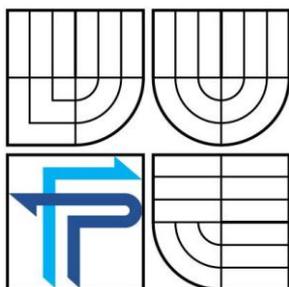


VYSOKÉ UČENÍ TECHNICKÉ V BRNĚ

BRNO UNIVERSITY OF TECHNOLOGY



FAKULTA PODNIKATELSKÁ  
ÚSTAV EKONOMIKY

FACULTY OF BUSINESS AND MANAGEMENT  
INSTITUTE OF ECONOMICS

## FINANCIAL ANALYSIS OF THE SELECTED FIRM

FINANČNÍ ANALÝZA VYBRANÉ FIRMY

DIPLOMOVÁ PRÁCE

MASTER'S THESIS

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BRNO 2011

## **MASTER'S THESIS ASSIGNMENT**

**Dobešová Věra, Bc.**

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European Business and Finance (6208T150)

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### **Financial Analysis of the Selected Firm**

In the Czech language:

### **Finanční analýza vybrané firmy**

Instruction:

Introduction  
Theoretical Foundations  
Current Situation Analysis  
Proposals and Contribution  
Conclusion

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- DLUHOŠOVÁ, D. Finanční řízení a rozhodování podniku. 2. upravené vyd. Praha: Ekopress, s.r.o., 2008. 192 s. ISBN 978-80-86929-44-6.
- GRASSEOVÁ, M. a kol. Analýza podniku v rukou manažera. 1. vyd. Brno: Computer Press, a.s., 2010. 325 s. ISBN 978-80-251-2621-9.
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- RŮČKOVÁ, P. Finanční analýza – metody, ukazatele, využití v praxi. Praha: Grada Publishing, 2007. 120 s. ISBN 978-80-247-1386-1.
- TEMTE, Andrew . Financial Statement Analysis [online]. La Crosse : Dearborn Trade, A Kaplan Professional Company , 2004 [cit. 2011-02-09]. Available at WWW: <<http://ntu.ac.uk/llr/>>.. ISBN 9781419528972.

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Termín odevzdání master's thesis is given by the Schedule of the Academic year 2010/2011.

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## **ABSTRACT**

The master's thesis deals with the financial evaluation of the company XYZ plc., that is based on the usage of the selected methods of financial analysis during the period 2008-2010. The main aim of the thesis is to propose the suggestions leading to improvement of the financial situation of the company in the coming years.

## **ABSTRAKT**

Tato diplomová práce pojednává o finančním hodnocení společnosti XYZ plc., které je založeno na použití vybraných metod finanční analýzy za období 2008 až 2010. The hlavní cíl této práce je navrhnout opatření vedoucí ke zlepšení finanční situace společnosti v nadcházejících letech.

## **KEY WORDS**

Financial analysis, financial statements, financial ratios, liquidity, rentability, cash flow, quick test

## **KLÍČOVÁ SLOVA**

Finanční analýza, finanční výkazy, finanční ukazatele, likvidita, rentabilita, cash flow, quick test

## **BIBLIOGRAPHIC CITATION**

DOBEŠOVÁ, V. *Finanční analýza vybrané firmy*. Brno: Vysoké učení technické v Brně, Fakulta podnikatelská, 2011. 81 s. Vedoucí diplomové práce Ing. Helena Hanušová, CSc..

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Brno, 31th August 2011

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## **ACKNOWLEDGEMENTS**

I would like to thank my supervising tutor Ing. Helena Hanušová, CSc. for her expert guidance and valuable advices.

I also thank MSc. Patrik Beck, a technical manager of the company for giving valuable information, consultations and for his kind approach.

Special thanks belong to my parents who have supported me during all studies at the university.

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## INTRODUCTION

The globalization has enabled the companies to cross borders of foreign countries and compete with the international companies on the global level. The firm often faces the more difficult conditions because of the higher rate of competitiveness. On the other side, company can use those changes to convert them into its competitive advantage and be more profitable.

Therefore, each company needs to have the perfect overview of its financial results and activities in order to overcome the today's competitors and reach the profit. Those findings can be founded in the financial analysis, that is considered as one of the most important tool of the financial management. The financial analysis provides the reliable source of financial information enabling to uncover the weaknesses, which could lead to problems and strong points, that could be beneficial in the future. The main goal of the financial analysis is to give a feedback about overall situation in the management of the company.

Although, the results appearing in the numbers are not match for the proper evaluation of analysis. The more important is the correct interpretation of the final results and looking for its causes and consequences in order to help the users to understand the linkage between managerial decision making and its impact on the financial situation and performance of the company. On the base of those findings, management monitors the company's financial stability, profitability and liquidity and consequently, makes decisions leading to organizational optimization in the future.

The topic of my master's thesis is *Financial analysis of the selected company* focusing on the IT company. The following paper is divided into four main parts. The first part defines the main aims of thesis and method of analysis which are used. The second section includes the theoretical bases where can be founded horizontal and vertical analysis, the proportion ratios, cash-flow analysis and cumulative ratios. All those ratios are consequently used and author provides their calculations with real numbers coming from the company financial statements and those results are mentioned in the chapter 3. The suggested proposals and their contribution to company are based on the financial

analysis, SWOT analysis, Porter's analysis and notes to the financial statements. Those final recommendations are found in the chapter 4. The final chapter is conclusion that summarizes the master thesis.

# **1 DEFINITION OF MAIN ISSUES AND AIMS OF THESIS**

The current business situation has faced the impacts of the financial crisis. Many companies pass through difficult period and try to survive in spite of the unhospitable conditions on the markets. Therefore, the company should have the overall overview about its situation in order to make right decisions and ensure the company's future development. Those findings can be found out through the financial and other analysis which provide needed information.

The main aim of the master's thesis is to make readers acquainted with the thorough analysis of company's financial situation. The suggested proposals leading to company's improvement are based on the results coming from this analysis considering the facts about the company and its SWOT and Porter's five forces's analysis. In the frame of theoretical base and results from calculations of various ratios, author provides conclusions and subsequent recommendations in order to improve the current situation, keep the competitive advantage and help to achieve a desired performance and positive development of the company.

## **1.1 Methods of analysis**

The master thesis uses the methods of analysis which are based on the company's internal and external environments as well. Those methods are the key elements serving the information in order to do the right decision making process. The Porter's five forces helps the company to identify the particular five forces that influence the business and determinate competitive power. Each company should have awareness about this situation. The SWOT analysis informs about the company's strenghts, weaknessess, opportunities and threats. The ratios of the financial analysis include the calculations of the absolute ratios, cash flow analysis, proportion ration, differential ratios, cummulative ratios. All those mentioned ratios are used in order to define the financial situation of the selected company and subsequently, suggest improvements leading to its desired development.

## **2 THEORETICAL BASIS OF THE THESIS**

The second chapter deals with the theoretical base of the thesis. It consists of the porter's five forces, SWOT analysis, financial analysis and its history, description, overview of the financial statements, users of financial analysis, and description of methods that are used in the chapter three, where are those calculation implied on the company. Those ratios are:

- Absolute ratios analysis
- Cash flow analysis
- Proportion ratios analysis
- Differential ratios analysis
- Cumulative ratios analysis

### **2.1 The financial analysis**

The financial analysis is the sphere, that represent the meaningful part of the financial management of firm. It provides feedback between the assumed effect of managerial decisions and reality. It is closely connected to the subject of the financial accounting, that provides data and information for financial decision-making through the financial statements, which are balance sheet, income statements, statement of cash flows and statement of change in equity (according IFRS). Those statements as well as accounting should be prepared properly in order to satisfy the needs of financial management and consequently, its decision making. Nevertheless, the accounting information do not reffect the future forecast and also miss the complete view of the financial situation of the company, its strengths, weaknesses, trends and total quality of management. In order to overcome those inadequacies, the financial analysis is used there. It represents the formalized method to measure data obtained among each other and enable to reach the conclusions about overall management and financial situation of the firm. Financial analysis also represents the evaluation of past, current situation and forecast future of financial management. Its purpose and intent is to provide diagnosis through the special methodological tools, capture all items of financial management and consequently analyze them. Company can

be considered as financially healthy if it is able to fulfill its purposes in both present and in the future. [6, 11]

### **2.1.1 History of Financial Analysis**

The historical roots of the financial analysis are dated back to origin of money. However, the methods of financial analysis of the historical methods have changed in many ways. Nowadays, only its principles and the reasons for compiling are the same. Modern methods of financial analysis have arisen in the United States. There where written the greatest amount of theoretical works on that topic and the practical application of those methods was realized. The term "financial analysis" comes from English. In continental Europe (especially in German speaking countries) are more likely to occur with the concept of "balancing analysis" (German - Bilanzanalyse) or even "total criticism" (German Bilanzkritik). The original understanding of the financial analysis was based on viewing the differences in accounting indicators, in absolute terms, particularly monetary values. As the next evolutionary step was introduced as an examination of financial statements information to evaluate firm's rentability. Especially during the Great Depression in the 30th years, the issues of liquidity and firm's survival became important. That is why, the attention turned to the profitability and efficiency. [6]

Financial analysis can be the analysis of the financial situation in company, in industries or state. The analysis uses the accounting and statistical information from the distant or immediate past. It also works with current trends and with predictions in some cases. [6]

### **2.1.2 Users of financial statements**

There are various kinds of users of financial statements. Those are people and institutions, who use the financial statements for a large spectrum of business purposes in order to success in the business world. Those users can be divided into two main groups: <sup>1</sup>

1. *Internal users* (they are inside the business) - those users of the financial statements are seen in the following picture where their primary goals and main objectives are also shown. Those are:

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<sup>1</sup> TEMTE, Andrew. *Financial Statement Analysis*. 2004. p.75 - 77

- *Equity investors* look for estimation of the value of its corporation. Their main interest is focused on the generation of the profitability and return on their investments (dividends).<sup>2</sup>
- *Creditors* are more interested in the corporation's ability to repay debt and getting information about the cash flow of the corporation over the life of the debt. The short-term credit ratings inform creditors about the ability to meet requirements for liquidity of company. The organization's solvency and ability to repay debt in long term perspective are indicated via long-term bond ratings.<sup>2</sup>
- *Management* use information gathered from financial analysis to make strategic and operating decisions. It is more concerned with the total profitability, efficiency and performance.<sup>2</sup>

**Figure 1 Users of the financial statements analysis**

<i>User of Financial Statement Analysis</i>	<i>Primary Goal</i>	<i>Objectives</i>
Equity investors	Valuation	Profitability Risk analysis Growth analysis
Creditors	Ability to repay debt	Liquidity Solvency
Management	Efficiency	Profitability Solvency Operating performance

Source: TEMTE, Andrew. *Financial Statement Analysis*. 2004. p.75

2. *External users* are in the external position to company. They are interested in the financial strength of a company in order to help them make investments decision making. Those can be:

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<sup>2</sup> TEMTE, Andrew. *Financial Statement Analysis*. 2004. p.75 - 77

- *Institutional investors;*
- *Financial Institutions (banks, lending institutions);*
- *Government;*
- *Vendors;*
- *Labour unions;*
- *And others (e.g. suppliers, competitors).<sup>3</sup>*

### **2.1.3 Financial Statements**

The quality materials are the basis for worth financial analysis. If documents are not handled properly and professionally or if we use the wrong materials, the valuable results cannot be built. There are financial statements capturing the movement of corporate finance in all its forms and at all stages of business activity. Each of them express the different type of information. Those statements are:<sup>4</sup>

#### **Basic financial statements**

- *The income statement (Profit & loss statement)* – represents the company’s operating results for a period of time. It gives an overview of its total revenues (sales), cost of operating the business (expenses) and net profit or loss.<sup>5</sup>
- *The balance sheet* – is composed of three main parts: assets, liabilities, and owner’s equity. The linkage between these three items can be expressed through the basic accounting equation:  $\text{Assets} = \text{Liabilities} + \text{Equity}$ .<sup>6</sup>

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<sup>3</sup> Finance Scholar. [online] [cit.2011-08-19]. Available at <http://www.financescholar.com/profit-margin-analysis.html>.

