordinary capital	4000000	4000000	4000000	4000000	4000000	4000000	4000000	4000000
Share premium account	0	0	0	0	0	0	0	0
Retained earnings	1474578	1474578	1474578	1474578	1474578	1474578	1474578	1474578
Net Worth	5474578	5474578	5474578	5474578	5474578	5474578	5474578	5474578

PURCHASED INFORMATION								
Company number:								Not requested
Market shares (% by volume sold)								
Product 1: Europe								
Nafta								
Internet								
Product 2: Europe								
Nafta								
Internet								
Product 3: Europe								
Nafta								
Internet								
Competitors' business activity								
Company number:								
Total advertising expenditure (€)	360000	360000	360000	360000	360000	360000	360000	360000
Total product development (€)	90000	90000	90000	90000	90000	90000	90000	90000
Consumer star ratings:								
Product 1	**	**	**	**	**	**	**	**
Product 2	**	**	**	**	**	**	**	**
Product 3	***	***	***	***	***	***	***	***
Web-site	****	****	****	****	****	****	****	****

Appendix 3. Historical report 3

Appendix 3.1 Management report

Management Report

This is a history quarter

Code: 12C3

for **Group 1** **Company 1**

PLEASE CHECK ...		your decisions				Year 2011 Qtr 4					
		Corporate	Product 1	Product 2	Product 3			Number needed	Support (€'000)	Commn. %	
Advertising: (€'000)						Agents and distributors:					
	Europe	30	30	30	30		European agents	2	13	13	
	Nafta	30	30	30	30		Nafta distributors	3	13	13	
	Internet	30	30	30	30		Internet distributor		11	11	
Prices (€):						Operations:					
	Europe	360	610	850		Materials to buy ('000) Spot	7	3mth	0	6mth	0
	Nafta	360	610	850		Maintenance hours/machine	25	Shift level			2
	Internet	340	520	740		Number of ports operated	11	Web-site development			30
Quantities to deliver to:						Personnel:					
	European agents	800 *	330 *	375 *		Assembly workers to recruit	0	Number to train			0
(Not in full if starred)	Nafta distributors	800 *	350 *	300 *		Hourly wage rate (€c)	10,00	Staff training (days)			0
	Internet distributor	1310 *	800 *	450 *		Management budget (€'000)	115				
Quality:						Finance:					
	Take up product improvements	0	0	1		Shares to issue/repurchase	0	Dividend (cents/share)			0
	Product development (€'000)	30	30	30		Term loans (€'000)	0	Term deposit (€'000)			0
	Assembly times (minutes)	115	165	325		Machines to buy	0	Machines to sell			0
	Premium materials (%)	0	0	0		Factory extension (sq. m.)	0	Insurance plan			2
Subcontracting:						Information:					
	Components to order (units)	0	0	0		Market shares	0	Corporate activity			1

Appendix 3.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2011

Qtr 4

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	6300
Factory size next quarter	900
Circulation and access	225
Machining operations	175
Assembly operations	260
Material and component stocks	0
Available space (overflow if negative)	240
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	115
Hours worked	7358
Hours planned maintenance	60
Average machine efficiency %	86.6
Materials:	
Opening stock available	1187
Bought spot	7000
Bought default	262
Lost or destroyed	45
Used	8404
Closing stock	0
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	11
Number of visits to your web-site	64174
Estimated level of failed visits (%)	1
Number of internet service complaints	103

HUMAN RESOURCES:																					
Production personnel:	<table border="1"> <thead> <tr> <th>Assembly</th> <th>Machining</th> </tr> </thead> <tbody> <tr> <td>At start of last quarter</td> <td>26</td> <td>48</td> </tr> <tr> <td>Recruited</td> <td>0</td> <td>8</td> </tr> <tr> <td>Trained</td> <td>0</td> <td></td> </tr> <tr> <td>Dismissed</td> <td>0</td> <td>0</td> </tr> <tr> <td>Left</td> <td>0</td> <td>8</td> </tr> <tr> <td>Available for next quarter</td> <td>26</td> <td>48</td> </tr> </tbody> </table>	Assembly	Machining	At start of last quarter	26	48	Recruited	0	8	Trained	0		Dismissed	0	0	Left	0	8	Available for next quarter	26	48
Assembly	Machining																				
At start of last quarter	26	48																			
Recruited	0	8																			
Trained	0																				
Dismissed	0	0																			
Left	0	8																			
Available for next quarter	26	48																			
Assembly workers:																					
Hours available	14976																				
Absenteeism/sickness (hours)	248																				
Hours worked	14307																				
Notice of strike weeks for next quarter	0																				

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	2	3	1
Resigned	0	0	
Dismissed	0	0	0
Appointed	0	0	0
Active next quarter	2	3	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1434	500	300
Number of loads	6	5	9

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	8,55
Energy used in production	30,40
Total primary CO2e	38,95

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	2564	1304	990
Produced	2643	1346	1023
Rejected	79	42	33
Lost or destroyed	0	0	0
Delivered to:			
European agents	704	290	330
Nafta distributors	705	308	264
Internet distributor	1155	706	396
Orders from:			
Europe	742	339	349
Nafta	808	354	310
Internet	1507	986	580
Sold to:			
Europe	704	290	330
Nafta	705	308	264
Internet	1155	761	396
Backlog of orders:			
Europe	73	27	45
Nafta	62	34	36
Warehouse stocks:			
Europe	0	0	0
Nafta	0	0	0
Internet	0	0	0
Guarantee services	89	51	33
Product improvements	Minor	Minor	Minor
Product components:			
Assembled last quarter	0	0	0
Ordered last quarter	0	0	0
Closing stock	0	0	0
Available for assembly	0	0	0

Appendix 3.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2011

Qtr 4

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
	€		€		€		€
ADMINISTRATIVE EXPENSES		Sales revenue	2468860	Non-current assets:		Operating activities:	
Advertising	360000	Opening inventory values	43797	Land	450000	Trading receipts	2347881
Internet distributor	129960	Components purchased	0	Buildings	450000	Insurance receipts	0
Internet service provider	42443	Materials purchased	247667	Machinery	1622442	Trading payments	2099669
Agents and distributors	251761	Machine running costs	113879	Property, plant and equipment	2522442	Tax paid	0
Sales office	29951	Machinists w ages	304129			Net cash flow from operations	248212
Guarantee servicing	21240	Assembly w ages	166019	Current assets:		Investing activities:	
Product development	90000	Quality control	5012	Product inventories	0	Interest received	0
Web-site development	30000	Hired transport	67950	Component inventories	0	Asset sales	0
Personnel department	8000	Less closing inventory values	0	Materials inventory	0	Assets purchased	0
Machine maintenance	14875	Cost of sales	948453	Trade receivables	1206697	Net cash flow from investing	0
Purchasing and warehousing	7594	Gross profit	1520407	Cash and cash equivalents	2707821		
Business intelligence	7500	Administrative expenses	1141921	Current assets	3914518	Financing activities:	
Credit control	4913	Insurance receipts	0	Total assets	6436960	Shares issued	0
Insurance premiums	9127	Depreciation	41596			Shares repurchased	0
Management salaries	115000	Operating profit/loss	336890	Liabilities:		Dividends paid	0
Other costs	19557	Finance income	0	Tax due	365678	Additional loans	0
Total administrative expenses	1141921	Finance expense	0	Trade payables	625492	Interest paid	0
		Profit/loss before tax	336890	Bank overdraft	0	Net cash flow from financing	0
Accumulated taxable profit:		Tax assessed	365678	Current liabilities	991170		
Profit/loss before tax	336890	Profit/loss for the period	-28788	Term loans	0	Net cash flow	248212
Previous taxable profit/loss	882038	Earnings per share (cents)	-0,72	Net assets	5445790	Previous cash balance	2459609
Taxable profit/loss	1218928			Equity:		Cash balance	2707821
		Dividends paid	0	Share capital	4000000	(including a term deposit of -	0)
Insurance claimed	3177	Transferred to retained earnings	-28788	Share premium account	0	Overdraft limit for next quarter	545000
Primary non-insured risk	5215	Previous retained earnings	1474578	Retained earnings	1445790	Borrowing power next quarter	2376000
		Retained earnings	1445790	Total equity	5445790		

Appendix 3.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2011

Qtr 4

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4154	4336	60	
% Unemployment rate (de-seasonalised)	7,3	5,1		
Balance of external trade	1831	1995		
Information about next quarter:				
Central Bank base rate (% p.a.)	4,3	3,2	Exchange rate in € per \$ (USD)	1,02
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	93	142	220	
to (100% premium materials)	110	175	270	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	32888	32487	32016	
BUSINESS REPORT:	Asian manufacturing grew recently boosted by a growth in exports. This has offset weak domestic demand.			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	146,03	146,03	146,03	146,03	146,03	146,03	146,03	146,03
Market valuation (€)	5841200	5841200	5841200	5841200	5841200	5841200	5841200	5841200
Dividend paid (cents/share)	0	0	0	0	0	0	0	0
Investment performance (€)	5841200	5841200	5841200	5841200	5841200	5841200	5841200	5841200
Business intelligence:								
Product prices (€)								
Product 1: Europe	360	360	360	360	360	360	360	360
Nafta	360	360	360	360	360	360	360	360
Internet	340	340	340	340	340	340	340	340
Product 2: Europe	610	610	610	610	610	610	610	610
Nafta	610	610	610	610	610	610	610	610
Internet	520	520	520	520	520	520	520	520
Product 3: Europe	850	850	850	850	850	850	850	850
Nafta	850	850	850	850	850	850	850	850
Internet	740	740	740	740	740	740	740	740
Production employees	82	82	82	82	82	82	82	82
Assembly wage rate (cents/hr)	1000	1000	1000	1000	1000	1000	1000	1000
Number of agents/distributors	5	5	5	5	5	5	5	5

Appendix 3.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2011

Qtr 4

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4	5	6	7	8
Assets								
Property, plant and equipment	2522442	2522442	2522442	2522442	2522442	2522442	2522442	2522442
Inventories	0	0	0	0	0	0	0	0
Trade receivables	1206697	1206697	1206697	1206697	1206697	1206697	1206697	1206697
Cash and cash equivalents	2707821	2707821	2707821	2707821	2707821	2707821	2707821	2707821
Liabilities								
Tax assessed and due	365678	365678	365678	365678	365678	365678	365678	365678
Trade payables	625492	625492	625492	625492	625492	625492	625492	625492
Bank overdraft	0	0	0	0	0	0	0	0
Long term loans	0	0	0	0	0	0	0	0
Equity								
Ordinary capital	4000000	4000000	4000000	4000000	4000000	4000000	4000000	4000000
Share premium account	0	0	0	0	0	0	0	0
Retained earnings	1445790	1445790	1445790	1445790	1445790	1445790	1445790	1445790
Net Worth	5445790	5445790	5445790	5445790	5445790	5445790	5445790	5445790