<sup>4</sup> Helfert, Erich A. *Financial analysis: tools and techniques: a guide for managers*. 2001. p. 14 - 36

<sup>5</sup> At the same place. p. 36 - 64

<sup>6</sup> At the same place. p. 36 - 64

- *The statement of owner's equity* – summarizes the activity of the equity accounts from the balance sheet. [10]

### **Statement of Cash Flows**

Statement of cash flows combines information from both the balance sheet and the income statements. It reflects the changes of the cash account and monitors the cash flow changes from operations, investments, and financing.<sup>7</sup>

### **Other information in annual reports**

An annual 10-K report is required for publicly traded corporations. The annual report serves as the information both business owners and other external users of financial information about the financial position and operations of the corporation. In addition, it can - especially in larger companies with extensive clientele and ambitions for further expansion - to serve as an important promotional tool. That is why, these companies emphasize the graphic design of those annual reports. [7,10]

There are also footnotes to the hereinbefore mentioned financial statements. Those notes provide further information regarding the depreciation method, inventory methods, and other essential information helping the analysis. Sources such as internet and other technological advances can be considered as other way how to get the information nowadays. [16]

#### **2.1.4 Approaches to the financial analysis**

Two main approaches to the financial analysis can be divided into:

- Fundamental (qualitative) analysis – the analysis results from wide knowledge of linkage between economic and non-economic phenomena considering also experience of specialist and future trends.
- Technical (quantitative) analysis – the analysis is based on the mathematic, statistic, econometric and other algorithmic methods to compile economic data and draw consequent conclusions. [12]

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<sup>7</sup> At the same place. p.89-107

### 2.1.5 Methods of the financial analysis

There are two main methods of financial analysis which can be classified into two main groups:

1. **Fundamental technical analysis methods** – work with the basic arithmetic operation and indicators. Those have advantage of their speed and simplicity to make calculations. Those methods can be divided into following categories: [6]
  - a) Absolute ratios analysis
  - b) Cash flow analysis
  - c) Proportion ratio analysis
  - d) Differential ratios analysis
  - e) System of ratios analysis
2. **Higher financial analysis methods** – use more complex mathematic methods and cogitation. Those can be divided into: Mathematic-statistic methods (e.g. Statistic tests, Regression simulation) and Non-statistic methods (Expert systems, Fuzzy sets). [6]

Only the fundamental methods will be closely presented in the following chapters. Those methods are matching the main purposes of the thesis.

#### 2.1.5.1 Horizontal Analysis

Horizontal analysis can be also called the *comparative or trend analysis*. Horizontal analysis ("the lines") presents a comparison of the various changes of the items recorded in the financial statements in chronological order. That analysis helps us to determine the percentage by which each item changed from the last year or how much the individual item has changed in absolute terms.<sup>8</sup>

The annual changes can be calculated by the following formulas:

- **The formula of absolute changes:**

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<sup>8</sup> KISLINGEROVÁ, E. *Finanční analýza: krok za krokem*.2005. p.11 - 14

$$D_{t/t-1} = B_i(t) - B_i(t-1),^9$$

where:  $D_{t/t-1}$  = the change against the last period (year);

$t$  – time;

$B_i$  – the value of an item in the financial statements.

➤ **The formula of relative changes (in %):**

$$I_{t/t-1} = B_i(t) / B_i(t-1) \times 100,^{10}$$

where:  $I_{t/t-1}$  – index;

$T$  – time;

$B_i$  - value of an item in the financial statements.

The method of analysis needs to have the following points in order to achieve sufficient and informative ability of this:

- sufficient number of data sets, (at least for two seasons);
- comparability in time series data for a particular company studied;
- if the data can be excluded from any accidental impacts that the development of certain items in some way influenced. [4; 9]

### **2.1.5.2 Vertical Analysis**

The method is based on observations of individual item of the financial statement as a percentage to the selected single base referred as 100%. This analysis is sometimes called as the structural analysis. In order to analyze e.g. the balance sheet, as the basic (100%) is chosen the sum of total assets (or total liabilities, equity) that is measured in the terms of the particular item. In the case of the analysis of profit and loss account, the total revenue is taken as the base. The method of percentual analysis can be conveniently used to compare the financial statements of the company in the longer term to ensure comparability

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<sup>9</sup> KISLINGEROVÁ, E. *Finanční analýza: krok za krokem*. 2005. p. 13

<sup>10</sup> At the same place.

of data. Moreover, it can also serve as a guide for planning activities regarding to results from that analysis. [4; 9]

➤ **Formula of percentage analysis:**

$$I_i = B_i / \sum B_i \times 100,^{11}$$

where:  $I_i$  – index;

$B_i$  - value of an item in the financial statements;

$\sum B_i$  – sum of all values of all items.<sup>12</sup>

### 2.1.5.3 Cash flow analysis

The statement of cash flow summarizes a company's cash inflows and cash outflows changing from the beginning to the end of the reporting period. It reflects the real movement of the financial sources of the company and informs about the factors which led to those changes in the management of the company. The cash flow statement gives more detailed information than are founded in the balance sheet or income statement, where only the structure of the various categories of revenues, costs, assets and equity is available. Moreover, it informs the users about real financial receipts and expenditure and explains firm's lack of the real cash in spite of high revenues in the income statements. The data of cash flow help to uncover the inconsonance between both expenditure and costs, or receipts and revenues. That statement gives the information whether the company has sufficient financial sources available and has the financial solvency to cover its commitments required for working capital.<sup>13</sup>

The statement of cash flow classifies cash flow into three following parts:

- **Operating cash flow (OCF)** – servers as the sources of information about the cash generated from the operating activities. It express the amount of current cash generated by company's business. It is also known as Cash flow from operatios.<sup>8</sup>

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<sup>11</sup> KISLINGEROVÁ, E. *Finanční analýza: krok za krokem*.2005. p.15

<sup>12</sup> At the same place. p.15

<sup>13</sup> At the same place. p.30

- **Investing cash flow (CFI)** – serves as the sources of information about the cash resulting from any gains (or losses) from the sale or purchase of the assets (such as property, plant, equipment); from investments in the financial markets or from operating subsidiaries.<sup>8</sup>
- **Financing cash flow (CFF)** – serves as the sources of information about the cash generated from the external activities such as issuing cash dividends, issuing and selling more stock, or some changes in the loans.

14

There are two methods of the cash flow analysis:

- **Direct Method** – it is also also called the income statement method. It calculates cash flows based on the cash receipts and cash disbursements from operating activities. It includes items such as the *Cash received from customers, Interest and dividends received, Cash paid to employees and suppliers, Other cash received* etc. The disadvantage of that method is the lack of the accounts of incomes and expenses.<sup>15</sup>
- **Indirect Method** – it is also called the reconciliation method. That method is more commonly used in practise. It consists in calculations of cash flow from operating activities where the net income is converted into net cash flow. That method reposes upon net income of items which influenced reported net income but didn't influence cash.<sup>16</sup>

#### 2.1.5.4 Differential Ratios

The series of differential ratios can be considered as the other part of the financial analysis. There are indices which can be described as the financial funds. Those inform about liquidity of the company and its ability to manage its liquid assets. [10] Those are:

- **Net working capital** – that ratio informs about company's availability of cash that covers operative activities of the company. The high value of

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<sup>14</sup> VALACH, J. a kol. *Finanční řízení podniku*. 2006. p. 83 - 90

<sup>15</sup> TEMTE, Andrew. *Financial Statement Analysis*. 2004. 94

<sup>16</sup> At the same place, p. 101

net working capital enables to dispose higher ability to cover its commitments. The positive value of that ratio shows the company's financial security and its good liquidity. The negative value threatens company's liquidity and ability to meet its obligations. It is calculated as:

$$\text{Current Assets} - \text{Current Liabilities}^{17}$$

- **Net quick assets** – that ratio provides more relevant information about liquidity of the company because there is the lack of the less liquid assets. It is calculated as:

$$\text{Available Cash Resources} - \text{promptly due payables}^{18}$$

- **Net cash assets** – that ratios puts together the two previous ratios of the differential analysis. Its calculation does not comprise less liquid items such as receivables or inventory. It is calculated as:

$$(\text{Current Assets} - \text{Inventory}) - \text{Short term Liabilities}^{19}$$

#### 2.1.5.5 Proportion ratios analysis

Ratio analysis represent the pivot of the financial analysis and an easy way how to interpret the numbers from the financial statements. That analysis, unlike the vertical and horizontal analysis, monitors the particular item of the financial statements in time or in the relation with other items. The financial ratios help to indicate the firm's performance and financial situation. Majority of them can be calculated on the base of information stated in the financial statements. The financial ratios are useful to analyze the trends and compare its numbers to those of other firms. In some cases, it may predict firm's bankruptcy in future. [9]

Financial ratios can be divided in the frame of the information they provide into the following types:

- Indicators of liquidity
- Indicators of solvency

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<sup>17</sup> SEDLÁČEK, J. *Finanční analýza podniku*. 2009. p. 35 - 40

<sup>18</sup> At the same place.

<sup>19</sup> At the same place.

- Indicators of activity (efficiency ratios)
- Indicators of profitability
- Measures for shareholders [9]

### **Indicators of liquidity**

The indicators of liquidity measure the company's ability to meet its short-term financial obligations. The results of liquidity are based on the comparison of the most liquid assets (or those that can be easily changed into the cash) and company's short-term liabilities. [7]

#### **Those indicators are:**

- **Working capital ratio** – it monitors the proportion of working capital to total assets as an indicator of liquidity. It is calculated as:<sup>20</sup>

$$\text{(Current Assets – Current Liabilities) / Total Assets}^{14}$$

- **Current ratio** – it is the most often used ratio. It measures the company's ability to pay off its short-term liabilities within the next accounting period (usually one year). The proper result should be within the range 0,2 – 0,5 but the higher such as the range of 0,9 – 1,1 is better. Its is calculated as:<sup>21</sup>

$$\text{Current Assets / Current Liabilities}^{21}$$

- **Quick ratio** – it is also known as the „acid test“. That ratio expresses the more critical test of the ability to pay current liabilities than the current ratio. Its is calculated as:<sup>22</sup>

$$\text{(Current Assets - Inventories) / Current Liabilities}^{22}$$

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<sup>20</sup> VALACH, J. a kol. *Finanční řízení podniku*. 2006. p. 108

<sup>21</sup> At the same place.

<sup>22</sup> At the same place.

## Indicators of solvency

The ratios of solvency are used to measure the company's ability to meet long-term obligations and consequently avoid bankruptcy. It informs investors whether the company has been financed more by the debt or the equity. The high solvency ratio suggests that company is financially healthy. General ratio of 20% and values above are regarded as the healthy. Lower values indicate the probability of company's default.<sup>23</sup>

Those indicators are:

- **Debt to equity** – the ratio indicates the extent to which a firm is using financial leverage. The recommended values of those ratios can depend on the industry. The industry with predictable earnings prefer a high ratio. Industry with nonstable earnings prefer a lower ratio. It is calculated as:<sup>24</sup>

$$\text{Liabilities} / \text{Stockholders' Equity}^{25}$$

- **Debt ratio** – the ratio indicates the extent of leverage that is being used by the company. The debt ratio measures company's total liabilities (debt) to its total assets. The lower results of ratio mean the lower degree of dependence on the leverage and stronger company's equity position as well. It is calculated as:<sup>26</sup>

$$\text{Total Liabilities} / \text{Total Assets}^{26}$$

- **Self – Financing Ratio** – the ratio indicates the extent of insolvency of owner's equity and inform about company's structure of finance. Both that ratio and debt ratio create together value 1. It is calculated as:<sup>25</sup>

$$\text{Owner's Equity} / \text{Total Assets}^{27}$$

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<sup>23</sup> VALACH, J. a kol. *Finanční řízení podniku*. 2006. p. 105

<sup>24</sup> SEDLÁČEK, J. *Finanční analýza podniku*. 2009. p. 63 – 66.

<sup>25</sup> At the same place.

<sup>26</sup> At the same place.

<sup>27</sup> At the same place.

## Indicators of efficiency

The indicators of efficiency are used to measure how well a company uses its assets and liabilities. The results of these ratios help the company to decide about questions of the inventory turnover, appropriate credit terms, efficiency of assets, etc. Those indicators are:<sup>28</sup>

- **Inventory Turnover** – the ratio is useful to measure how many times per year the company's inventory is turned over. It can be calculated by both formulas:<sup>29</sup>

$$\text{Cost of Goods Sold} / \text{Inventory}; \text{ or } \text{Sales} / \text{Inventory}^{29}$$

- **Inventory Turnover Period** – the ratio is useful to find out the how many days is the inventory on the stock before its sale. It is calculated as:<sup>30</sup>

$$360 \times \text{Inventory} / \text{Sales}^{30}$$

- **Working capital turnover** – the ratio is useful to measure the amount of working capital that is required in order to produce sales. It is calculated as:<sup>31</sup>

$$\text{Sales} / (\text{Current Assets} - \text{Current Liabilities})^{31}$$

- **Assets Turnover** – the ratio is useful to measure the amount of sales which are generated from each item of the assets. The firm that calls for lower asset base and is able to have the same volume of sales, will be more attractive than firm requiring a higher asset base within the same conditions. It is calculated as:<sup>32</sup>

$$\text{Sales} / \text{Total Assets}^{32}$$

- **Fixed Assets Turnover** – the ratio is useful to measure the amount of sales which are generated from item of the fixed assets. It informs

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<sup>28</sup> KISLINGEROVÁ, E. Manažerské finance. 2007. p. 93 - 95

<sup>29</sup> At the same place.

<sup>30</sup> At the same place.

<sup>31</sup> At the same place.

<sup>32</sup> At the same place.

whether the company used those asset well in order to generate sales. It is calculated as:<sup>33</sup>

### **Sales / Fixed Assets<sup>33</sup>**

- **Receivables Turnover Period** – the ratio is useful to find out how many days lasts before the debtors will pay to company. It is calculated as:<sup>34</sup>

$$360 \times \text{Receivables} / \text{Sales}^{34}$$

- **Payables Turnover Period** – the ratio is useful to find out how many days it takes before the company pay to suppliers. It is calculated as:<sup>35</sup>

$$360 \times \text{Payables} / \text{Sales}^{35}$$

### **Indicators of profitability**

Profitability indicators are a measure of the company's ability to create new sources and continuously achieve profit by using of the invested capital. Those ratios serve as the evaluation and complex appreciation of the overall profitability with regards to the capital committed by stockholders and lenders as compared to its expenses and other costs incurring over specific period. If the ratios are higher or on the same level in comparison with the competitors or previous years of business, it suggests that the company is doing well. Those indicators are: [15]

**Return on Sales (ROS)** – the ratio is used to measure the net income as a percentage of net sales. <sup>36</sup>

$$\text{Net Income after interest and taxes (EAT)} / \text{Net Sales}^{36}$$

**Return on Total Assets (ROA)** - the ratio is used to measure how effectively profit is generated from the overall assets used.<sup>37</sup>

$$\text{Net Income after interest and taxes (EAT)} / \text{Total Assets}^{37}$$

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<sup>33</sup> KISLINGEROVÁ, E. Manažerské finance. 2007. p. 93 - 95

<sup>34</sup> At the same place.

<sup>35</sup> At the same place.

<sup>36</sup> KISLINGEROVÁ, E. Manažerské finance. 2007. p. 83 - 86, SEDLÁČEK, J. Finanční analýza podniku. 2009. P. 56

<sup>37</sup> At the same place.

**Return on Equity (ROE)** – the ratio is used to measure how effectively profit is generated from the stockholder's equity. <sup>38</sup>

$$\text{Net Income after interest and taxes (EAT) / Stockholder's Equity}^{38}$$

**Return on Investment (ROI)** – the ratio is used to measure the size of investment return that is generated from the stockholder's equity. It is key ratio for investors providing them important information about the efficiency of investments.<sup>39</sup>

$$\text{EBIT} + \text{Costs Interests} / \text{Liabilities and Capital}^{39}$$

**Gross Profit Margin** – the ratio is used to inform how much money have left in order to pay operating costs, taxes and to achieve the profit.<sup>40</sup>

$$\text{Total Sales} - \text{Cost of Sales} / \text{Sales}^{40}$$

**Net Profit Margin** – the ratio is used to inform how much money have left after all costs have been paid. <sup>41</sup>

$$\text{EAT} / \text{Sales}^{41}$$

#### Measures for shareholders

**Book Value per Share** – the ratios measure the per share value with regards to the book value that represent the company's equity.<sup>42</sup>

$$\text{Equity} / \text{Share outstanding}^{42}$$

#### 2.1.5.6 Analysis of cumulative ratios

The system of ratios are useful to evaluate the overall financial situation in comparison with other ratios that provide specific information focusing on the particular field. Those ratios are:<sup>37</sup>

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<sup>38</sup> SEDLÁČEK, J. Finanční analýza podniku. 2009. p. 56

<sup>39</sup> At the same place.

<sup>40</sup> TEMTE, Andrew. *Financial Statement Analysis*. 2004. p. 115

<sup>41</sup> Finance Scholar. [online] [cit.2011-08-19]. Available at <http://www.financescholar.com/profit-margin-analysis.html>.

<sup>42</sup> Investopedia. [online] [cit.2011-08-19]. Available at <http://www.investopedia.com/university/ratios/bookvaluepershare.asp#axzz1Wc1FkJgp>.

## **Altman Z-Score**

Provides information about the company's financial health and its probability of the bankruptcy. Altman's model created one formula that is comprising the five ratios. The formula can be used for the analysis of the small or middle-size company and its is calculated:<sup>43</sup>

$$Z = 0.717 x_1 + 0.847 x_2 + 3.107 x_3 + 0.42 x_4 + 0.998 x_5^{44}$$

where:

$x_1 = \text{Working Capital} / \text{Total Assets}$

$x_2 = \text{Retained Earnings} / \text{Total Assets}$

$x_3 = \text{Earnings Before Interest and Taxes} / \text{Total Assets}$

$x_4 = \text{Book Value of Equity} / \text{Total Liabilities}$

$x_5 = \text{Sales} / \text{Total Assets}$

### **Zones of Discrimination:**

$Z > 2.9$  Safe Zone – low risk of bankruptcy

$1.2 > Z < 2.9$  Grey Zone – average risk of bankruptcy

$Z < 1.2$  Distress Zone – high risk of bankruptcy<sup>45</sup>

### **Index IN05**

The Index IN05 serves as the evaluation of the financial health of the company and is comprised from the several parts such as the Altman Z – Score analysis. Nevertheless, that ratio is appropriate only in the czech environment because of its specific conditions. Therefore, author does not include that index into the calculations. [17]

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<sup>43</sup> KISLINGEROVÁ, E. *Finanční analýza: krok za krokem*.2005. p.82

<sup>44</sup> At the same place. p.82

<sup>45</sup> At the same place. p.88

## Quick test

Quick test is comprised from four ratios and it refers the points to the company according to the gathered values. Those four ratios are capital power, liquidity, insolvency and profitability.<sup>46</sup>

R1: Quota of the own equity = Owner's Equity / Total Assets

R2: Period of Cash-Flow pay-off = (Current Liabilities + Long Term Liabilities – Financial Property) / Running Cash Flow

R3: Cash Flow from Sales (in %) = Cash Flow / Sales

R4: Return on Assets (ROA) = EBIT / Total Assets<sup>47</sup>

According to the result from those ratios, the particular points are consequently assigned to the company. The final result is the arithmetical average of the summarization of all ratios.

**Table 1 Evaluation of Quick test**

Ratio	Excellent (1)	Very Good (2)	Good (3)	Bad (4)	Threat (5)
Quota of the own equity	> 30 %	> 20 %	> 10 %	> 0 %	negative
Period of Cash-Flow pay-off	< 3 years	< 5 years	< 12 years	> 12 years	> 30 years
Cash Flow from Sales in %	> 10 %	> 8 %	> 5 %	> 0 %	negative
Return on Assets (ROA)	> 15 %	> 12 %	> 8 %	> 0 %	negative

Source: Own processing from the source: KISLINGEROVÁ, E. Finanční analýza: krok za krokem.2005.p.77

## 2.2 SWOT analysis

The form of SWOT analysis represents strenghts, weaknesses, opportunities and threats of selected and analyzed company. It describes the key matters of the business environment as well as the strategic capability of an organization that are supposed to have the impact on the company's strategy development in the

<sup>46</sup> KISLINGEROVÁ, E. Finanční analýza: krok za krokem.2005. p.76-81

<sup>47</sup> INTENTION OF COMPANY FINANCIAL/ECONOMIC ANALYSIS

IMPLEMENTATION [online] [cit.2011-08-21]. Available at

[http://old.vgtu.lt/leidiniai/leidykla/BUS\\_AND\\_MANA\\_2008/fin-engineering/272-275-G-Art-Olejnik\\_Horvathova.pdf](http://old.vgtu.lt/leidiniai/leidykla/BUS_AND_MANA_2008/fin-engineering/272-275-G-Art-Olejnik_Horvathova.pdf).

future. It gives together the conclusions evaluative the internal potentialities of company and external options of business environment. In the frame of the SWOT analysis, the company defines its weaknesses and consequently can reduce or avoid on-coming threats. In order to get the competitive advantage, company can build on its strengths to explore defined opportunities. It is essential to understand how each item depends on others. SWOT analysis is powerful technique that helps company to compete successfully in the particular market.<sup>48</sup>

### **2.3 Porter's five forces**

Porter designed framework that shapes the particular industry and market as being influenced by five forces. Those determine competitive power in a business sphere. The particular items are seen below in the following picture. *Threat of New Entry* describe the ability of a new company entry the market. The high barriers (e.g. request for economies of scale, special technologies, high initial costs) protect firm's position on the market. Otherwise, the low barriers are indications of new entries. The *Bargaining Power of Suppliers* depends on how easy the suppliers can drive up prices, if their products are unique, how many suppliers are available on the market and what is the cost of switching from one to another. To analyze the *Bargaining Power of Buyers*, the company is in the position of supplier and faces the similar problems mentioned hereinbefore. For analysis of *Competitive Rivalry* is important to have awareness of competitors, its number and capabilities. *Threat of Substitute Products or Service* represents the possibilities of customers to find different way for their needs instead of use your products or services. [6, 8]

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<sup>48</sup> BLAŽKOVÁ, M.: *Marketingové řízení a plánování pro malé a střední firmy*. 2007. p. 156., GRASSEOVÁ, M., DUBEC, R., ŘEHÁK, D.: *Analýza v rukou manažera*. 2010. p. 299.

### **3 ANALYSIS OF PROBLEMS AND CURRENT SITUATION**

The following chapter includes the introduction of Company, description of its history, current situation, its activities, organizational structure and capital management. The company is consequently analyzed through Porter's five forces, SWOT analysis and the financial analysis of the company. The following analysis is the pivot of this thesis and serves the source data for the other chapter that will contain the suggested proposals leading to improvements of the company. Analysis is based on the financial statements of years 2008, 2009 and 2010. It is important to consider the fact, that the company had sold its main product and it started its production from zero in 2008. Since that time Company has completely changed its focus and started to work on the different type of products, the comparison among these years are more valuable. However, the change happened in the year 2008 and the comparison of this year and two others can not be taken as the period of the same conditions. Therefore, the Porter's five forces also analyses the company with regards to the character of business coming from years 2009 and 2010.

In order to calculate following ratios, the author has also used the numbers mentioned in the notes to the financial statements which are not attached in appendices. However, some ratios are not calculated due to the lack of particular accounts.

In order to work the overall analysis, the author has used the knowledge from the theoretical base mentioned in the previous chapter, further four main types of the financial statements and sources necessary to an analysis:

- The statement of income;
- The balance sheet statement;
- The cash flow statement;
- The notes to financial statements;
- Other sources (consultation, official website).

### **3.1 Introduction of company**

Trade name:	<b>XYZ plc.</b>
Legal form:	Limited
Established:	1996
Place of headquarters:	Oxfordshire, Abingdon
Other offices:	London, New York, Chicago, Paris
Turnover:	1 160 000 GBP
Number of employees:	35
The subject of business:	Finance technologies
Core Products:	Accelerated Market Data Line Handlers Accelerated Market Data Feed Handlers Accelerated Order Access/Execution

#### **3.1.1 History**

The company was founded as spin-off from Oxford University in 1996. Its specialization was in applying acceleration technologies to tasks demanding a lot of processing power. Company was a leading provider of Electronic System Level (ESL) design solutions for the Embedded Systems and Accelerated Computing markets. The main product was a unique design technology allowing silicon chips to be programmed directly from high level software description (Handel-C). This automated path from algorithm design to hardware implementation speeds chip design, support greater product differentiation, and enables the rapid development of custom co-processors for algorithm acceleration. In addition to software, Company offers these market sectors complementary solutions including development and acceleration boards, IP, training and professional services. Company was targeting large number of industries varying from oil, automotive, energy, agricultural to finance and had customers in all regions of the world. It had established partnerships and

strategic relationships with global leaders in the electronic value chain Altera, Synopsys, Texas Instruments, Toshiba and Xilinx. However, this business model was unsustainable because of targeting too wide spectrum of business. That led to company restructuring at the beginning 2008 and the sale of ESL to Agility Design Solutions Inc. The sale had caused the significant reduction of the operational costs by Company staff moving to Agility including engineers and sales resources who specialized in that business sector.<sup>49</sup>

### **3.1.2 Current situation**

The Company business restructure led to changes of business strategy and focus, value proposition to customers, business model and partnership. Company has moved from a technology company to a solution provider, leveraging its engineering resources and know-how to focus on specific product in order to provide accelerated solutions for investment banks, brokers, hedge funds and other firms trading on electronic exchanges. These accelerated solutions represent low-latency and high bandwidth solutions which are implemented for those organizations. Company's low latency products enable users to capture market data faster than any alternative offering on the market today and lead to reinforcement of the clients reaction to market conditions more quickly and trade faster in comparison with their competitions. This solution can deliver sub 5 microsecond latency and extremely high bandwidth (over 10 million messages per second). Its implemented solutions are determined for the main US and European Equities, Options and Futures exchanges.<sup>50</sup>

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<sup>49</sup> Celoxica Holdings plc. *Financial statements*. 2010, p. 3-5

<sup>50</sup> At the same place.