PURCHASED INFORMATION	Not requested							
Company number:								
Market shares (% by volume sold)								
Product 1: Europe								
Nafta								
Internet								
Product 2: Europe								
Nafta								
Internet								
Product 3: Europe								
Nafta								
Internet								
Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	360000	360000	360000	360000	360000	360000	360000	360000
Total product development (€)	90000	90000	90000	90000	90000	90000	90000	90000
Consumer star ratings:								
Product 1	**	**	**	**	**	**	**	**
Product 2	**	**	**	**	**	**	**	**
Product 3	*****	*****	*****	*****	*****	*****	*****	*****
Web-site	****	****	****	****	****	****	****	****

Appendix 4. Historical report 4

Appendix 4.1 Management report

Management Report

This is a history quarter

Code: 12C3

for **Group 1** **Company 1**

PLEASE CHECK ...		your decisions				Year 2012 Qtr 1				
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %
Europe		30	30	30	30	European agents	2	13	13	
Nafta		30	30	30	30	Nafta distributors	3	13	13	
Internet		30	30	30	30	Internet distributor		11	11	
Prices (€):						Operations:				
Europe		360	610	850		Materials to buy ('000) Spot	10	3mth 0	6mth 0	
Nafta		360	610	850		Maintenance hours/machine	25	Shift level	2	
Internet		340	520	740		Number of ports operated	11	Web-site development	30	
Quantities to deliver to:						Personnel:				
European agents		730 *	300 *	330 *		Assembly workers to recruit	0	Number to train	0	
(Not in full Nafta distributors		700 *	300 *	275 *		Hourly wage rate (€c)	10,00	Staff training (days)	0	
if starred) Internet distributor		1280 *	850 *	500 *		Management budget (€'000)	115			
Quality:						Finance:				
Take up product improvements		0	0	0		Shares to issue/repurchase	0	Dividend (cents/share)	6	
Product development (€'000)		30	30	30		Term loans (€'000)	0	Term deposit (€'000)	0	
Assembly times (minutes)		115	165	325		Machines to buy	0	Machines to sell	0	
Premium materials (%)		0	0	0		Factory extension (sq. m.)	0	Insurance plan	2	
Subcontracting:						Information:				
Components to order (units)		0	0	0		Market shares	0	Corporate activity	1	

Appendix 4.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2012

Qtr 1

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	6300
Factory size next quarter	900
Circulation and access	225
Machining operations	175
Assembly operations	260
Material and component stocks	8
Available space (overflow if negative)	232
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	114
Hours worked	7360
Hours planned maintenance	61
Average machine efficiency %	85.4
Materials:	
Opening stock available	0
Bought spot	10000
Bought default	0
Lost or destroyed	0
Used	8339
Closing stock	1661
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	11
Number of visits to your web-site	70249
Estimated level of failed visits (%)	1
Number of internet service complaints	105

HUMAN RESOURCES:		
Production personnel:	Assembly	Machining
At start of last quarter	26	48
Recruited	0	8
Trained	0	
Dismissed	0	0
Left	0	8
Available for next quarter	26	48
Assembly workers:		
Hours available		14976
Absenteeism/sickness (hours)		251
Hours worked		14170
Notice of strike weeks for next quarter		0

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	2	3	1
Resigned	0	0	
Dismissed	0	0	0
Appointed	0	0	0
Active next quarter	2	3	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1434	500	300
Number of loads	5	5	9

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	8,55
Energy used in production	<u>30,33</u>
Total primary CO2e	38,88

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	2377	1313	1000
Produced	2530	1355	1033
Rejected	76	42	33
Lost or destroyed	77 !	0	0
Delivered to:			
European agents	640	271	298
Nafta distributors	614	271	249
Internet distributor	1123	771	453
Orders from:			
Europe	690	305	309
Nafta	684	303	262
Internet	1227	843	502
Sold to:			
Europe	640	271	298
Nafta	614	271	249
Internet	1123	771	453
Backlog of orders:			
Europe	61	30	28
Nafta	66	33	24
Warehouse stocks:			
Europe	0	0	0
Nafta	0	0	0
Internet	0	0	0
Guarantee services	91	50	35
Product improvements	Minor	Major	Minor
Product components:			
Assembled last quarter	0	0	0
Ordered last quarter	0	0	0
Closing stock	0	0	0
Available for assembly	0	0	0

Appendix 4.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2012

Qtr 1

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
	€		€		€		€
ADMINISTRATIVE EXPENSES		Sales revenue	2375330	Non-current assets:		Operating activities:	
Advertising	360000	Opening inventory values	0	Land	450000	Trading receipts	2469273
Internet distributor	133975	Components purchased	0	Buildings	450000	Insurance receipts	22676
Internet service provider	44537	Materials purchased	335460	Machinery	1581881	Trading payments	2070459
Agents and distributors	233361	Machine running costs	113645	Property, plant and equipment	2481881	Tax paid	0
Sales office	25778	Machinists wages	304171			Net cash flow from operations	421490
Guarantee servicing	21710	Assembly wages	163279	Current assets:		Investing activities:	
Product development	90000	Quality control	4918	Product inventories	0	Interest received	0
Web-site development	30000	Hired transport	65350	Component inventories	0	Asset sales	0
Personnel department	8000	Less closing inventory values	48938	Materials inventory	48938	Assets purchased	0
Machine maintenance	14875	Cost of sales	937885	Trade receivables	1112754	Net cash flow from investing	0
Purchasing and warehousing	7500	Gross profit	1437445	Cash and cash equivalents	2889311		
Business intelligence	7500	Administrative expenses	1125309	Current assets	4051003	Financing activities:	
Credit control	4690	Insurance receipts	22676	Total assets	6532884	Shares issued	0
Insurance premiums	8828	Depreciation	40561			Shares repurchased	0
Management salaries	115000	Operating profit/loss	294251	Liabilities:		Dividends paid	240000
Other costs	19555	Finance income	0	Tax due	365678	Additional loans	0
Total administrative expenses	1125309	Finance expense	0	Trade payables	667165	Interest paid	0
Accumulated taxable profit:		Profit/loss before tax	294251	Bank overdraft	0	Net cash flow from financing	-240000
Profit/loss before tax	294251	Tax assessed	0	Current liabilities	1032843		
Previous taxable profit/loss	0	Profit/loss for the period	294251	Term loans	0	Net cash flow	181490
Taxable profit/loss	294251	Earnings per share (cents)	7,36			Previous cash balance	2707821
				Net assets	5500041	Cash balance	2889311
		Dividends paid	240000	Equity:		(including a term deposit of -	0)
Insurance claimed	27720	Transferred to retained earnings	54251	Share capital	4000000	Overdraft limit for next quarter	443000
Primary non-insured risk	5044	Previous retained earnings	1445790	Share premium account	0	Borrowing power next quarter	2503000
		Retained earnings	1500041	Retained earnings	1500041		
				Total equity	5500041		

Appendix 4.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2012

Qtr 1

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4191	4373	61	
% Unemployment rate (de-seasonalised)	7,2	5,0		
Balance of external trade	1995	1976		
Information about next quarter:				
Central Bank base rate (% p.a.)	4,2	4,2	Exchange rate in € per \$ (USD)	1,02
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	93	142	220	
to (100% premium materials)	110	175	271	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	32958	32587	32095	
BUSINESS REPORT:	Information is critical to the ongoing development of business. Often the management team are so busy dealing with day to day decisions that they cannot keep abreast of new developments.			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	147,28	147,28	147,28	147,28	147,28	147,28	147,28	147,28
Market valuation (€)	5891200	5891200	5891200	5891200	5891200	5891200	5891200	5891200
Dividend paid (cents/share)	6	6	6	6	6	6	6	6
Investment performance (€)	6133780	6133780	6133780	6133780	6133780	6133780	6133780	6133780
Business intelligence:								
Product prices (€)								
Product 1: Europe	360	360	360	360	360	360	360	360
Nafta	360	360	360	360	360	360	360	360
Internet	340	340	340	340	340	340	340	340
Product 2: Europe	610	610	610	610	610	610	610	610
Nafta	610	610	610	610	610	610	610	610
Internet	520	520	520	520	520	520	520	520
Product 3: Europe	850	850	850	850	850	850	850	850
Nafta	850	850	850	850	850	850	850	850
Internet	740	740	740	740	740	740	740	740
Production employees	82	82	82	82	82	82	82	82
Assembly wage rate (cents/hr)	1000	1000	1000	1000	1000	1000	1000	1000
Number of agents/distributors	5	5	5	5	5	5	5	5

Appendix 4.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2012

Qtr 1

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4	5	6	7	8
Assets								
Property, plant and equipment	2481881	2481881	2481881	2481881	2481881	2481881	2481881	2481881
Inventories	48938	48938	48938	48938	48938	48938	48938	48938
Trade receivables	1112754	1112754	1112754	1112754	1112754	1112754	1112754	1112754
Cash and cash equivalents	2889311	2889311	2889311	2889311	2889311	2889311	2889311	2889311
Liabilities								
Tax assessed and due	365678	365678	365678	365678	365678	365678	365678	365678
Trade payables	667165	667165	667165	667165	667165	667165	667165	667165
Bank overdraft	0	0	0	0	0	0	0	0
Long term loans	0	0	0	0	0	0	0	0
Equity								
Ordinary capital	4000000	4000000	4000000	4000000	4000000	4000000	4000000	4000000
Share premium account	0	0	0	0	0	0	0	0
Retained earnings	1500041	1500041	1500041	1500041	1500041	1500041	1500041	1500041
Net Worth	5500041	5500041	5500041	5500041	5500041	5500041	5500041	5500041

PURCHASED INFORMATION								
								Not requested
Company number:								
Market shares (% by volume sold)								
Product 1: Europe								
Nafta								
Internet								
Product 2: Europe								
Nafta								
Internet								
Product 3: Europe								
Nafta								
Internet								
Competitors' business activity								
Company number:								
Total advertising expenditure (€)	360000	360000	360000	360000	360000	360000	360000	360000
Total product development (€)	90000	90000	90000	90000	90000	90000	90000	90000
Consumer star ratings:								
Product 1	**	**	**	**	**	**	**	**
Product 2	**	**	**	**	**	**	**	**
Product 3	*****	*****	*****	*****	*****	*****	*****	*****
Web-site	****	****	****	****	****	****	****	****

Appendix 5. Historical report 5

Appendix 5.1 Management report

Management Report

This is a history quarter

Code: 12C3

for **Group 1** **Company 1**

PLEASE CHECK ...		your decisions				Year 2012		Qtr 2		
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %
Europe		30	30	30	30	European agents		2	13	13
Nafta		30	30	30	30	Nafta distributors		3	13	13
Internet		30	30	30	30	Internet distributor			11	11
Prices (€):						Operations:				
Europe		360	610	850		Materials to buy ('000) Spot		10	3mth 0	6mth 0
Nafta		360	610	850		Maintenance hours/machine		25	Shift level	2
Internet		340	520	740		Number of ports operated		11	Web-site development	30
Quantities to deliver to:						Personnel:				
European agents		800 *	375 *	250 *		Assembly workers to recruit		0	Number to train	0
(Not in full Nafta distributors if starred)		720 *	275 *	280 *		Hourly wage rate (€c)		10,00	Staff training (days)	0
Internet distributor		1375 *	925 *	550 *		Management budget (€'000)		115		
Quality:						Finance:				
Take up product improvements		0	0	0		Shares to issue/repurchase		0	Dividend (cents/share)	0
Product development (€'000)		30	30	30		Term loans (€'000)		0	Term deposit (€'000)	0
Assembly times (minutes)		115	165	325		Machines to buy		0	Machines to sell	0
Premium materials (%)		0	0	0		Factory extension (sq. m.)		0	Insurance plan	2
Subcontracting:						Information:				
Components to order (units)		0	0	0		Market shares		0	Corporate activity	1

Appendix 5.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2012

Qtr 2

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	6300
Factory size next quarter	900
Circulation and access	225
Machining operations	175
Assembly operations	260
Material and component stocks	17
Available space (overflow if negative)	223
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	114
Hours worked	7360
Hours planned maintenance	61
Average machine efficiency %	84.1
Materials:	
Opening stock available	1661
Bought spot	10000
Bought default	0
Lost or destroyed	0
Used	8189
Closing stock	3472
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	11
Number of visits to your web-site	75044
Estimated level of failed visits (%)	2
Number of internet service complaints	109

HUMAN RESOURCES:																					
Production personnel:	<table border="1"> <thead> <tr> <th>Assembly</th> <th>Machining</th> </tr> </thead> <tbody> <tr> <td>At start of last quarter</td> <td>26</td> <td>48</td> </tr> <tr> <td>Recruited</td> <td>0</td> <td>8</td> </tr> <tr> <td>Trained</td> <td>0</td> <td></td> </tr> <tr> <td>Dismissed</td> <td>0</td> <td>0</td> </tr> <tr> <td>Left</td> <td>0</td> <td>8</td> </tr> <tr> <td>Available for next quarter</td> <td>26</td> <td>48</td> </tr> </tbody> </table>	Assembly	Machining	At start of last quarter	26	48	Recruited	0	8	Trained	0		Dismissed	0	0	Left	0	8	Available for next quarter	26	48
Assembly	Machining																				
At start of last quarter	26	48																			
Recruited	0	8																			
Trained	0																				
Dismissed	0	0																			
Left	0	8																			
Available for next quarter	26	48																			
Assembly workers:																					
Hours available	14976																				
Absenteeism/sickness (hours)	282																				
Hours worked	13871																				
Notice of strike weeks for next quarter	0																				

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	2	3	1
Resigned	0	0	
Dismissed	0	0	0
Appointed	0	0	0
Active next quarter	2	3	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1434	500	300
Number of loads	5	5	10

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	8,55
Energy used in production	30,18
Total primary CO2e	38,73

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	2474	1346	923
Produced	2550	1390	953
Rejected	76	44	30
Lost or destroyed	0	0	0
Delivered to:			
European agents	683	320	213
Nafta distributors	615	235	239
Internet distributor	1176	791	471
Orders from:			
Europe	735	333	333
Nafta	728	314	282
Internet	1345	900	535
Sold to:			
Europe	683	320	213
Nafta	615	235	239
Internet	1176	791	471
Backlog of orders:			
Europe	56	21	74
Nafta	89	56	33
Warehouse stocks:			
Europe	0	0	0
Nafta	0	0	0
Internet	0	0	0
Guarantee services	90	50	36
Product improvements	Major	Major	Major
Product components:			
Assembled last quarter	0	0	0
Ordered last quarter	0	0	0
Closing stock	0	0	0
Available for assembly	0	0	0

Appendix 5.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2012

Qtr 2

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
	€		€		€		€
ADMINISTRATIVE EXPENSES		Sales revenue	2359890	Non-current assets:		Operating activities:	
Advertising	360000	Opening inventory values	48938	Land	450000	Trading receipts	2415380
Internet distributor	138566	Components purchased	0	Buildings	450000	Insurance receipts	0
Internet service provider	45790	Materials purchased	336170	Machinery	1542332	Trading payments	2117627
Agents and distributors	236426	Machine running costs	113930	Property, plant and equipment	2442332	Tax paid	365678
Sales office	27653	Machinists w ages	304171			Net cash flow from operations	-67925
Guarantee servicing	21900	Assembly w ages	157299	Current assets:		Investing activities:	
Product development	90000	Quality control	4893	Product inventories	0	Interest received	0
Web-site development	30000	Hired transport	66000	Component inventories	0	Asset sales	0
Personnel department	8000	Less closing inventory values	103013	Materials inventory	103013	Assets purchased	0
Machine maintenance	14875	Cost of sales	928388	Trade receivables	1057264	Net cash flow from investing	0
Purchasing and warehousing	7500	Gross profit	1431502	Cash and cash equivalents	2821386		
Business intelligence	7500	Administrative expenses	1136359	Current assets	3981663	Financing activities:	
Credit control	4743	Insurance receipts	0	Total assets	6423995	Shares issued	0
Insurance premiums	8857	Depreciation	39549			Shares repurchased	0
Management salaries	115000	Operating profit/loss	255594	Liabilities:		Dividends paid	0
Other costs	19549	Finance income	0	Tax due	0	Additional loans	0
Total administrative expenses	1136359	Finance expense	0	Trade payables	668360	Interest paid	0
		Profit/loss before tax	255594	Bank overdraft	0	Net cash flow from financing	0
Accumulated taxable profit:		Tax assessed	0	Current liabilities	668360		
Profit/loss before tax	255594	Profit/loss for the period	255594	Term loans	0	Net cash flow	-67925
Previous taxable profit/loss	294251	Earnings per share (cents)	6,39	Net assets	5755635	Previous cash balance	2889311
Taxable profit/loss	549845					Cash balance	2821386
		Dividends paid	0	Equity:		(including a term deposit of -	0)
Insurance claimed	560	Transferred to retained earnings	255594	Share capital	4000000	Overdraft limit for next quarter	785000
Primary non-insured risk	5061	Previous retained earnings	1500041	Share premium account	0	Borrowing power next quarter	2268000
		Retained earnings	1755635	Retained earnings	1755635		
				Total equity	5755635		

Appendix 5.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2012

Qtr 2

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4228	4406	61	
% Unemployment rate (de-seasonalised)	7,2	4,9		
Balance of external trade	1908	1948		
Information about next quarter:				
Central Bank base rate (% p.a.)	4,1	4,2	Exchange rate in € per \$ (USD)	1,02
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	93	142	220	
to (100% premium materials)	110	175	270	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	32896	32684	32320	
BUSINESS REPORT:	The International Monetary Fund is concerned that loans given to southern Europe may not be repaid in full. The northern European countries may have to provide the shortfall.			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	152,66	152,66	152,66	152,66	152,66	152,66	152,66	152,66
Market valuation (€)	6106400	6106400	6106400	6106400	6106400	6106400	6106400	6106400
Dividend paid (cents/share)	0	0	0	0	0	0	0	0
Investment performance (€)	6351527	6351527	6351527	6351527	6351527	6351527	6351527	6351527
Business intelligence:								
Product prices (€)								
Product 1: Europe	360	360	360	360	360	360	360	360
Nafta	360	360	360	360	360	360	360	360
Internet	340	340	340	340	340	340	340	340
Product 2: Europe	610	610	610	610	610	610	610	610
Nafta	610	610	610	610	610	610	610	610
Internet	520	520	520	520	520	520	520	520
Product 3: Europe	850	850	850	850	850	850	850	850
Nafta	850	850	850	850	850	850	850	850
Internet	740	740	740	740	740	740	740	740
Production employees	82	82	82	82	82	82	82	82
Assembly wage rate (cents/hr)	1000	1000	1000	1000	1000	1000	1000	1000
Number of agents/distributors	5	5	5	5	5	5	5	5

Appendix 5.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2012

Qtr 2

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4	5	6	7	8
Assets								
Property, plant and equipment	2442332	2442332	2442332	2442332	2442332	2442332	2442332	2442332
Inventories	103013	103013	103013	103013	103013	103013	103013	103013
Trade receivables	1057264	1057264	1057264	1057264	1057264	1057264	1057264	1057264
Cash and cash equivalents	2821386	2821386	2821386	2821386	2821386	2821386	2821386	2821386
Liabilities								
Tax assessed and due	0	0	0	0	0	0	0	0
Trade payables	668360	668360	668360	668360	668360	668360	668360	668360
Bank overdraft	0	0	0	0	0	0	0	0
Long term loans	0	0	0	0	0	0	0	0
Equity								
Ordinary capital	4000000	4000000	4000000	4000000	4000000	4000000	4000000	4000000
Share premium account	0	0	0	0	0	0	0	0
Retained earnings	1755635	1755635	1755635	1755635	1755635	1755635	1755635	1755635
Net Worth	5755635	5755635	5755635	5755635	5755635	5755635	5755635	5755635

PURCHASED INFORMATION	Not requested							
Company number:								
Market shares (%by volume sold)								
Product 1: Europe								
Nafta								
Internet								
Product 2: Europe								
Nafta								
Internet								
Product 3: Europe								
Nafta								
Internet								
Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	360000	360000	360000	360000	360000	360000	360000	360000
Total product development (€)	90000	90000	90000	90000	90000	90000	90000	90000
Consumer star ratings:								
Product 1	**	**	**	**	**	**	**	**
Product 2	**	**	**	**	**	**	**	**
Product 3	****	****	****	****	****	****	****	****
Web-site	****	****	****	****	****	****	****	****