### **3.1.3 The subject of business**

Company's principal activity is the provision of solutions utilizing FPGA-based architectures in the growing demands for ultra-low latency in the financial services industry and, in particular to the advanced, electronic trading community.<sup>51</sup>

Products and services:

- Accelerated Market Data Feed Handlers
- Accelerated Order Access / Execution
- Implementation
- Project Support
- Maintenance
- Upgrade Services

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<sup>51</sup> Celoxica Holdings plc. *Financial statements*. 2010, p. 3-5

Figure 2 Illustration of product integration



Source: Official website of Company<sup>52</sup>

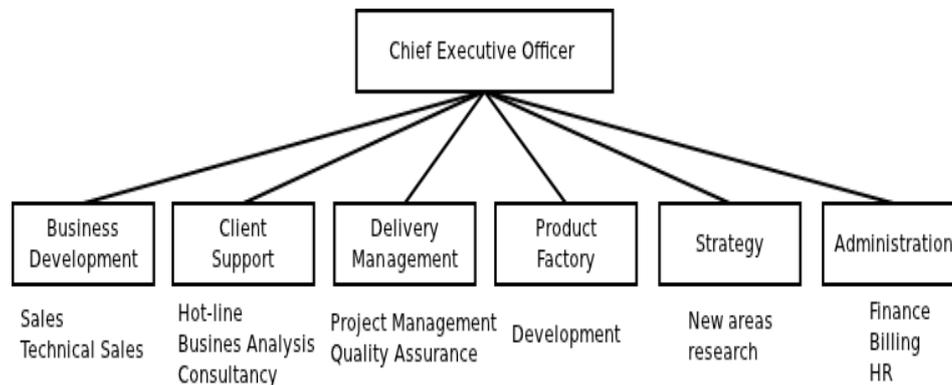
### 3.1.4 Organizational structure

The Company's headquarters is situated in Abingdon (UK) where is the main Business Development team and most of the management is. Nowadays, the

<sup>52</sup> Source: *Accelerated trading solution*. [online] [cit.2011-08-19]. Available at: [www.celoxica.com](http://www.celoxica.com).

main office has been moving from Abingdon to London in order to get better access to the clients. Offices in US were established mainly because of that reason as well. The new branch is being established in Paris currently. The business development and client supports are combined in all those offices.

**Figure 3 The organizational structure**



*Source: Own processing*

### 3.1.5 Capital management

Company has considered its capital to be defined as all equity and reserves accounts, as disclosed in the consolidated statements of changes in equity. It has relied on share issues to finance the business. However, its overall target is still to produce sufficient cash resources to cover its activities. The last increasing of the capital share was at value of GBP 1,128,434 (1p/per share) during the year 2010. Its overall share capital created value at 17,355,294 GBP at 31 December 2010. However, there is also the account of Retained Earnings cumulating losses of the previous periods.<sup>53</sup>

### 3.1.6 Accounting policies

Company Holdings plc is a company incorporated in the United Kingdom under the Companies Act 2006. Company was listed as an AIM-listed company within 2008. The Group's (company and its subsidiaries are referred to as the „Group“) financial statements have been prepared for each financial year in accordance with International Financial Reporting Standards (IFRS) as adopted by EU, and those are also prepared in accordance with UK Accounting Standards (United Kingdom Generally Accepted Accounting Practise). The financial statements are

<sup>53</sup> Celoxica Holdings plc. *Financial statements*. 2010, p. 6

presented in pounds (GBP) with regards to the the primary economic environment in which the company operates.<sup>54</sup>

### **3.2 Porter's five forces**

Company XYZ belongs to IT industry with the specific focus on the financial sector that creates the particular conditions in order to analyse its competitive intensity and market attractiveness. See further in the following points:

#### **Threat of New Entrants**

Threats of new entrants are weak because of the high initial costs, need of well-educated and skilled hardware engineers and research time. However, the market is lucrative and therefore new competitors are bound to appear in the future.

#### **Rivalry among Existing Firm**

This year, the new competitors Novaspark has appeared on the market and came up with very similar products which match the high speed performance. At the moment, their solutions cover only small part of our potential customers whilst company XYZ cooperates with the majority of them. To consider the high switching costs for customers, the loss of our customers does not represent a real threat. There are no other firms to compete with company XYZ at this moment but the trend suggests that there will be growth of hardware focus within the financial industry soon.

#### **Threat of Substitute Products or Service**

The substitute products are represented by software solutions which the customers can ensure with their own engineers within their organization or with supplying of other software companies. Anyway, the key success factor of company is hardware accelerated high speed products which are unique on the market. These alternative software solutions are not so fast and that is why, company XYZ does not have to be afraid of any threats coming from substitute products or services today.

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<sup>54</sup> Celoxica Holdings plc. *Financial statements*. 2010, p. 8

### **Bargaining Power of Buyer**

Company XYZ offers the unique product and its competitors have started to developed similar product recently but those products are not mature yet. Company as the only provider has good position to keep all its customers that led to very low bargaining power of customers. The products are quite expensive and the purchase of one of them requests usually the purchase of others related to launch customer's projects. Customer's switching costs are very high and once they started to cooperate with company, the switch to other supplier is very costly and time demanding.

### **Bargaining Power of Suppliers**

Company XYZ has only three suppliers which provide them the cards and IP cores. Those products are not unique and there is various other suppliers offering similar solutions. Anyway, the switching costs are high because of the required engineering effort that leads to quite important bargaining power of suppliers.

## **3.3 SWOT analysis**

The following points describes strenghts, opportunities, weaknesses and threats of company. See further text:

### **Strenghts**

- specialization of company (unique products) competitive advantage
- well-educated and experienced employees
- board of directors is well contacted in industry
- good customers awareness about company (brand is well known in industry)
- good financial resources
- cutting edge research (innovative products)
- establishment of new office in New York

## **Opportunities**

- close contracts at higher price
- extending features of existing products suite (product development)
- enter Asian markets
- customize products for options, futures, forexs
- wider spectrum of related products
- extended education of employees (courses, conference attendance)
- improvement of product quality

## **Weaknesses**

- lack of quality assurance procedures
- understaffed teams
- incompetence fulfilling agreed deadlines
- development team is in different time-zone than the majority of clients
- unclear organizational structure
- high failure rate of suppliers products
- inability to meet the new contracts
- overdue payments to contractors and suppliers
- bad reputation with some customers

## **Threats**

- political effects
- competitor intentions
- movement of employees to clients (because of bank financial resources)

- bankruptcy of our supplier which can lead to loss of time focusing on the development.

### **3.3.1 Summarization of analysis**

Company is the leading provider of hardware accelerated product and has been at the forefront of advanced computing technologies for over ten years. After its recapitalisation of the business in 2008, company has launched new business strategy focusing on technology solutions for the high frequency trading community. Firm started offering a unique product that wasn't produced by any other company. Until recently, the intrepid market position has started to be threatened by new competitor NovaSpark that matches the requirements for speed on the same level as company does. Company's advantage is the current coverage of the majority of the clients. A new company's enter on the market is limited for the high initial costs, the demandingness requesting well-educated and skilled hardware engineers and research time. Company's strenghts and huge competitive advantage can be founded in the employees, who match those demanding requirements. That is confirmed by the continuous interest from various banks, which have been trying to conciliate the employees in order to work for them. That fact definitely and steadily represents a huge threat for company. Other company's strenght consists in the uniqueness of its products and the relative high switching costs for its clients. That causes them the complications to switch new supplier and therefore stabilize partnership with customers. Although, if its weaknesses are considered, there is lack of quality assurance procedures and inability to fulfill the agreed deadlines. Those matters have started to lead to poor quality products and adversely influence its business relations with clients that can cause firm's bad reputation in the future.

### **3.4 Horizontal analysis**

The horizontal analysis serves as the ratio that shows changes between years in both currency and percentage form. It compares the historical financial data over the several periods or the ratios derived from those financial data. In order to create the horizontal analysis, the financial information for at least two years should be used, and subsequently compared to each other. Although, the

horizontal analysis has some limitations because of the ongoing changes in the financial statements. The accounts such as assets, liabilities, revenues, or expenses may switch between various other accounts and that can cause dissimilarities during comparison of the accounts balances from one period to the others. [5; 7]

### Horizontal analysis of balance sheet

Firstly, the author uses the horizontal analysis of the balance sheet. The results are seen in the table 1. Those items are stated in absolute values (in GBP) and in percentage as well.

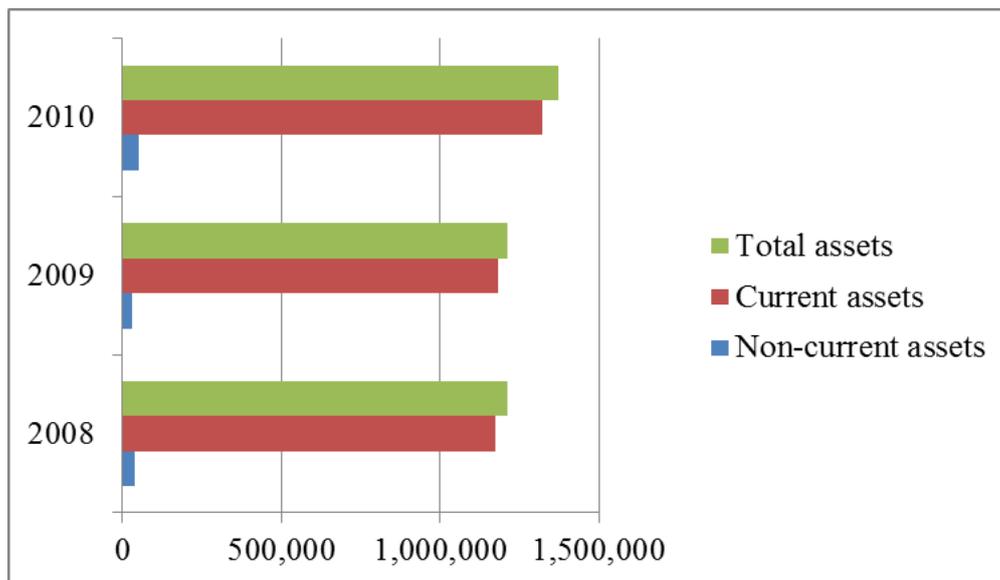
**Table 2 Horizontal analysis of consolidated balance sheet in the period from 2008 to 2010**

<b>Horizontal analysis of consolidated balance sheet</b>				
	<b>2009</b>	<b>2009</b>	<b>2010</b>	<b>2010</b>
<b>Assets</b>	<b>in GBP</b>	<b>%</b>	<b>in GBP</b>	<b>%</b>
<b>Non-current assets</b>	-11,063	-27.4	20,467	69.9
Property, plant and equipment	-11,063	-27.4	20,467	69.9
<b>Current assets</b>	11,628	1.0	137,591	11.6
Inventories	108,385		-17,236	-15.9
Trade and other receivables	160,980	47.2	587,758	117.1
Tax assets	-15,030	-100.0		
Financial assets	-300,000	-100.0		
Cash	57,293	11.1	-432,931	-75.5
<b>Total assets</b>	565	0.0	158,058	13.0
<b>Current liabilities</b>	440,954	143.4	576,935	77.1
Trade and other payables	440,954	143.4	576,935	77.1
Net current assets	-429,326	-49.7	-439,344	-100.9
<b>Net assets</b>	<b>-440,389</b>	<b>-48.7</b>	<b>-418,877</b>	<b>-90.2</b>
<b>Equity</b>				
Share capital	1,000,000	6.6	1,128,435	7.0
Share premium	0	0.0		0.0
Merger reserve	0	0.0		0.0
Share Option Reserve	107,102	302.5	108,675	76.3
Translation reserve	-979	-1.9	37	0.1
Retained earnings	-1,546,512	3.6	-1,656,024	3.8
<b>Total equity</b>	<b>-440,389</b>	<b>-48.7</b>	<b>-418,877</b>	<b>-90.2</b>

*Source: Own calculation*

The number of total assets was 1,212,578 GBP in year 2008, 1,213,143 GBP in year 2009 and 1,371,201 GBP in year 2010. The main element in the trend of the total assets is their slow increase by each year. In year 2009, there is the slight interference in the growth but year later, there is recorded an increase is by 13%. As you can see on the graph below, the total assets were created from intangible assets (non-current assets) and the current assets. However, the majority is composed by the current assets.