Appendix 6. Game report 1

Appendix 6.1 Management report

Management Report

TTU

Code: 12C3

for Group 1 Company 1

PLEASE CHECK ...		your decisions				Year 2012 Qtr 3				
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %
Europe		70	30	30	20	European agents	13 *	9	13	
Nafta		20	30	30	20	Nafta distributors	9 *	5	13	
Internet		80	40	40	30	Internet distributor		20	6	
Prices (€):						Operations:				
Europe		390	695	999		Materials to buy ('000) Spot	5	3mth 0	6mth 0	
Nafta		385	695	999		Maintenance hours/machine	30	Shift level	2	
Internet		390	690	999		Number of ports operated	20	Web-site development	60	
Quantities to deliver to:						Personnel:				
European agents		927	297	182		Assembly workers to recruit	55 *	Number to train	9	
(Not in full Nafta distributors if starred)		963	296	175		Hourly wage rate (€c)	10,00	Staff training (days)	30	
Internet distributor		1336	362	325		Management budget (€'000)	240			
Quality:						Finance:				
Take up product improvements		1	1	1		Shares to issue/repurchase	0	Dividend (cents/share)	0	
Product development (€'000)		60	55	50		Term loans (€'000)	0	Term deposit (€'000)	0	
Assembly times (minutes)		115	165	325		Machines to buy	0	Machines to sell	0	
Premium materials (%)		0	0	0		Factory extension (sq. m.)	800	Insurance plan	4	
Subcontracting:						Information:				
Components to order (units)		4000	9999	7000		Market shares	1	Corporate activity	1	

Appendix 6.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2012

Qtr 3

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	5500
Factory size next quarter	1700
Circulation and access	425
Machining operations	175
Assembly operations	510
Material and component stocks	2170
Available space (overflow if negative)	-1580
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	107
Hours worked	7115
Hours planned maintenance	103
Average machine efficiency %	83.3
Materials:	
Opening stock available	3472
Bought spot	5000
Bought default	0
Lost or destroyed	0
Used	7363
Closing stock	1109
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	20
Number of visits to your web-site	105583
Estimated level of failed visits (%)	0
Number of internet service complaints	85

HUMAN RESOURCES:																					
Production personnel:	<table border="1"> <thead> <tr> <th>Assembly</th> <th>Machining</th> </tr> </thead> <tbody> <tr> <td>At start of last quarter</td> <td>26</td> <td>48</td> </tr> <tr> <td>Recruited</td> <td>16</td> <td>8</td> </tr> <tr> <td>Trained</td> <td>9</td> <td></td> </tr> <tr> <td>Dismissed</td> <td>0</td> <td>0</td> </tr> <tr> <td>Left</td> <td>0</td> <td>8</td> </tr> <tr> <td>Available for next quarter</td> <td>51</td> <td>48</td> </tr> </tbody> </table>	Assembly	Machining	At start of last quarter	26	48	Recruited	16	8	Trained	9		Dismissed	0	0	Left	0	8	Available for next quarter	51	48
Assembly	Machining																				
At start of last quarter	26	48																			
Recruited	16	8																			
Trained	9																				
Dismissed	0	0																			
Left	0	8																			
Available for next quarter	51	48																			
Assembly workers:																					
Hours available	14976																				
Absenteeism/sickness (hours)	85																				
Hours worked	12817																				
Notice of strike weeks for next quarter	0																				

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	2	3	1
Resigned	0	1	
Dismissed	0	0	0
Appointed	7	4	0
Active next quarter	9	6	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1434	500	300
Number of loads	5	5	7

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	16,15
Energy used in production	28,86
Total primary CO2e	45,01

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	3226	955	682
Produced	3305	979	700
Rejected	79	24	18
Lost or destroyed	0	0	0
Delivered to:			
European agents	927	297	182
Nafta distributors	963	296	175
Internet distributor	1336	362	325
Orders from:			
Europe	684	273	191
Nafta	659	240	169
Internet	1092	466	298
Sold to:			
Europe	724	285	182
Nafta	727	273	175
Internet	1092	362	298
Backlog of orders:			
Europe	0	0	23
Nafta	0	0	5
Warehouse stocks:			
Europe	203	12	0
Nafta	236	23	0
Internet	244	0	27
Guarantee services	90	50	36
Product improvements	Minor	Minor	Major
Product components:			
Assembled last quarter	0	0	0
Ordered last quarter	4000	9999	7000
Closing stock	0	0	0
Available for assembly	4000	9999	7000

Appendix 6.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2012

Qtr 3

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
	€		€		€		€
ADMINISTRATIVE EXPENSES		Sales revenue	2287310	Non-current assets:		Operating activities:	
Advertising	440000	Opening inventory values	103013	Land	450000	Trading receipts	2225435
Internet distributor	78400	Components purchased	3331858	Buildings	850000	Insurance receipts	0
Internet service provider	40200	Materials purchased	167770	Machinery	<u>1503772</u>	Trading payments	4124152
Agents and distributors	360426	Machine running costs	111283	Property, plant and equipment	2803772	Tax paid	<u>0</u>
Sales office	22873	Machinists wages	286694			Net cash flow from operations	-1898717
Guarantee servicing	21900	Assembly wages	137655	Current assets:		Investing activities:	
Product development	165000	Quality control	4984	Product inventories	72580	Interest received	0
Web-site development	60000	Hired transport	64050	Component inventories	3331858	Asset sales	0
Personnel department	224500	Less closing inventory values	<u>3432813</u>	Materials inventory	28375	Assets purchased	<u>400000</u>
Machine maintenance	17850	Cost of sales	<u>774494</u>	Trade receivables	1119139	Net cash flow from investing	-400000
Purchasing and warehousing	12244	Gross profit	1512816	Cash and cash equivalents	<u>522669</u>	Financing activities:	
Business intelligence	12500	Administrative expenses	1722356	Current assets	<u>5074621</u>	Shares issued	0
Credit control	4118	Insurance receipts	0	Total assets	7878393	Shares repurchased	0
Insurance premiums	2545	Depreciation	<u>38560</u>	Liabilities:		Dividends paid	0
Management salaries	240000	Operating profit/loss	-248100	Tax due	0	Additional loans	0
Other costs	<u>19800</u>	Finance income	0	Trade payables	2370858	Interest paid	<u>0</u>
Total administrative expenses	<u>1722356</u>	Finance expense	<u>0</u>	Bank overdraft	<u>0</u>	Net cash flow from financing	0
Accumulated taxable profit:		Profit/loss before tax	-248100	Current liabilities	2370858		
Profit/loss before tax	-248100	Tax assessed	<u>0</u>	Term loans	0	Net cash flow	-2298717
Previous taxable profit/loss	<u>549845</u>	Profit/loss for the period	-248100	Net assets	5507535	Previous cash balance	<u>2821386</u>
Taxable profit/loss	301745	Earnings per share (cents)	-6,20	Equity:		Cash balance	522669
		Dividends paid	<u>0</u>	Share capital	4000000	(including a term deposit of -	0)
Insurance claimed	0	Transferred to retained earnings	-248100	Share premium account	0	Overdraft limit for next quarter	1003000
Primary non-insured risk	10181	Previous retained earnings	<u>1755635</u>	Retained earnings	<u>1507535</u>	Borrowing power next quarter	1766000
		Retained earnings	1507535	Total equity	5507535		

Appendix 6.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2012

Qtr 3

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4180	4567	61	
% Unemployment rate (de-seasonalised)	7,1	4,9		
Balance of external trade	1937	1924		
Information about next quarter:				
Central Bank base rate (% p.a.)	4,0	4,1	Exchange rate in € per \$ (USD)	1,01
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	91	138	214	
to (100% premium materials)	107	169	262	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	31252	29415	28148	
BUSINESS REPORT:	Global developments may not always bring growth for all of the national parties involved. Sometimes a weaker partner carries the brunt of cost reductions and this can cause threats of local disruption.			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	138,47	150,63	148,85	148,78	0	0	0	0
Market valuation (€)	5538800	6025200	5954000	5951200	0	0	0	0
Dividend paid (cents/share)	0	0	0	0	0	0	0	0
Investment performance (€)	5786439	6272839	6201639	6198839	0	0	0	0
Business intelligence:								
Product prices (€)								
Product 1: Europe	390	365	385	360	0	0	0	0
Nafta	385	360	385	360	0	0	0	0
Internet	390	355	364	340	0	0	0	0
Product 2: Europe	695	610	653	610	0	0	0	0
Nafta	695	610	653	610	0	0	0	0
Internet	690	535	556	520	0	0	0	0
Product 3: Europe	999	850	910	850	0	0	0	0
Nafta	999	850	910	850	0	0	0	0
Internet	999	755	792	740	0	0	0	0
Production employees	82	82	82	82	0	0	0	0
Assembly wage rate (cents/hr)	1000	1000	1050	1025	0	0	0	0
Number of agents/distributors	5	5	5	5	0	0	0	0

Appendix 6.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2012

Qtr 3

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4				
Assets								
Property, plant and equipment	2803772	4383772	3661272	2403772				
Inventories	3432813	364106	275925	869409				
Trade receivables	1119139	1056935	1086197	1066550				
Cash and cash equivalents	522669	761177	1505610	2521774				
Liabilities								
Tax assessed and due	0	0	0	0				
Trade payables	2370858	820830	917886	1120790				
Bank overdraft	0	0	0	0				
Long term loans	0	0	0	0				
Equity								
Ordinary capital	4000000	4000000	4000000	4000000				
Share premium account	0	0	0	0				
Retained earnings	1507535	1745160	1611118	1740715				
Net Worth	5507535	5745160	5611118	5740715	0	0	0	0

PURCHASED INFORMATION								
Company number:	1	2	3	4	5	6	7	8
Market shares (% by volume sold)								
Product 1: Europe	3.7	3.3	3.2	3.6	0,0	0,0	0,0	0,0
Nafta	6.4	5.5	5.4	5.5	0,0	0,0	0,0	0,0
Internet	10.7	11.2	11.5	11.1	0,0	0,0	0,0	0,0
Product 2: Europe	3.1	3.4	3.5	3.6	0,0	0,0	0,0	0,0
Nafta	5.3	4.8	4.5	4.9	0,0	0,0	0,0	0,0
Internet	6.7	14.0	14.7	13.9	0,0	0,0	0,0	0,0
Product 3: Europe	5.8	7.2	6.6	6.7	0,0	0,0	0,0	0,0
Nafta	8.7	12.5	11.8	11.7	0,0	0,0	0,0	0,0
Internet	11.7	18.0	18.6	17.5	0,0	0,0	0,0	0,0

Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	440000	340000	480000	360000	0	0	0	0
Total product development (€)	165000	115000	170000	90000	0	0	0	0
Consumer star ratings:								
Product 1	****	****	****	****				
Product 2	*****	*****	*****	*****				
Product 3	*****	*****	*****	*****				
Web-site	*****	*****	****	****				

Appendix 7. Game report 2

Appendix 7.1 Management report

Management Report

TTU

Code: 12C3

for Group 1 Company 1

PLEASE CHECK ...		your decisions				Year 2012 Qtr 4				
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %
Europe		70	78	53	52	European agents	13 *	9	13	
Nafta		20	52	32	31	Nafta distributors	9 *	5	13	
Internet		80	68	46	40	Internet distributor		20	6	
Prices (€):						Operations:				
Europe		380	660	999		Materials to buy ('000) Spot	0	3mth 0	6mth 0	
Nafta		380	660	999		Maintenance hours/machine	99	Shift level	2	
Internet		380	660	999		Number of ports operated	22	Web-site development	40	
Quantities to deliver to:						Personnel:				
(Not in full if starred)	European agents	2565	1093	686		Assembly workers to recruit	50 *	Number to train	0	
	Nafta distributors	1603	643	402		Hourly wage rate (€c)	10,00	Staff training (days)	30	
	Internet distributor	2099	914	517		Management budget (€'000)	240			
Quality:						Finance:				
	Take up product improvements	0	0	1		Shares to issue/repurchase	0	Dividend (cents/share)	0	
	Product development (€'000)	99	55	50		Term loans (€'000)	0	Term deposit (€'000)	0	
	Assembly times (minutes)	115	165	325		Machines to buy	0	Machines to sell	0	
	Premium materials (%)	100	100	100		Factory extension (sq. m.)	500	Insurance plan	4	
Subcontracting:						Information:				
	Components to order (units)	6000	0	0		Market shares	1	Corporate activity	1	

Appendix 7.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2012

Qtr 4

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	5000
Factory size next quarter	2200
Circulation and access	550
Machining operations	175
Assembly operations	750
Material and component stocks	9250
Available space (overflow if negative)	-8525
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	54 !
Hours worked	2876
Hours planned maintenance	639
Average machine efficiency %	84.0
Materials:	
Opening stock available	1109
Bought spot	2417
Bought default	0
Lost or destroyed	0
Used	2417
Closing stock	1109
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	22
Number of visits to your web-site	132584
Estimated level of failed visits (%)	0
Number of internet service complaints	176

HUMAN RESOURCES:																					
Production personnel:	<table border="1"> <thead> <tr> <th>Assembly</th> <th>Machining</th> </tr> </thead> <tbody> <tr> <td>At start of last quarter</td> <td>51</td> <td>48</td> </tr> <tr> <td>Recruited</td> <td>24</td> <td>8</td> </tr> <tr> <td>Trained</td> <td>0</td> <td></td> </tr> <tr> <td>Dismissed</td> <td>0</td> <td>0</td> </tr> <tr> <td>Left</td> <td>0</td> <td>13</td> </tr> <tr> <td>Available for next quarter</td> <td>75</td> <td>43</td> </tr> </tbody> </table>	Assembly	Machining	At start of last quarter	51	48	Recruited	24	8	Trained	0		Dismissed	0	0	Left	0	13	Available for next quarter	75	43
Assembly	Machining																				
At start of last quarter	51	48																			
Recruited	24	8																			
Trained	0																				
Dismissed	0	0																			
Left	0	13																			
Available for next quarter	75	43																			
Assembly workers:																					
Hours available	29376																				
Absenteeism/sickness (hours)	259																				
Hours worked	28683																				
Notice of strike weeks for next quarter	0																				

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	9	6	1
Resigned	3	2	
Dismissed	0	0	0
Appointed	3	2	0
Active next quarter	9	6	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1310	500	300
Number of loads	15	9	12

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	20,90
Energy used in production	23,89
Total primary CO2e	44,79

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	6267	2650	1605
Produced	6417	2716	1646
Rejected	150	66	41
Lost or destroyed	0	0	0
Delivered to:			
European agents	2565	1093	686
Nafta distributors	1603	643	402
Internet distributor	2099	914	517
Orders from:			
Europe	2331	998	480
Nafta	1492	632	288
Internet	2148	856	448
Sold to:			
Europe	2331	998	503
Nafta	1492	632	293
Internet	2148	856	448
Backlog of orders:			
Europe	0	0	0
Nafta	0	0	0
Warehouse stocks:			
Europe	437	107	183
Nafta	347	34	109
Internet	195	58	69
Guarantee services	92	39	28
Product improvements	Major	Major	Major
Product components:			
Assembled last quarter	4000	2716	1646
Ordered last quarter	6000	0	0
Closing stock	0	7283	5354
Available for assembly	6000	7283	5354

Appendix 7.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2012

Qtr 4

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
ADMINISTRATIVE EXPENSES	€		€		€		€
Advertising	622000	Sales revenue	5174906	Non-current assets:		Operating activities:	
Internet distributor	129724	Opening inventory values	3432813	Land	450000	Trading receipts	3713822
Internet service provider	74861	Components purchased	642000	Buildings	1100000	Insurance receipts	0
Agents and distributors	592596	Materials purchased	114435	Machinery	1466178	Trading payments	4845803
Sales office	51749	Machine running costs	83030	Property, plant and equipment	3016178	Tax paid	0
Guarantee servicing	18370	Machinists wages	174720	Current assets:		Net cash flow from operations	-1131981
Product development	204000	Assembly wages	338040	Product inventories	230922	Investing activities:	
Web-site development	40000	Quality control	10779	Component inventories	2854066	Interest received	0
Personnel department	138000	Hired transport	130500	Materials inventory	27306	Asset sales	0
Machine maintenance	58905	Less closing inventory values	3112294	Trade receivables	2580223	Assets purchased	250000
Purchasing and warehousing	29241	Cost of sales	1814023	Cash and cash equivalents	0	Net cash flow from investing	-250000
Business intelligence	12500	Gross profit	3360883	Current assets	5692517	Financing activities:	
Credit control	9701	Administrative expenses	2263674	Total assets	8708695	Shares issued	0
Insurance premiums	6236	Insurance receipts	0	Liabilities:		Shares repurchased	0
Management salaries	240000	Depreciation	37594	Tax due	405830	Dividends paid	0
Other costs	35791	Operating profit/loss	1059615	Trade payables	1282233	Additional loans	0
Total administrative expenses	2263674	Finance income	0	Bank overdraft	867905	Interest paid	8593
Accumulated taxable profit:		Finance expense	8593	Current liabilities	2555968	Net cash flow from financing	-8593
Profit/loss before tax	1051022	Profit/loss before tax	1051022	Term loans	0	Net cash flow	-1390574
Previous taxable profit/loss	301745	Tax assessed	405830	Net assets	6152727	Previous cash balance	522669
Taxable profit/loss	1352767	Profit/loss for the period	645192	Equity:		Cash balance	-867905
		Earnings per share (cents)	16,13	Share capital	4000000	(including a term deposit of -	0)
		Dividends paid	0	Share premium account	0	Overdraft limit for next quarter	2965000
Insurance claimed	2218	Transferred to retained earnings	645192	Retained earnings	2152727	Borrowing power next quarter	949000
Primary non-insured risk	24946	Previous retained earnings	1507535	Total equity	6152727		
		Retained earnings	2152727				

Appendix 7.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2012

Qtr 4

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4132	4321	61	
% Unemployment rate (de-seasonalised)	7,0	4,9		
Balance of external trade	1871	1905		
Information about next quarter:				
Central Bank base rate (% p.a.)	3,9	4,0	Exchange rate in € per \$ (USD)	1,00
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	90	135	210	
to (100% premium materials)	105	165	256	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	30282	28798	27358	
BUSINESS REPORT:	Mobile phones are transforming the way some rural farmers are doing business. Previously isolated from information on weather forecasting or the latest market prices they now use their phones to keep up to date. In some countries farmers account for a reasonable percentage of GDP and therefore this technology is welcome.			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	195,7	162,94	159,87	143,32	0	0	0	0
Market valuation (€)	7828000	6517600	6394800	5732800	0	0	0	0
Dividend paid (cents/share)	0	0	0	0	0	0	0	0
Investment performance (€)	8078115	6767715	6644915	5982915	0	0	0	0
Business intelligence:								
Product prices (€)								
Product 1: Europe	380	395	373	365	0	0	0	0
Nafta	380	400	373	365	0	0	0	0
Internet	380	390	353	350	0	0	0	0
Product 2: Europe	660	665	633	615	0	0	0	0
Nafta	660	670	633	615	0	0	0	0
Internet	660	595	539	530	0	0	0	0
Product 3: Europe	999	900	883	855	0	0	0	0
Nafta	999	900	883	855	0	0	0	0
Internet	999	815	768	750	0	0	0	0
Production employees	107	92	131	81	0	0	0	0
Assembly wage rate (cents/hr)	1000	1025	1050	1025	0	0	0	0
Number of agents/distributors	15	12	16	7	0	0	0	0

Appendix 7.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2012

Qtr 4

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4				
Assets								
Property, plant and equipment	3016178	4452306	3644430	2366178				
Inventories	3112294	930531	831363	837055				
Trade receivables	2580223	1777047	1647438	1241978				
Cash and cash equivalents	0	555191	1054826	2312369				
Liabilities								
Tax assessed and due	405830	364657	180588	260691				
Trade payables	1282233	1293761	1370306	682818				
Bank overdraft	867905	0	0	0				
Long term loans	0	0	0	0				
Equity								
Ordinary capital	4000000	4000000	4000000	4000000				
Share premium account	0	0	0	0				
Retained earnings	2152727	2056657	1627163	1814071				
Net Worth	6152727	6056657	5627163	5814071	0	0	0	0

PURCHASED INFORMATION								
Company number:	1	2	3	4	5	6	7	8
Market shares (% by volume sold)								
Product 1: Europe	12.0	5.5	4.8	3.8	0,0	0,0	0,0	0,0
Nafta	12.6	7.1	6.6	5.8	0,0	0,0	0,0	0,0
Internet	18.7	11.3	13.5	8.7	0,0	0,0	0,0	0,0
Product 2: Europe	10.5	6.0	5.9	4.1	0,0	0,0	0,0	0,0
Nafta	10.8	7.9	8.0	6.3	0,0	0,0	0,0	0,0
Internet	13.7	14.7	17.5	10.9	0,0	0,0	0,0	0,0
Product 3: Europe	13.6	11.8	13.1	8.4	0,0	0,0	0,0	0,0
Nafta	13.5	16.5	13.8	10.0	0,0	0,0	0,0	0,0
Internet	15.8	19.9	21.4	13.2	0,0	0,0	0,0	0,0

Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	622000	465000	660000	360000	0	0	0	0
Total product development (€)	204000	110000	120000	90000	0	0	0	0
Consumer star ratings:								
Product 1	****	****	****	****				
Product 2	*****	*****	*****	*****				
Product 3	*****	*****	*****	*****				
Web-site	*****	*****	*****	****				