**Graph 1 Graph of total assets over period from 2008 to 2010**



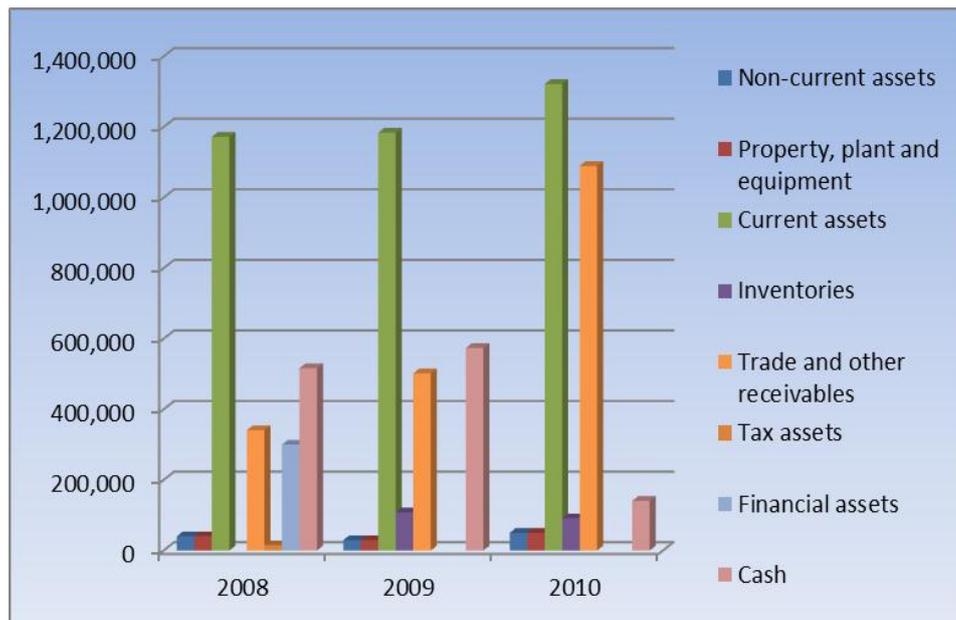
*Source: Own processing*

**The current assets** are created from the items: *inventories, trade and other receivables, tax assets, financial assets and cash*. The numbers from graph show that the item of *Inventories* was missing in year 2008. Inventories represent the accelerator cards which support the technological features and capabilities of the products. To consider the complex change in production in 2008, the company had to deprive those cards because of new character of business. In the next years, the new accelerator cards were bought and up to these days, they are offered to clients to support and improve the functionality of products. The items such as *Financial assets* and *Tax assets* were missing in years 2009 and 2010. The highest growth was recorded in the item of the *Trade and other receivables* that increased by 47% in year 2009 and by 117% in 2010. That account

comprises amounts receivable from the sale of goods, maintenance, support and prepayments in accordance with signed contracts.

The amount of **the non-current assets** decreased by 27,4% in year 2009 and consequently, increased by 70% in year 2010, when the new offices were opened in US and new equipment was purchased

**Graph 2 Graph of total assets in more details over period from 2008 to 2010**

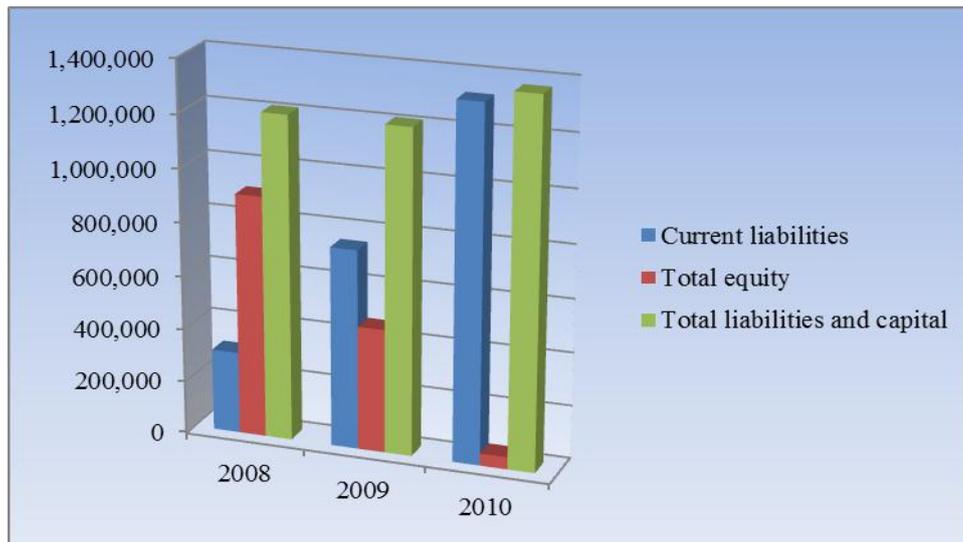


*Source: Own processing*

The total value of liabilities and capital achieved 1,212,578 GBP in year 2008.

The slight decrease of 13% was recorded in year 2010.

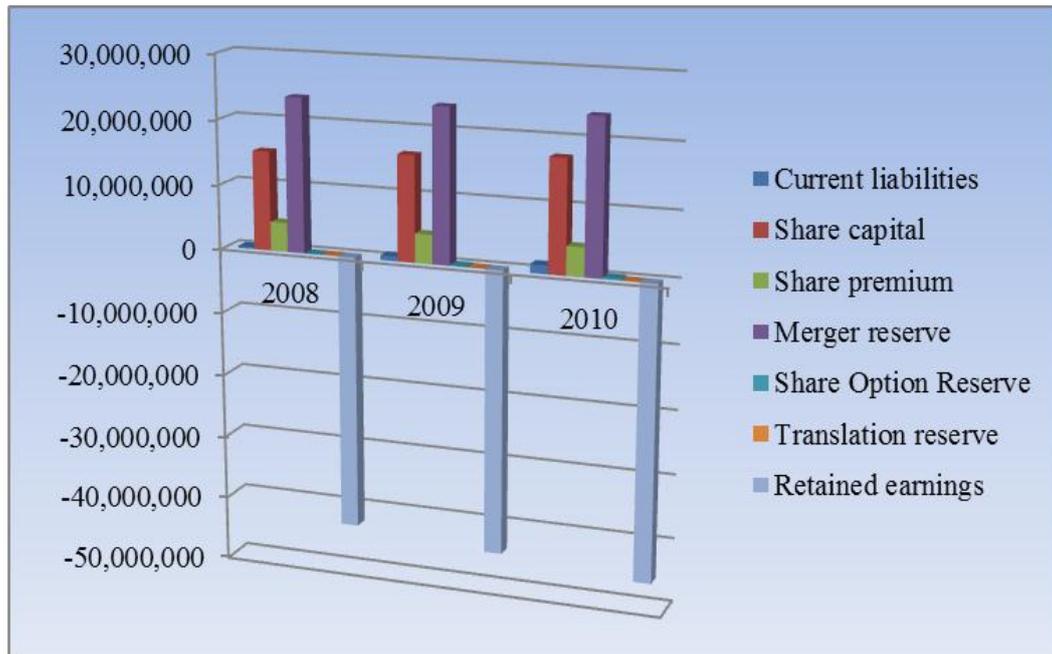
**Graph 3 Graph of total liabilities and capital over period from 2008 to 2010**



*Source: Own processing*

As it is obvious from the graph below, the total capital of the company is composed from owner's equity. The item of *Retained earnings* has increased by 3,5% in 2009 and 2010. The total sum of that account was - 45,809,879 in the last year and forasmuch as company shows loss each year, the number has been rising up. The other accounts of *Equity* had been created and continuously escalated in order to equilibrate the still increasing loss. In 2009, company entered into a new partnership with Credit Suisse, both as an investor and as a client, which supported the new development of the technical roadmap, with more markets and more functionality. That refinancing was undertaken by to recapitalize the business in support of Credit Suisse's participation with a subscription round issuing 100,000,000 new shares, priced at 1p, and raised 1m GBP. The item of *Share Capital* has risen up by 6,6% in 2009 and by 7% in 2010 due to new shares issued. The item of *Share option Reserve* was also growing by 302,5% in year 2009. This huge growth occurred in terms of the accounts of *Share premium* and *Merger reserve* have not changed and show the same amounts each year. The *Merger reserve* was previously noted as a Merger Capital Reserve and was created due to the acquisition of company Limited by company XYZ Holdings plc in 2001, representing the balance on the account of the share premium of XYZ Limited at that time.

**Graph 4 Graph of total liabilities and capital over period from 2008 to 2010**



Source: Own processing

### **Horizontal analysis of income statement**

The table 2 shows the trend analysis of income statement. The group's *revenue* for 2009 was 289,000 GBP (2008; 364,000GBP) with funds used for operating the activities of 1,730,000GBP (2008; 2,069,000GBP) with continued focus on reducing and controlling overheads. The trend shows that the revenues decreased by 20.7 % in year 2009 and increased by 302 % in 2010. That was mostly caused by the development of new business focusing on technology solutions for the high frequency trading community. In 2009, the company released new products, consequently gained new market awareness of its brand, and engaged with few new clients, including strategic relationship with Credit Suisse.

However, the working on that new product started to bring the results mostly in the end of year 2009. The company's revenue started to be more predictable and sustainable because of its offering solutions via subscriptions to their products and services. That brought the periodic revenue's stream that became the warranted sources of the funds. The item of *Gross profit* recorded the growth by 426.2 % in 2010 against year 2009.

Although, the account of the *Administrative expenses* was 2,646,799 and went up by 54% against the prior year. That fact led to the increasing of the Operating loss by 15%. The item of *Profit on sale of operations* has missed in year 2009 and 2010 due to the realization of the sale of company's core product in year 2008.

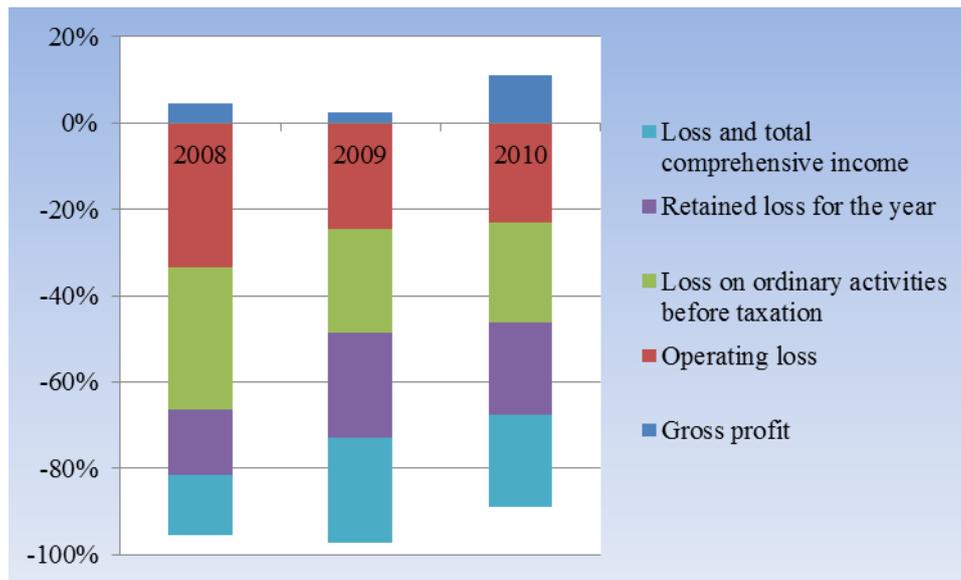
**Table 3**Horizontal analysis of income statement

<b>Horizontal analysis of consolidated statements of comprehensive incomes</b>				
	<b>2009</b>	<b>2009</b>	<b>2010</b>	<b>2010</b>
	<b>In GBP</b>	<b>%</b>	<b>In GBP</b>	<b>%</b>
Revenues	-75,260	-20.7	871,408	301.9
Cost of sales	34,929	38.7	174,975	139.7
<b>Gross profit</b>	-110,189	-40.3	696,433	426.2
Administrative expenses	-616,451	-26.4	930,729	54.2
<b>Operating loss</b>	506,262	-24.6	-234,296	15.1
Finance income	-37,866	-83.8	-6,557	-89.8
Finance costs	-3,252	-73.8	223	19.3
<b>Loss on ordinary activities before taxation</b>	471,648	-23.4	-241,076	15.6
Tax on loss on ordinary activities	-10,293	-100.0	131,564	
Profit on sale of operations	-1,080,205	-100.0	0	
<b>Retained loss for the year</b>	-618,850	66.7	-109,512	7.1
<b>Other comprehensive income</b>	-60,838	-101.6	1,016	-103.8
Exchange differences	-60,838	-101.6	1,016	-103.8
<b>Loss and total comprehensive income</b>	-679,688	78.3	-108,496	7.0

Source: Own calculation

The graph below reflects the main items of the income statement which are mainly negative excluding the account of the *Gross profit* that recorded opposite trend and was rising by 426 % in 2010 by comparison with the prior year.