Appendix 8. Game report 3

Appendix 8.1 Management report

Management Report

TTU

Code: 12C3

for Group 1 Company 1

PLEASE CHECK ...		your decisions				Year 2013 Qtr 1					
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %	
	Europe	70	85	65	39		European agents	13 *	9	13	
	Nafta	20	28	26	19		Nafta distributors	9 *	5	13	
	Internet	80	84	63	35		Internet distributor		20	6	
Prices (€):						Operations:					
	Europe		328	540	800	Materials to buy ('000) Spot	0	3mth	0	6mth	0
	Nafta		328	540	800	Maintenance hours/machine	30	Shift level			2
	Internet		328	540	800	Number of ports operated	24	Web-site development			40
Quantities to deliver to:						Personnel:					
	European agents		4413	2080 *	731	Assembly workers to recruit	25	Number to train		0	
(Not in full	Nafta distributors		2376	1159 *	450	Hourly wage rate (€c)	10,00	Staff training (days)		30	
if starred)	Internet distributor		3319	1403 *	593	Management budget (€'000)	240				
Quality:						Finance:					
	Take up product improvements		1	1	1	Shares to issue/repurchase	0	Dividend (cents/share)		0	
	Product development (€'000)		25	55	45	Term loans (€'000)	0	Term deposit (€'000)		0	
	Assembly times (minutes)		115	165	325	Machines to buy	0	Machines to sell		0	
	Premium materials (%)		100	100	100	Factory extension (sq. m.)	0	Insurance plan		4	
Subcontracting:						Information:					
	Components to order (units)		6000	0	0	Market shares	1	Corporate activity		1	

Appendix 8.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2013

Qtr 1

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	5000
Factory size next quarter	2200
Circulation and access	550
Machining operations	175
Assembly operations	1000
Material and component stocks	5052
Available space (overflow if negative)	-4577
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	23 !
Hours worked	4452
Hours planned maintenance	187
Average machine efficiency %	97.7
Materials:	
Opening stock available	1109
Bought spot	4350
Bought default	0
Lost or destroyed	0
Used	4350
Closing stock	1109
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	24
Number of visits to your web-site	156302
Estimated level of failed visits (%)	0
Number of internet service complaints	243

HUMAN RESOURCES:																					
Production personnel:	<table border="1"> <thead> <tr> <th>Assembly</th> <th>Machining</th> </tr> </thead> <tbody> <tr> <td>At start of last quarter</td> <td>75</td> <td>43</td> </tr> <tr> <td>Recruited</td> <td>25</td> <td>13</td> </tr> <tr> <td>Trained</td> <td>0</td> <td></td> </tr> <tr> <td>Dismissed</td> <td>0</td> <td>0</td> </tr> <tr> <td>Left</td> <td>0</td> <td>13</td> </tr> <tr> <td>Available for next quarter</td> <td>100</td> <td>43</td> </tr> </tbody> </table>	Assembly	Machining	At start of last quarter	75	43	Recruited	25	13	Trained	0		Dismissed	0	0	Left	0	13	Available for next quarter	100	43
Assembly	Machining																				
At start of last quarter	75	43																			
Recruited	25	13																			
Trained	0																				
Dismissed	0	0																			
Left	0	13																			
Available for next quarter	100	43																			
Assembly workers:																					
Hours available	43200																				
Absenteeism/sickness (hours)	310																				
Hours worked	42773																				
Notice of strike weeks for next quarter	0																				

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	9	6	1
Resigned	3	2	
Dismissed	0	0	0
Appointed	3	2	0
Active next quarter	9	6	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1310	500	300
Number of loads	23	13	17

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	20,90
Energy used in production	36,13
Total primary CO2e	57,03

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	10108	4592	1774
Produced	10350	4758	1819
Rejected	242	116	45
Lost or destroyed	0	50 !	0
Delivered to:			
European agents	4413	2057	731
Nafta distributors	2376	1146	450
Internet distributor	3319	1389	593
Orders from:			
Europe	3295	1535	678
Nafta	1926	904	405
Internet	2852	1288	555
Sold to:			
Europe	3295	1535	678
Nafta	1926	904	405
Internet	2852	1288	555
Backlog of orders:			
Europe	0	0	0
Nafta	0	0	0
Warehouse stocks:			
Europe	1118	522	53
Nafta	450	242	45
Internet	467	101	38
Guarantee services	135	58	54 !
Product improvements	Major	Major	Minor
Product components:			
Assembled last quarter	6000	4758	1819
Ordered last quarter	6000	0	0
Closing stock	0	2525	3535
Available for assembly	6000	2525	3535

Appendix 8.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2013

Qtr 1

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
ADMINISTRATIVE EXPENSES	€		€		€		€
Advertising	614000	Sales revenue	6226206	Non-current assets:		Operating activities:	
Internet distributor	144498	Opening inventory values	3112294	Land	450000	Trading receipts	5544084
Internet service provider	84248	Components purchased	630000	Buildings	1100000	Insurance receipts	0
Agents and distributors	669971	Materials purchased	197590	Machinery	1429522	Trading payments	3990600
Sales office	62262	Machine running costs	101640	Property, plant and equipment	2979522	Tax paid	0
Guarantee servicing	29300	Machinists wages	174720	Current assets:		Net cash flow from operations	1553484
Product development	125000	Assembly wages	508959	Product inventories	389507	Investing activities:	
Web-site development	40000	Quality control	16927	Component inventories	1766250	Interest received	0
Personnel department	93000	Hired transport	191750	Materials inventory	26532	Asset sales	0
Machine maintenance	17850	Less closing inventory values	2182289	Trade receivables	3262345	Assets purchased	0
Purchasing and warehousing	37837	Cost of sales	2751591	Cash and cash equivalents	677009	Net cash flow from investing	0
Business intelligence	12500	Gross profit	3474615	Current assets	6121643	Financing activities:	
Credit control	13438	Administrative expenses	2236313	Total assets	9101165	Shares issued	0
Insurance premiums	6128	Insurance receipts	0	Liabilities:		Shares repurchased	0
Management salaries	240000	Depreciation	36656	Tax due	405830	Dividends paid	0
Other costs	46281	Operating profit/loss	1201646	Trade payables	1349532	Additional loans	0
Total administrative expenses	2236313	Finance income	0	Bank overdraft	0	Interest paid	8570
Accumulated taxable profit:		Finance expense	8570	Current liabilities	1755362	Net cash flow from financing	-8570
Profit/loss before tax	1193076	Profit/loss before tax	1193076	Term loans	0	Net cash flow	1544914
Previous taxable profit/loss	0	Tax assessed	0	Net assets	7345803	Previous cash balance	-867905
Taxable profit/loss	1193076	Profit/loss for the period	1193076	Equity:		Cash balance	677009
		Earnings per share (cents)	29,83	Share capital	4000000	(including a term deposit of -	0)
		Dividends paid	0	Share premium account	0	Overdraft limit for next quarter	3047000
Insurance claimed	13502	Transferred to retained earnings	1193076	Retained earnings	3345803	Borrowing power next quarter	1143000
Primary non-insured risk	24513	Previous retained earnings	2152727	Total equity	7345803		
		Retained earnings	3345803				

Appendix 8.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2013

Qtr 1

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4055	4165	61	
% Unemployment rate (de-seasonalised)	6,9	4,9		
Balance of external trade	1853	1895		
Information about next quarter:				
Central Bank base rate (% p.a.)	3,8	3,9	Exchange rate in € per \$ (USD)	1,01
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	89	133	208	
to (100% premium materials)	104	163	252	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	29164	27705	26320	
BUSINESS REPORT:	Energy forecasters are predicting that because the US will be able to access vast reserves of gas and oil from shale rock deposits it is set to become the biggest global gas and oil producer. Europe is interested in this development. It may reduce costs.			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	209,52	176,62	146,89	148,51	0	0	0	0
Market valuation (€)	8380800	7064800	5875600	5940400	0	0	0	0
Dividend paid (cents/share)	0	0	0	0	0	0	0	0
Investment performance (€)	8633353	7317353	6128153	6192953	0	0	0	0
Business intelligence:								
Product prices (€)								
Product 1: Europe	328	365	354	375	0	0	0	0
Nafta	328	365	354	375	0	0	0	0
Internet	328	350	342	360	0	0	0	0
Product 2: Europe	540	635	601	630	0	0	0	0
Nafta	540	635	601	630	0	0	0	0
Internet	540	585	523	630	0	0	0	0
Product 3: Europe	800	870	857	900	0	0	0	0
Nafta	800	870	857	900	0	0	0	0
Internet	800	795	745	850	0	0	0	0
Production employees	131	102	140	80	0	0	0	0
Assembly wage rate (cents/hr)	1000	1025	1050	1025	0	0	0	0
Number of agents/distributors	15	12	18	7	0	0	0	0

Appendix 8.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2013

Qtr 1

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4				
Assets								
Property, plant and equipment	2979522	4372870	3579254	2622022				
Inventories	2182289	804073	846172	538935				
Trade receivables	3262345	1776847	1578894	997106				
Cash and cash equivalents	677009	997218	956204	2375540				
Liabilities								
Tax assessed and due	405830	364657	180588	260691				
Trade payables	1349532	1315378	1063809	589140				
Bank overdraft	0	0	0	0				
Long term loans	0	0	0	0				
Equity								
Ordinary capital	4000000	4000000	4000000	4000000				
Share premium account	0	0	0	0				
Retained earnings	3345803	2270973	1716127	1683772				
Net Worth	7345803	6270973	5716127	5683772	0	0	0	0

PURCHASED INFORMATION								
Company number:	1	2	3	4	5	6	7	8
Market shares (% by volume sold)								
Product 1: Europe	22.1	7.5	8.2	3.3	0,0	0,0	0,0	0,0
Nafta	20.1	9.9	8.6	4.8	0,0	0,0	0,0	0,0
Internet	27.7	14.5	13.0	7.7	0,0	0,0	0,0	0,0
Product 2: Europe	20.9	7.6	7.5	4.0	0,0	0,0	0,0	0,0
Nafta	19.0	10.0	8.9	5.7	0,0	0,0	0,0	0,0
Internet	24.2	15.6	16.5	7.0	0,0	0,0	0,0	0,0
Product 3: Europe	22.7	13.8	11.6	7.6	0,0	0,0	0,0	0,0
Nafta	20.4	17.2	12.7	10.4	0,0	0,0	0,0	0,0
Internet	21.9	21.1	19.8	11.9	0,0	0,0	0,0	0,0

Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	614000	690000	640000	420000	0	0	0	0
Total product development (€)	125000	110000	40000	90000	0	0	0	0
Consumer star ratings:								
Product 1	*****	****	****	****				
Product 2	*****	*****	****	****				
Product 3	*****	*****	*****	*****				
Web-site	*****	*****	*****	****				

Appendix 9. Game report 4

Appendix 9.1 Management report

Management Report

TTU

Code: 12C3

for Group 1 Company 1

PLEASE CHECK ...		your decisions				Year 2013 Qtr 2				
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %
Europe		70	80	58	33	European agents	13 *	9	13	
Nafta		20	44	34	21	Nafta distributors	9 *	5	13	
Internet		70	74	52	27	Internet distributor		20	6	
Prices (€):						Operations:				
Europe		320	520	800		Materials to buy ('000) Spot	0	3mth 0	6mth 0	0
Nafta		320	520	800		Maintenance hours/machine	30	Shift level		2
Internet		320	520	800		Number of ports operated	26	Web-site development		40
Quantities to deliver to:						Personnel:				
European agents		3947	1840	592		Assembly workers to recruit	0	Number to train		0
(Not in full Nafta distributors		2517	1197	396		Hourly wage rate (€c)	10,00	Staff training (days)		30
if starred) Internet distributor		3494	1526	487		Management budget (€'000)	240			
Quality:						Finance:				
Take up product improvements		1	1	0		Shares to issue/repurchase	0	Dividend (cents/share)		0
Product development (€'000)		25	55	25		Term loans (€'000)	0	Term deposit (€'000)		0
Assembly times (minutes)		115	165	325		Machines to buy	0	Machines to sell		0
Premium materials (%)		100	100	100		Factory extension (sq. m.)	5	Insurance plan		4
Subcontracting:						Information:				
Components to order (units)		7000	0	0		Market shares	1	Corporate activity		1

Appendix 9.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2013

Qtr 2

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	4995
Factory size next quarter	2205
Circulation and access	551,25
Machining operations	175
Assembly operations	960
Material and component stocks	2318
Available space (overflow if negative)	-1799
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	17
Hours worked	7154
Hours planned maintenance	193
Average machine efficiency %	96.3
Materials:	
Opening stock available	1109
Bought spot	8508
Bought default	0
Lost or destroyed	0
Used	8508
Closing stock	1109
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	26
Number of visits to your web-site	171838
Estimated level of failed visits (%)	0
Number of internet service complaints	255

HUMAN RESOURCES:		
Production personnel:	Assembly	Machining
At start of last quarter	100	43
Recruited	0	13
Trained	0	
Dismissed	0	0
Left	4	13
Available for next quarter	96	43
Assembly workers:		
Hours available		57600
Absenteeism/sickness (hours)		380
Hours worked		40612
Notice of strike weeks for next quarter		0

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	9	6	1
Resigned	3	2	
Dismissed	0	0	0
Appointed	3	2	0
Active next quarter	9	6	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1310	500	300
Number of loads	20	13	17

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	20,95
Energy used in production	43,44
Total primary CO2e	64,39

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	9958	4563	1475
Produced	10200	4679	1513
Rejected	242	116	38
Lost or destroyed	0	0	0
Delivered to:			
European agents	3947	1840	592
Nafta distributors	2517	1197	396
Internet distributor	3494	1526	487
Orders from:			
Europe	3350	1626	623
Nafta	2106	1051	412
Internet	2973	1376	536
Sold to:			
Europe	3350	1626	623
Nafta	2106	1051	412
Internet	2973	1376	525
Backlog of orders:			
Europe	0	0	0
Nafta	0	0	0
Warehouse stocks:			
Europe	597	214	22
Nafta	411	146	29
Internet	521	150	0
Guarantee services	211	98	45
Product improvements	Major	Major	Major
Product components:			
Assembled last quarter	6000	2525	1513
Ordered last quarter	7000	0	0
Closing stock	0	0	2022
Available for assembly	7000	0	2022

Appendix 9.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2013

Qtr 2

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
	€		€		€		€
ADMINISTRATIVE EXPENSES		SALES REVENUE		Non-current assets:		Operating activities:	
Advertising	583000	Sales revenue	6429555	Land	450000	Trading receipts	6211875
Internet distributor	145212	Opening inventory values	2182289	Buildings	1102500	Insurance receipts	0
Internet service provider	86605	Components purchased	728000	Machinery	1393785	Trading payments	4265914
Agents and distributors	679073	Materials purchased	375904	Property, plant and equipment	2946285	Tax paid	405830
Sales office	64295	Machine running costs	122728			Net cash flow from operations	1540131
Guarantee servicing	38610	Machinists w ages	283176	Current assets:		Investing activities:	
Product development	105000	Assembly w ages	505671	Product inventories	261168	Interest received	0
Web-site development	40000	Quality control	16392	Component inventories	1172840	Asset sales	0
Personnel department	43000	Hired transport	183950	Materials inventory	27822	Assets purchased	2500
Machine maintenance	17850	Less closing inventory values	1461830	Trade receivables	3480025	Net cash flow from investing	-2500
Purchasing and warehousing	29198	Cost of sales	2936280	Cash and cash equivalents	2214640		
Business intelligence	12500	Gross profit	3493275	Current assets	7156495	Financing activities:	
Credit control	14042	Administrative expenses	2150121	Total assets	10102780	Shares issued	0
Insurance premiums	5161	Insurance receipts	0			Shares repurchased	0
Management salaries	240000	Depreciation	35737	Liabilities:		Dividends paid	0
Other costs	46575	Operating profit/loss	1307417	Tax due	0	Additional loans	0
Total administrative expenses	2150121	Finance income	0	Trade payables	1449560	Interest paid	0
		Finance expense	0	Bank overdraft	0	Net cash flow from financing	0
Accumulated taxable profit:		Profit/loss before tax	1307417	Current liabilities	1449560		
Profit/loss before tax	1307417	Tax assessed	0	Term loans	0	Net cash flow	1537631
Previous taxable profit/loss	1193076	Profit/loss for the period	1307417	Net assets	8653220	Previous cash balance	677009
Taxable profit/loss	2500493	Earnings per share (cents)	32,69			Cash balance	2214640
				Equity:		(including a term deposit of -	0)
Insurance claimed	0	Dividends paid	0	Share capital	4000000	Overdraft limit for next quarter	3190000
Primary non-insured risk	20647	Transferred to retained earnings	1307417	Share premium account	0	Borrowing power next quarter	1554000
		Previous retained earnings	3345803	Retained earnings	4653220		
		Retained earnings	4653220	Total equity	8653220		

Appendix 9.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2013

Qtr 2

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4167	4308	61	
% Unemployment rate (de-seasonalised)	6,8	4,9		
Balance of external trade	1911	1913		
Information about next quarter:				
Central Bank base rate (% p.a.)	3,9	3,9	Exchange rate in € per \$ (USD)	1,02
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	91	138	214	
to (100% premium materials)	107	169	262	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	31002	28768	27329	
BUSINESS REPORT:	European Union energy policy has concentrated on the reduction of CO2 emissions. This has led to the need to increase renewable power capacity. The timescales for the reduction of CO2 are short. Can Europe maintain security of supply and affordability to customers and still meet these targets?			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	237,18	194,9	145,4	151,46	0	0	0	0
Market valuation (€)	9487200	7796000	5816000	6058400	0	0	0	0
Dividend paid (cents/share)	0	7	7	0	0	0	0	0
Investment performance (€)	9742152	8333612	6353612	6313352	0	0	0	0
Business intelligence:								
Product prices (€)								
Product 1: Europe	320	315	354	360	0	0	0	0
Nafta	320	315	354	360	0	0	0	0
Internet	320	310	342	360	0	0	0	0
Product 2: Europe	520	585	601	600	0	0	0	0
Nafta	520	585	601	600	0	0	0	0
Internet	520	540	523	600	0	0	0	0
Product 3: Europe	800	800	857	850	0	0	0	0
Nafta	800	800	857	850	0	0	0	0
Internet	800	785	745	850	0	0	0	0
Production employees	156	105	136	92	0	0	0	0
Assembly wage rate (cents/hr)	1000	1060	1050	1025	0	0	0	0
Number of agents/distributors	15	14	18	10	0	0	0	0

Appendix 9.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2013

Qtr 2

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4				
Assets								
Property, plant and equipment	2946285	4295421	3515709	2578973				
Inventories	1461830	783980	508743	372202				
Trade receivables	3480025	2379039	1676680	1184722				
Cash and cash equivalents	2214640	671151	919888	2341604				
Liabilities								
Tax assessed and due	0	0	0	0				
Trade payables	1449560	1417592	793241	527424				
Bank overdraft	0	0	0	0				
Long term loans	0	0	0	0				
Equity								
Ordinary capital	4000000	4000000	4000000	4000000				
Share premium account	0	0	0	0				
Retained earnings	4653220	2711999	1827779	1950077				
Net Worth	8653220	6711999	5827779	5950077	0	0	0	0

PURCHASED INFORMATION								
Company number:	1	2	3	4	5	6	7	8
Market shares (% by volume sold)								
Product 1: Europe	23.9	13.6	8.7	4.6	0,0	0,0	0,0	0,0
Nafta	20.9	17.7	10.1	6.5	0,0	0,0	0,0	0,0
Internet	27.2	20.2	13.7	7.9	0,0	0,0	0,0	0,0
Product 2: Europe	23.4	11.3	8.1	5.1	0,0	0,0	0,0	0,0
Nafta	21.4	14.6	9.0	7.2	0,0	0,0	0,0	0,0
Internet	24.7	18.7	16.3	8.8	0,0	0,0	0,0	0,0
Product 3: Europe	21.1	17.0	12.5	8.4	0,0	0,0	0,0	0,0
Nafta	19.3	21.4	12.4	11.2	0,0	0,0	0,0	0,0
Internet	20.8	21.8	20.8	12.1	0,0	0,0	0,0	0,0

Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	583000	635000	565000	360000	0	0	0	0
Total product development (€)	105000	90000	30000	45000	0	0	0	0
Consumer star ratings:								
Product 1	*****	*****	*****	*****				
Product 2	*****	*****	****	*****				
Product 3	*****	*****	*****	*****				
Web-site	*****	*****	*****	****				

Appendix 10. Game report 5

Appendix 10.1 Management report

Management Report

TTU

Code: 12C3

for Group 1 Company 1

PLEASE CHECK ...		your decisions				Year 2013 Qtr 3				
Advertising: (€'000)		Corporate	Product 1	Product 2	Product 3	Agents and distributors:		Number needed	Support (€'000)	Commn. %
Europe		70	81	59	32	European agents	13 *	9	13	
Nafta		20	32	24	17	Nafta distributors	12 *	5	13	
Internet		70	88	65	32	Internet distributor		20	6	
Prices (€):						Operations:				
Europe		355	545	800		Materials to buy ('000) Spot	0	3mth 0	6mth 0	
Nafta		350	545	830		Maintenance hours/machine	5	Shift level	2	
Internet		360	545	800		Number of ports operated	28	Web-site development	40	
Quantities to deliver to:						Personnel:				
European agents		3203	1769 *	689		Assembly workers to recruit	0	Number to train	0	
(Not in full Nafta distributors		2072	1103	429		Hourly wage rate (€c)	10,00	Staff training (days)	30	
if starred) Internet distributor		2874	1440	561		Management budget (€'000)	240			
Quality:						Finance:				
Take up product improvements		1	1	1		Shares to issue/repurchase	200	Dividend (cents/share)	10	
Product development (€'000)		25	40	25		Term loans (€'000)	0	Term deposit (€'000)	0	
Assembly times (minutes)		115	165	325		Machines to buy	0	Machines to sell	0	
Premium materials (%)		100	100	100		Factory extension (sq. m.)	0	Insurance plan	4	
Subcontracting:						Information:				
Components to order (units)		0	0	0		Market shares	1	Corporate activity	1	