**Graph 5 The structure of the income statement**



Source: Own processing

### 3.5 Vertical analysis

The vertical analysis represents each item of the financial statements as a proportion to the whole account that is considered to be the basic item. This method can be appropriate to use for benchmarking as well. [12]

#### Vertical analysis of the balance sheet

The Table 3 shows the percentual structure of the single items regarding to the total sum of *the Total Assets* that represent a 100% base. As it is shown in the table, the account of *Total Assets* is mostly created the *Current assets* (2008; 96.7%. 2009; 97.6%, 2010; 96.4%). The highest numbers can be found in the accounts such as *Trade and other receivables* and *Cash*. In the year 2010, the account of *Trade and other receivables* creates almost 80% of all assets. That item comprises amounts receivable from the sale of goods, R&D tax receivable and other prepayments from customers. The huge increase in the year 2010 was mainly caused because the company started to have the regular revenues coming from new deals being signed up with customers.

In the frame of the sale of ESL to Agility Design Solutions Inc in 2008, the item of *Inventories* doesn't show any percentage point in 2008 because the company

started to focus on the different type of business so it was needed to sell all cards which represented all the inventories. The item of the *Financial assets* created the significant part of the total assets in 2008 with regards to that sale. The single item of *Non-current assets* represented the greater percent in 2010 due to the open new offices in US. Because company is company focusing on the Information Technology (IT) sphere, the amounts in *Non-current assets* are not high and occupy the small part of *Total assets*. With the exception of year 2010, the greatest part of all assets represent the account of the *Cash*.

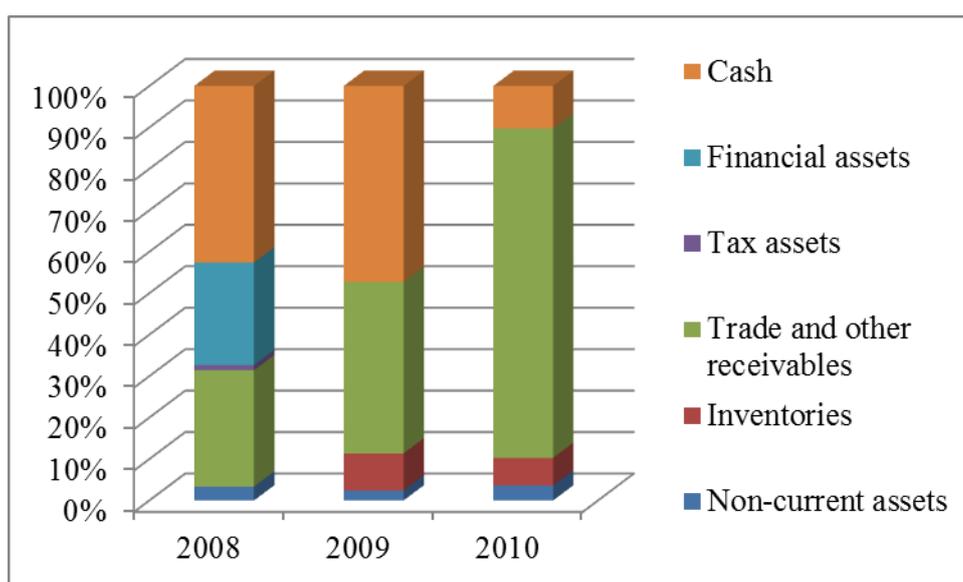
**Table 4 Vertical analysis of the total assets (in %)**

<b>Assets</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Non-current assets</b>	<b>3.3</b>	<b>2.4</b>	<b>3.6</b>
Property, plant and equipment	3.3	2.4	3.6
<b>Current assets</b>	<b>96.7</b>	<b>97.6</b>	<b>96.4</b>
Inventories	0.0	8.9	6.6
Trade and other receivables	28.1	41.4	79.5
Tax assets	1.2	0.0	0.0
Financial assets	24.7	0.0	0.0
Cash	42.6	47.3	10.3
<b>Total assets</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*Source: Own calculation*

The detailed division of the particular items in the percentage are shown in the following graph. The *Non-current assets* represent very small part, 3% on average. There is obvious that the item of *Trade and other receivables* creates the greatest part of all assets, mainly in the year 2010 when it covers almost 80% of total assets. That fact signifies that company earns the money but on the other hand, the increase of receivables indicates that these money have not been transferred from profit account into the cash flow. When the changes of the accounts of the receivables (from 42.7% to 117.1% mentioned in the horizontal analysis) are compared to the lower increase showing on the account payables (from 143.3% to 77%), the company credits its customers which can influence its liquidity negatively.

**Graph 6**The structure of the Total assets



Source: Own processing

The following Table 4 shows the percentual division between two main items: *Current liabilities and Equity*. Forasmuch as the liabilities and equity represent the sources of the firm, the particular parts inform about the structure of the funding of the company. The all liabilities are created just by the account of the *Trade and other payables* that comprise amounts outstanding for trade purchases and ongoing costs. The Equity represents only the funding from investors on the base of shares issued, or increasing in the reserve's account. The steadily increasing account of *Retained earnings* has been increased by each year due to the still gaining loss. To balance the total equity, the negative account of *Retained earnings* has been covered by investments.

**Table 5** Vertical analysis of Liabilities and Capital (in %)

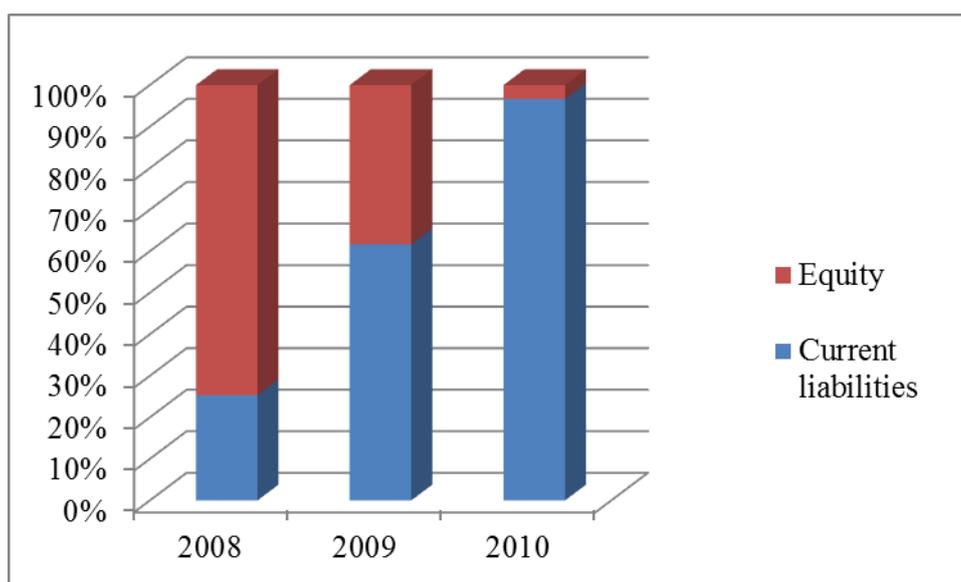
<b>Liabilities and Capital</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Current liabilities</b>	<b>25.4</b>	<b>61.7</b>	<b>96.7</b>
Trade and other payables	25.4	61.7	96.7
<b>Equity</b>	<b>74.6</b>	<b>38.3</b>	<b>3.3</b>
Share capital	1,255.7	1,337.6	1,265.7
Share premium	368.6	368.4	325.9
Merger reserve	1,957.0	1,956.1	1,730.6
Share Option Reserve	2.9	11.7	18.3
Translation reserve	4.2	4.1	3.7

Retained earnings	-3,513.8	-3,639.6	-3,340.9
<b>Total equity</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Own calculation

To see the significant change in the proportion of the structure of liabilities and equity servers the following graph. That structure was changed eminently. The assets were financed mostly by own capital that created almost 75% in year 2008. In the year later, the item of the Equity was about 38% and year after, there is again significant decrease. The total equity is created from 96.7% of current liabilities and from 3.3% of own equity. The company doesn't use the „paid“ borrowed capital (e.g. obligations, bank loan) though. Nevertheless, the short term payables became very meaningful source for the financing over the period. The further division of the account of the Trade and other payables is founded in the notes to the financial statements. That account comprises mostly from Trade payables (2010; 312,008GBP) and Deferred income and accrued expenses (2010; 943,152) which include the payments for company's engineers who work under contract. It results that company is mostly financed by the short term liabilities to its suppliers and contractors and it covers its loss by the shares issued.

**Graph 7 The structure of the Equity**



Source: Own processing

## The vertical analysis of the Income statement

The Table 5 shows the percentage of the particular items to the total sum of the revenues. The items prove that *Revenues* were not able to cover all the costs and the company had been continuously showing negative results. Although, the particular items of Income Statements decreased their percentage with regards to the account of the Revenues in 2010. Nevertheless, the Revenue of 1,160,043 GBP was not match for covering of all costs. The highest costs represent the item of the *Staff Costs* that is usual in the IT company. The second highest item of costs is Research & Development including the expenditure incurred by the Group in the development of its products including its range of software, hardware development boards and consulting services.

**Table 6 Vertical analysis of the Income Statement**

<b>Vertical analysis of the Income Statement (in %)</b>			
	<b>2008</b>	<b>2009</b>	<b>2010</b>
Revenues	100.0	100.0	100.0
Cost of sales	24.8	43.4	25.9
<b>Gross profit</b>	<b>75.2</b>	<b>56.6</b>	<b>74.1</b>
Administrative expenses	641.0	594.5	228.2
<b>Operating loss</b>	<b>-565.8</b>	<b>-537.9</b>	<b>-154.0</b>
Finance income	12.4	2.5	0.1
Finance costs	1.2	0.4	0.1
<b>Loss on ordinary activities before taxation</b>	<b>-554.6</b>	<b>-535.8</b>	<b>-154.1</b>
Tax on loss on ordinary activities	2.8	0.0	11.3
Profit on sale of operations	296.8	0.0	0.0
<b>Retained loss for the year</b>	<b>-254.9</b>	<b>-535.8</b>	<b>-142.8</b>
<b>Other comprehensive income</b>	<b>16.4</b>	<b>-0.3</b>	<b>0.0</b>
Exchange differences on translating foreign operations	16.4	-0.3	0.0
<b>Loss and total comprehensive income</b>	<b>-238.5</b>	<b>-536.1</b>	<b>-142.8</b>

*Source: Own calculations*

## 3.6 Cash flow analysis

The monitoring of the cash flow is important with regards to the fact that there is the inconsonance between costs and expenditure, and between the revenues and receipts, profit and status of the financial sources. Cash flow represent the outflow and inflow of the financial sources of the company in the periods. The indirect method is based on the calculation of the cash flow coming from the

profit that is modified by the non-cash items and flow of cash due to the changes of the equity and capital. [2]

**Table 7 Consolidated cash flow statement**

<b>Consolidated cash flow statement in GBP</b>			
	<b>2,008</b>	<b>2,009</b>	<b>2,010</b>
<b>Cash flows from Operations</b>			
Loss before tax	-937,955	-1,546,512	-1,787,588
Adjustments for:			
Depreciation	22,351	22,312	21,255
Gains on disposal of operation	-1,080,205	-	-
Share based payments	35,400	107,102	108,675
Currency translation differences	-113,691	5,172	-592
Income tax received	114,231	-	-
Net interest	-40,765	-6,151	629
<b>Σ</b>	<b>-1,773,252</b>	<b>-1,418,077</b>	<b>-1,657,621</b>
Increase/Decrease in trade and other receivables	100,437	-160,980	-376,194
Increase/Decrease in inventories	27,747	-108,385	17,236
Increase in trade and other payables	333,220	440,954	576,935
Write-off of tax asset	-	15,030	-
Increase/Decrease in provisions	85,399	-	
<b>Net cash outflow from operating activities</b>	<b>-2,063,687</b>	<b>-1,231,458</b>	<b>-1,439,644</b>
<b>Cash flows from investing activities</b>			
Proceeds from disposal of operation	1,045,233	-	-
Purchases of property, plant and equipment	-26,232	-11,249	-41,722
Realisation of financial asset	-300,000	300,000	-
<b>Net cash outflow/inflow from investing activities</b>	<b>719,001</b>	<b>288,751</b>	<b>-41,722</b>
<b>Cash flows from financing activities</b>			
Issue of shares	2,011,500	1,000,000	1,048,435
<b>Net cash inflow from financing activities</b>	<b>2,011,500</b>	<b>1,000,000</b>	<b>1,048,435</b>
<b>Net increase/decrease in cash and cash equivalents</b>	<b>666,814</b>	<b>57,293</b>	<b>-432,931</b>
Cash and cash equivalents at beginning of year	150,446	516,368	573,661
Cash and cash equivalents at the end of year	516,368	573,661	140,730

*Source: Celoxica Holdings. Financial statements over period 2008 - 2010*

The company reported **the net cash flow from operating activities** in the negative values during all reporting period. Those values were slightly decreasing in the year 2009 and consequently increasing in the year 2010. The value was the highest in the year 2008 with regards to item of the *Gains on disposal of operation* that created the significant item of the cash flow results

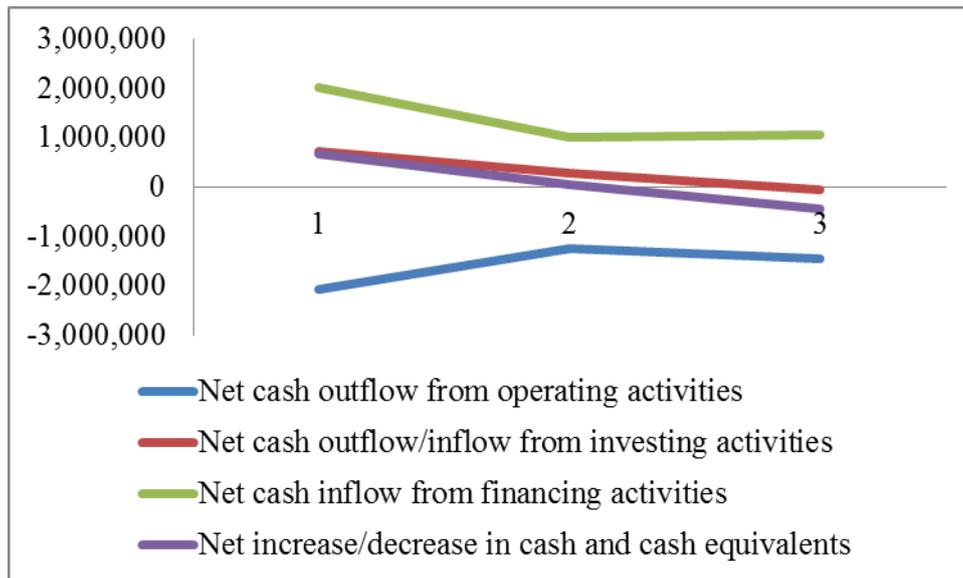
from running activities. Company sold its main product (ESL to Agility Design Solutions Inc) that was registered as the intangible asset before. Firm's negative cash flow from operating activities indicate the company's problems with the meeting its commitments and that fact could signify the threat for its future. That items should have the positive values and steadily increase the net cash flow from operating activities.

**The net cash flow from investing activities** was continuously decreasing from the positive value of 719,001 GBP to the negative value of -41,722. The positive value in 2008 was caused by the sale of the main product as was mentioned hereinbefore that brought the short-term cash. The negative results in the following years were caused by the investments into the purchase of the computer and other equipments, especially in 2010.

**The net cash flow from financing activities** represent the movement of cash among the company, its owners and creditors. These values were slightly decreasing but still positive. That was caused by the receiving the net amount from issuing stock.

The item of **Cash and cash equivalents** represent the value of the company assets that are cash or can be easily converted into cash. That item inform about **the overall net cash flow** summarizing all previous three cash flows. Their trend was continuously decreasing. In 2010, the value was negative mainly due to the high loss that the company was not able to cover from its operating activities.

**Graph 8 The overall net cash flow**



*Source: Own processing*

### **3.7 Proportion ratios analysis**

The following chapter comprises the calculations of the proportion ratios mentioned hereinbefore in the theoretical base.

#### **3.7.1 Indicators of liquidity**

The working capital ratio has positive values only in year 2008 and 2009. In the year 2010, the ratio is negative which means the company was not able to pay off its short-term liabilities with its current assets. The values of the current ratios are positive and meet the recommended values of 1.5– 2.5 in the second year. That express the company's ability to meet the creditor's demands. Although the value in the year 2008 is positive, it can be considered as too high. It can signify that current assets are not being used efficiently and the company cumulates them instead of the using them to grow business. The value of year 2010 decreased under the recommended value that can lead to a risk of paying off firm's obligations. The recommended values of quick ratios are in interval of 1 – 1.5. Those ratios had the similar results such as the results of the current ratio and the interpretation can be similar as well regards to the lack of the stock item.

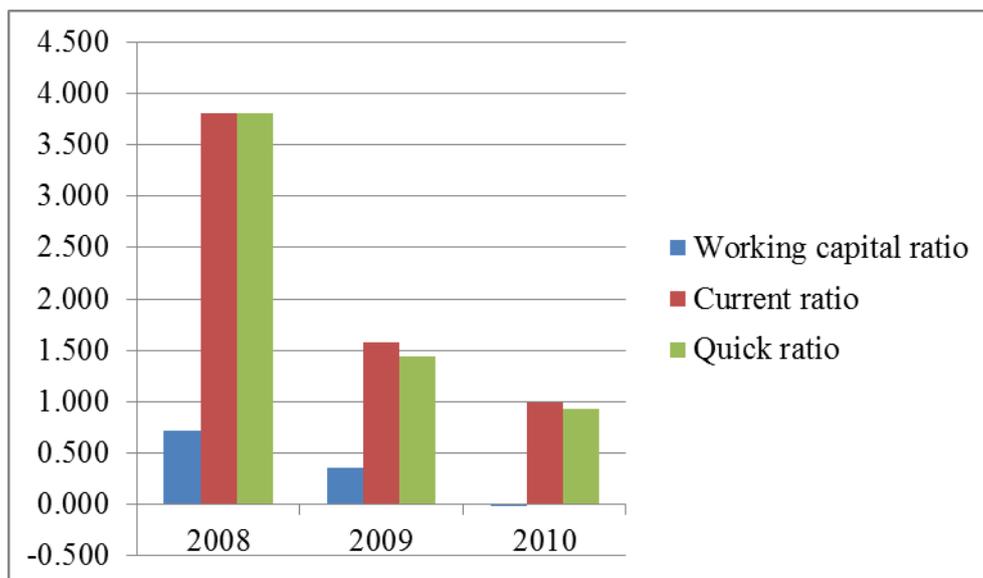
**Table 8 Liquidity ratios**

	2008	2009	2010
Working capital ratio	0.713	0.359	-0.003
Current ratio	3.811	1.582	0.997
Quick ratio	3.811	1.437	0.928

*Source: Own calculation*

The particular ratios are shown in the graph below as well. The results of current ratio and quick ratio have the same value in the year 2008 because there were no inventories. See further:

**Graph 9 Liquidity ratios**



*Source: Own processing*

### **3.7.2 Indicators of solvency**

The ratio **Debt to Equity** were continuously increasing over period. The lower value indicates the low risk because shareholder's have more rights in the company's assets. The high value lead to more risky business because company finances its activities with debt that can lead to volatile earnings. Company's results can be compared with the average ratio of debt to equity in the industry.

The last numbers from industry shows the value of 65,1 on average. In the frame of that average number, the company had lower value in the 2008 and higher values in others when the company's growth was financed by the unpaid liabilities.

The both values of the **Self-financing ratio** and Debt ratio create together 100%. The result show that a company financed its assets from 75% by its own sources in the year 2008. The preferable way how to finance its assets should be using the borrow capital that is cheaper and less risky. The values of other years were rapidly increasing. Company financed its assets by borrowed capital at the expense of suppliers and contractors.

The values of **Debt ratios** were constanly fluctuating. The value in year 2008 was low that indicates the less dependency on leverage and the stronger equity position. The value of year 2009 increased and was in the recommended value of 30% - 70%. Although, value of year 2010 was too risky that is not preffered by creditors but it is positive for owners because the higher leverage lead to multiply profits vice versa. It is positive in the case that the company is able to reach the higher rate of rentability from all equity than are the percentage of interests paid from borrowed capital. However, the growth of this ratio in 2010 was caused by increasing of the short term liabilities.

**Table 9 Indicators of solvency**

	<b>2008</b>	<b>2009</b>	<b>2010</b>
Debt to equity	0.340	1.611	28.965
Self-financing ratio	0.746	0.383	0.033
Debt ratio	0.254	0.617	0.967

Source: Own calculation

### **3.7.3 Indicators of efficiency**

The ratio of **inventory turnover periods** was not applied because the accounts, which are usually used for that calculation, comprise other items which are not the subjects of calculations. Moreover, the item of the inventory represents also the accelerator cards which are not the core products of the company. Company

has signed up the various contracts when the cards can be given to its customers for free or customers pay for just some of them with regards to the contract conditions.

The average values of the **working capital turnover** is value of 1.09. The company was under that value all time and moreover, it recorded the enormous decreased in the year 2010. That was caused by the high increase of the current liabilities.

The average values of the **assets turnover** in the industry are around value of 0.61. The company was not reaching those values in two first years but in the year after, it exceed the that value and reached 0.8. The average value of the **fixed assets turnover** is 3.60. The company was exceeding that values over all period.

The **ratio of the receivables and payables turnover periods** was also not applied because the results cannot reflect the main purposes and give the biased values. The company was unable to pay its liabilities from the revenues and gathered money from investors as the source of funding. The payables represent the liabilities to contractors and suppliers which were paid from those investments and not from the revenues. Therefore, the numbers of days cannot express the fair values with regards to this ratios. Anyway, there are some problems with delayed paymetns regarding to the weaknesses in the swot analysis mentioned hereinbefore.

The **receivables turnover period** was not applied as well. However, there are several facts which lead to the high numbers of the days over period. To consider complete change of the business activities, company was developing new products and meet new customers over the period. It started to sell its products mainly in the four quarter of 2010. In the case of the licenses, company has to recognize the related revenues into the particular months that lead the high value of the receivables but low value of the sales. Other fact is that the company makes its products with many bugs and therefore, the revenues from customers are delayed several months with regards to the contract conditions.

**Table 10 Indicators of efficiency**

Indicators of assets management/efficiency ratio	2008	2009	2010
Inventory turnover period	-	-	-
Working capital turnover	0.4	0.7	-289.6
Assets Turnover	0.3	0.2	0.8
Fixed Assets Turnover	9.0	9.9	23.3
Receivables Turnover Period	-	-	-
Payables Turnover Period	-	-	-

Source: Own calculation

### 3.7.4 Indicators of profitability

Those indicators measure the profitability based on the linkage between profit and capital invested. The higher values indicate that company is managing its capital well.

As it is shown in the Table 9, the reached values are negative and are not in the recommended intervals either. The light expect was the *Gross profit margin* that was showing the positive values. The values of ratios are better in year 2008 when company sold its core product and increased the revenues. To evaluate the particular ratios, those are indications that the company is not able to generate good results from capital invested and does not generate the positive values as well.

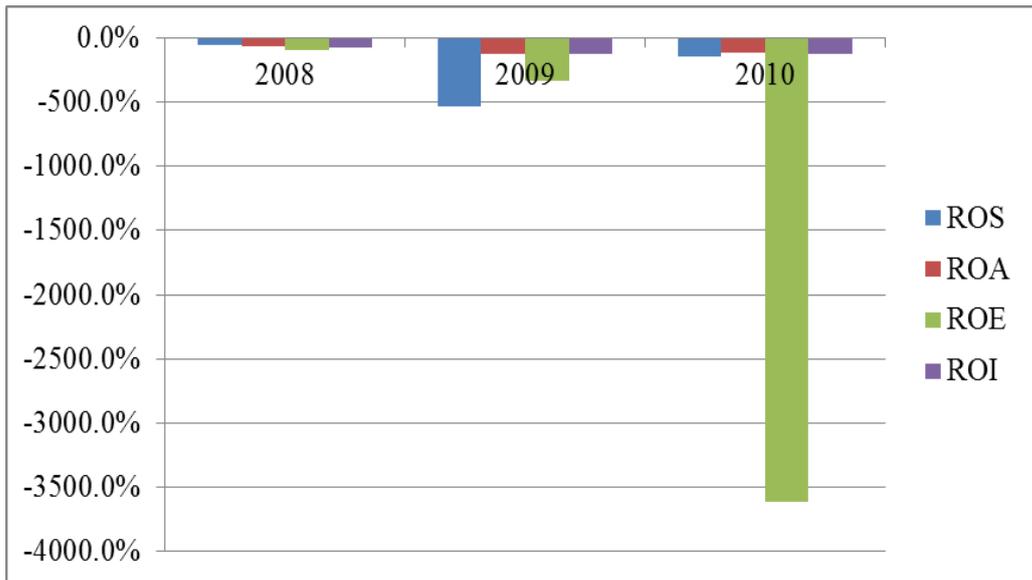
**Table 11 Indicators of profitability**

	2008	2009	2010
<b>ROS</b>	-60.1%	-536.1%	-142.8%
<b>ROA</b>	-71.6%	-127.6%	-120.8%
<b>ROE</b>	-95.9%	-333.1%	-3618.9%
<b>ROI</b>	-77.2%	-127.4%	-130.0%
<b>Gross profit margin</b>	75.2%	56.6%	74.1%
<b>Net profit margin</b>	-60.1%	-536.1%	-142.8%

Source: Own calculation

The worst result was calculated for *return on equity* in 2010 when the the majority of equity was created by borrowed capital and the loss was the highest over reporting period. That it is shown in the following graph *Rate of return of ratios*.