Appendix 10.2 Resources and Products

Group 1

Company 1

Resources and Products

Year 2013

Qtr 3

PHYSICAL RESOURCES: Usage and availability	
Space:	Sq. m.
Land owned	9000
Access/parking etc	1800
Unused land	4995
Factory size next quarter	2205
Circulation and access	551,25
Machining operations	175
Assembly operations	960
Material and component stocks	304
Available space (overflow if negative)	215
Machines:	Number
Number decommissioned	0
Machines in use last quarter	7
Number bought and installed	0
Machines available for next quarter	7
Theoretical hours available	7476
Hours breakdown	26
Hours worked	7299
Hours planned maintenance	9
Average machine efficiency %	94.2
Materials:	
Opening stock available	1109
Bought spot	10192
Bought default	0
Lost or destroyed	0
Used	10192
Closing stock	1109
For delivery next quarter:	
Bought last quarter	0
Bought quarter before last	0
For delivery quarter after next:	0
Internet statistics:	
Number of web-site ports operated	28
Number of visits to your web-site	185341
Estimated level of failed visits (%)	0
Number of internet service complaints	232

HUMAN RESOURCES:		
Production personnel:	Assembly	Machining
At start of last quarter	96	43
Recruited	0	13
Trained	0	
Dismissed	0	0
Left	0	14
Available for next quarter	96	42
Assembly workers:		
Hours available		55296
Absenteeism/sickness (hours)		337
Hours worked		37492
Notice of strike weeks for next quarter		0

Agents/distributors:	Europe	Nafta	Internet
Active last quarter	9	6	1
Resigned	3	2	
Dismissed	0	0	0
Appointed	3	4	0
Active next quarter	9	8	1

Transport:	Europe	Nafta	Internet
Journey length (km)	1310	500	300
Number of loads	19	12	16

Carbon footprint (CO2e):	Tonnes
Factory heating and lighting	20,95
Energy used in production	42,27
Total primary CO2e	63,22

PRODUCT DATA:	Product 1	Product 2	Product 3
Quantities:			
Scheduled	8149	4311	1679
Produced	8348	4422	1723
Rejected	199	110	44
Lost or destroyed	0	1 !	0
Delivered to:			
European agents	3203	1768	689
Nafta distributors	2072	1103	429
Internet distributor	2874	1440	561
Orders from:			
Europe	2734	1507	622
Nafta	1718	938	379
Internet	2524	1350	540
Sold to:			
Europe	2734	1507	622
Nafta	1718	938	379
Internet	2524	1350	540
Backlog of orders:			
Europe	0	0	0
Nafta	0	0	0
Warehouse stocks:			
Europe	469	261	67
Nafta	354	165	50
Internet	350	90	21
Guarantee services	249	118	44
Product improvements	Major	Major	Minor
Product components:			
Assembled last quarter	7000	0	1723
Ordered last quarter	0	0	0
Closing stock	0	0	299
Available for assembly	0	0	299

Appendix 10.3 Financial Statements

Group 1

Company 1

Financial Statements

Year 2013

Qtr 3

FINANCIAL STATEMENTS		INCOME STATEMENT		BALANCE SHEET		CASH FLOW STATEMENT	
ADMINISTRATIVE EXPENSES	€		€		€		€
Advertising	590000	Sales revenue	6076163	Non-current assets:		Operating activities:	
Internet distributor	144583	Opening inventory values	1461830	Land	450000	Trading receipts	6318698
Internet service provider	88291	Components purchased	0	Buildings	1102500	Insurance receipts	0
Agents and distributors	669152	Materials purchased	483437	Machinery	1358940	Trading payments	4032078
Sales office	60761	Machine running costs	122032	Property, plant and equipment	2911440	Tax paid	0
Guarantee servicing	43640	Machinists wages	293867			Net cash flow from operations	2286620
Product development	90000	Assembly wages	503772	Current assets:		Investing activities:	
Web-site development	40000	Quality control	14493	Product inventories	253281	Interest received	0
Personnel department	43000	Hired transport	171400	Component inventories	65780	Asset sales	0
Machine maintenance	2975	Less closing inventory values	347830	Materials inventory	28769	Assets purchased	0
Purchasing and warehousing	18754	Cost of sales	2703001	Trade receivables	3237490	Net cash flow from investing	0
Business intelligence	12500	Gross profit	3373162	Cash and cash equivalents	4575620		
Credit control	12312	Administrative expenses	2107004	Current assets	8160940	Financing activities:	
Insurance premiums	4408	Insurance receipts	0	Total assets	11072380	Shares issued	474360
Management salaries	240000	Depreciation	34845	Liabilities:		Shares repurchased	0
Other costs	46628	Operating profit/loss	1231313	Tax due	0	Dividends paid	400000
Total administrative expenses	2107004	Finance income	0	Trade payables	1113487	Additional loans	0
Accumulated taxable profit:		Finance expense	0	Bank overdraft	0	Interest paid	0
Profit/loss before tax	1231313	Profit/loss before tax	1231313	Current liabilities	1113487	Net cash flow from financing	74360
Previous taxable profit/loss	2500493	Tax assessed	0	Term loans	0		
Taxable profit/loss	3731806	Profit/loss for the period	1231313	Net assets	9958893	Net cash flow	2360980
		Earnings per share (cents)	29,32			Previous cash balance	2214640
		Dividends paid	400000	Equity:		Cash balance	4575620
Insurance claimed	173	Transferred to retained earnings	831313	Share capital	4200000	(including a term deposit of -	0)
Primary non-insured risk	17632	Previous retained earnings	4653220	Share premium account	274360	Overdraft limit for next quarter	2750000
		Retained earnings	5484533	Retained earnings	5484533	Borrowing power next quarter	2772000
				Total equity	9958893		

Appendix 10.4 Group Information 1

MANAGEMENT REPORT - Group Information Pg 1 Group 1

Year 2013

Qtr 3

ECONOMIC INTELLIGENCE	Europe	Nafta	Rest (of developed world)	
Gross domestic product (de-seasonalised)	4195	4329	61	
% Unemployment rate (de-seasonalised)	6,9	4,9		
Balance of external trade	1937	1933		
Information about next quarter:				
Central Bank base rate (% p.a.)	4,0	4,0	Exchange rate in € per \$ (USD)	1,01
Building cost (€ per square metre)	500			
Component cost (€ per unit)	Product 1	Product 2	Product 3	
from (no premium materials)	91	138	215	
to (100% premium materials)	107	170	263	
Material prices (\$ per '000 units)	Spot price	3 month	6 month	
	31622	30040	28539	
BUSINESS REPORT:	Is the future of the global economy one of pessimism? Will the Eurozone crisis be resolved shortly? Can a reduction in the cost of energy help?			

FREE INFORMATION	Company 1	Company 2	Company 3	Company 4	Company 5	Company 6	Company 7	Company 8
Stock market data:								
Share price (cents)	262,96	187,04	150,82	153,15	0	0	0	0
Market valuation (€)	11044320	7481600	6032800	6126000	0	0	0	0
Dividend paid (cents/share)	10	15	7	0	0	0	0	0
Investment performance (€)	11226672	8630303	6858383	6383437	0	0	0	0
Business intelligence:								
Product prices (€)								
Product 1: Europe	355	300	336	319	0	0	0	0
Nafta	350	300	336	319	0	0	0	0
Internet	360	295	325	319	0	0	0	0
Product 2: Europe	545	545	571	519	0	0	0	0
Nafta	545	545	571	519	0	0	0	0
Internet	545	500	497	519	0	0	0	0
Product 3: Europe	800	780	814	799	0	0	0	0
Nafta	830	780	814	799	0	0	0	0
Internet	800	765	708	799	0	0	0	0
Production employees	152	125	134	92	0	0	0	0
Assembly wage rate (cents/hr)	1000	1060	1050	1025	0	0	0	0
Number of agents/distributors	15	14	16	10	0	0	0	0

Appendix 10.5 Group Information 2

MANAGEMENT REPORT - Group Information Pg 2 Group 0

Year 2013

Qtr 3

COMPANY BALANCE SHEETS								
for Company:	1	2	3	4				
Assets								
Property, plant and equipment	2911440	4219914	3453756	2536998				
Inventories	347830	125232	227113	65890				
Trade receivables	3237490	2422410	1800224	1399427				
Cash and cash equivalents	4575620	1144473	1372597	2931193				
Liabilities								
Tax assessed and due	0	0	0	0				
Trade payables	1113487	852675	568648	557756				
Bank overdraft	0	0	0	0				
Long term loans	0	0	0	0				
Equity								
Ordinary capital	4200000	4000000	4000000	4000000				
Share premium account	274360	0	0	0				
Retained earnings	5484533	3059354	2285042	2375752				
Net Worth	9958893	7059354	6285042	6375752	0	0	0	0

PURCHASED INFORMATION								
Company number:	1	2	3	4	5	6	7	8
Market shares (% by volume sold)								
Product 1: Europe	19.9	14.6	9.4	6.9	0,0	0,0	0,0	0,0
Nafta	17.5	18.9	12.2	8.3	0,0	0,0	0,0	0,0
Internet	23.2	20.9	14.5	11.2	0,0	0,0	0,0	0,0
Product 2: Europe	21.7	12.4	8.6	7.7	0,0	0,0	0,0	0,0
Nafta	19.3	15.7	10.1	10.3	0,0	0,0	0,0	0,0
Internet	23.7	18.5	15.7	12.4	0,0	0,0	0,0	0,0
Product 3: Europe	20.7	16.5	13.3	10.8	0,0	0,0	0,0	0,0
Nafta	17.5	20.7	15.1	12.7	0,0	0,0	0,0	0,0
Internet	20.9	20.5	21.1	14.0	0,0	0,0	0,0	0,0

Competitors' business activity								
Company number:	1	2	3	4	5	6	7	8
Total advertising expenditure (€)	590000	430000	405000	360000	0	0	0	0
Total product development (€)	90000	60000	15000	45000	0	0	0	0
Consumer star ratings:								
Product 1	*****	*****	*****	****				
Product 2	*****	*****	****	*****				
Product 3	*****	*****	*****	*****				
Web-site	*****	****	****	****				