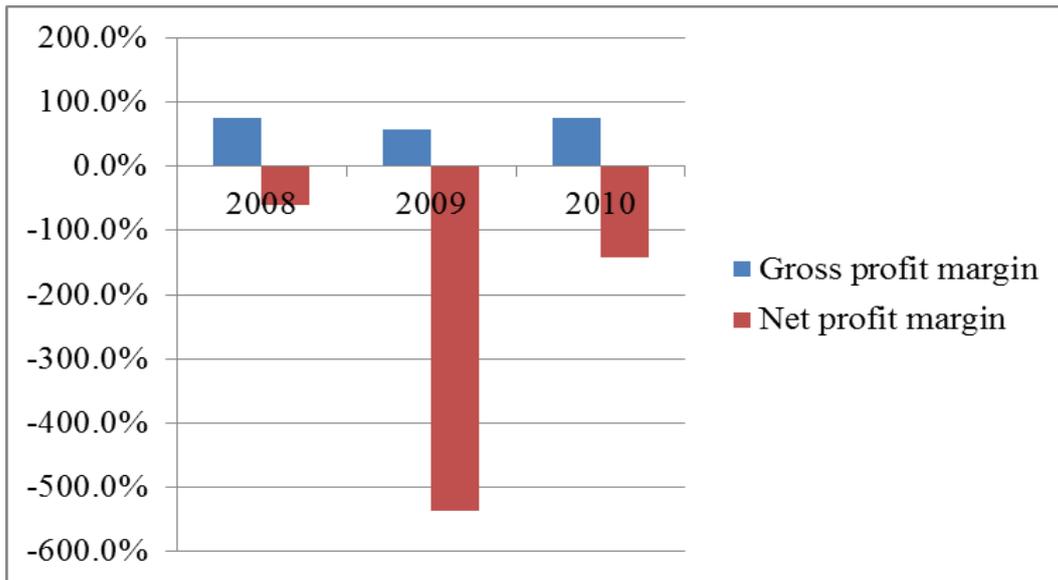
**Graph 10 Rate of return of ratios**



*Source: Own processing*

**Gross profit margin** has achieved positive values as the only one ratio in comparison with the previous ones. The particular results were fluctuating but achieved the high percentage. Otherwise, the net profit margins were negative and in the year 2009, the value of that ratio was -536.1%. It was caused by decrease of the revenues and increase of the costs of sales. Consequently, the administrative expenses caused the other decrease and the value of the profit margin went down. In the frame of the high administrative costs, the other margins were falling down as well. The biggest item of those costs is the staff costs. Those cannot be reduced because the workforce represent the worth value of the company and with regards to its current lack, company needs more employees in order to meet the customers' demands and consequently, gain new clients.

**Graph 11 Graph Profit margins**



Source: Own processing

### 3.7.5 Measures for shareholders

The values of the *Table 11* express the overall amount of the company's equity on a per-share basis. The numbers are minimal and still decreasing because of the declining equity. On the base of the perpetual loss and accumulating negative retained earnings, the board of directors have not been recommending the payment of a dividend over the period.

**Table 12 Book Value per Share**

	2008	2009	2010
<b>Book Value per Share</b>	0.0027	0.0011	0.0001

Source: Own calculation

### 3.8 Analysis of cumulative ratios

That last section contains the calculations of the ratios which serve as the summarization of the financial position and health of the company.<sup>55</sup>

<sup>55</sup> KISLINGEROVÁ, E. *Finanční analýza: krok za krokem*.2005. p.82

### 3.8.1 Altman Z – Score

The result of the Altman Z – Score are in the Distress Zone with the high risk of bankruptcy. Nevertheless, the particular results show that the main reason for that negative values is presented by the ratio X2. That is influenced by the cumulative losses from previous years. The other negative ratio is X3 that contains the negative loss of the year.

**Table 13 Altman Z – Score**

Ratios	2008	2009	2010
<b>X1</b>	0.71	0.36	0.00
<b>X2</b>	-35.14	-36.40	-33.41
<b>X3</b>	-1.66	-1.27	-1.30
<b>X4</b>	2.94	0.62	0.03
<b>X5</b>	0.30	0.24	0.85
<b>Z - Score</b>	-32.89	-34.03	-31.49

*Source: Own calculation*

### 3.8.2 Quick Test

The quick test serves the information through four indicators which characterize the firm's financial stability and firm's revenue. The first two indicators show positive results and evaluate the company 1,5 on average. The second two indicators result in very bad numbers and signify company's negative profitability. Overall evaluation per year indicates the following numbers – 3, 3, 4. Those are getting worse and are indicative of the problems for company.

**Table 14 Quick Test**

	2008	2009	2010	Indicators evaluation
Quota of the own equity	74.64%	38.30%	3.34%	
Company's evaluation	1	1	4	<b>2</b>
Period of Cash-Flow pay-off	0.60	1.30	9.42	
Company's evaluation	1	1	2	<b>1,3</b>
Cash Flow from Sales in %	-142.90%	-426.65%	-124.10%	
Company's evaluation	5	5	5	<b>5</b>
Return on Assets (ROA)	-71.57%	-127.56%	-120.77%	
Company's evaluation	5	5	5	<b>5</b>
<b>Overall evaluation</b>	<b>3</b>	<b>3</b>	<b>4</b>	

*Source: Own calculation*

## **4 SUGGESTED PROPOSALS AND THEIR CONTRIBUTION**

The last part consists of the overall summarization of the analysis, evaluation and interpretation of the ratios results and suggestions based on those numbers in the combination with the company's situation on the market regarding to the findings of the Porter's five analysis and SWOT analysis.

### **4.1 Impact of history on the current situation**

The key role is represented by the account *Retained Earnings* that can be found in the balance sheet. The item consists of the accumulated losses from the previous periods. Those have still influenced the company situation negatively and have the big impact on the current unfavourable financial situation. To consider the fact that company had completely different management and also different business activities before year 2008, its previous accumulated losses seem to be more connected with that business and not with the present one. In the year 2008, the company could go bankrupt and started new business with the clear account. Nevertheless, its shareholders decided to continue with the brand of company and started to work on the completely new technology under new management. The main reasons to continue were mainly the well-educated and experienced staff, company's code and the presumption of the high profit from the sale of the core product. Moreover, the new management was called in the year 2007 and managers could not effort to leave the company to go bankrupt from the personal point of view. Therefore, they started to developed new products with the previous losses.

### **4.2 Overall summarization**

Considering all results coming from the financial analysis, company has not matched the basic assumption of the main aim of each business – making profit. The company was able to cover only its *Cost of Sales* with revenues and showed the positive *Gross profit* over period. However, its other costs – *Administrative expenses* (mainly staff costs) were too high and the company shows the *Operating losses*. In the year 2010, the revenues achieved the huge growth by

300% though, but the operating costs increased as well. That caused the loss again. Its assets were financed with the short-term liabilities that created almost 77% in last year. The company was not able to pay its contractors and suppliers on the time that lead to the complications with the fulfillment of the deadlines. The company's negative results were covered by the shares issued and the investments from the strategic partnership were accepted. On the base of those facts, the result from various ratios are not positive. Therefore, the analysis of the quick test evaluated company in the lowest numbers and the result of the Altman Z – Score classified the company to the Distress Zone with the high risk of bankruptcy. Nevertheless, that result was mainly influenced by negative loss and accumulated losses from the previous periods. The values of the liquidity were fluctuating over period and their results mean both the inefficient management of the assets and inability to pay suppliers. Although, the positive results matching the recommended values were also founded. The ratios of the solvency was fluctuating as well. Firstly, the company cover all assets with the own sources and in the end of the reporting period, its equity was created mostly by the foreign capital. The majority of the indicators of efficiency were not applied because the different content of the accounts and inability to establish the right numbers into the formulas. The results of profitability ratios were negative and off the recommended values that show the company's inability to generate good results from the capital invested. The current values of the company's equity per-share were minimal and still decreasing. That is why; the board of directors has not been recommending the payment of a dividend over the period.

### **4.3 Introduction of problems**

As was mentioned, the company faces the problems with payments of the short-term liabilities and it uses them to finance great part of the business activities. This results in the several problems. Firstly, the account of the short-term liabilities is created from the payments to the contractors who are the staff of the company and work under contract. The company was not able to pay them for longer period. That fact caused that they were not receiving their salaries for longer period and some of them left the company. Their leaves caused the understaff situation and company's inability to meet the deadlines on the time.

The account of the short-term liabilities consists of the liabilities to the suppliers who deliver the accelerated cards to company. The late payments to them were resulting in the lack of those cards and firm's incapacity to finish company's projects or fix the bugs. That caused the late payments from customers consequently. Therefore, it is obvious that the company needs to improve its financial situation by the increasing of the revenues and consequently cash. The decrease of the costs is not possible because the majority of them are created by the staff costs. Employees and contractors represent the essential part of the company and are the valuable drivers of the business activities. The decrease of the costs is not so important as the needfulness of the increasing the revenues. The suggestions how to do that, can be classified into the following categories:

1. Organizational structure
2. Orientation on the current customers:
  - Decreasing of the bugs, lack of the cards
  - More testing – hire the company to do those test activities (in the US, or cheaper variants in the Europe or India)
  - Meeting of deadlines
  - Support in the same country – eliminate the wasting of time because of the time differences
3. Speak to new customers:
  - Increasing the awareness about company
  - Emphasis on the marketing
  - Attendance conferences and company's articles
4. Modification related to products
  - Increase of the product prices
  - New product portfolio
  - Improvement of the quality of the products

- Decrease the sale cycle
  - Documentation of products
5. Increase the numbers of the employees
- Cooperation with the universities
  - Outsourcing
  - Hire the employment agencies in UK and US
  - Motivation of the current employees
6. Changes in the structure of the equity

#### **4.3.1 Organizational structure**

Company is now in the situation when there is the confusion with the management and it is not so much clear who is boss for the particular projects. There should be created **more elaborate organizational structure** where the team leaders will be divided according the project and then work with the several employees on that project with the clear objectives, feedbacks and supervision.

#### **4.3.2 Orientation on the current customers**

Lately, the company started to get bad reputation among its customers and faces the problems with the late payments from them because is not able to deliver products on time. The other problem consists in the quantity of bugs which are in each product and cause their malfunction. Company should increase quality of the products and make them easier its running. Those bugs are mostly caused by the lack of the time and as well as the lack of the engineers. To consider that company has problems with finding new well-educated employees, there is possibility to **hire other company** to that. Testing is not difficult activity and does not require the deeper knowledge of products and firm's background. Therefore, that can be done by the foreign company from the United States or England. The company can decrease the costs by **outsourcing** the companies from the Eastern Europe or India.

Other problem is based on the cards failure and its occasional lack that cause problems in the running of products and protract their usages. Company should **speak to new suppliers** of those cards and start to use their services. To consider fact that switching costs are high for the company, there is no need to completely change the supplier. The **cooperation with two suppliers** will ensure the safety running of delivery and improve the bargaining power of company. Although, the purchase of new cards requests the longer time period to harmonize the particular codes. The cooperation and good relations with the current supplier is very important. Therefore, the company also has to pay them on the time in order to prevent its delayed delivery.

Third matter is in the **harmonization of the support** with regards to the different time zones. The company has to assign the particular employees of support to the customer in the same country. It makes the fixing the current problems both on the telephone and on-site visit easier. That is also connected with the changes in the organizational structure as was mentioned hereinbefore.

Moreover, the company should have one or two persons who will be in the touch with the current customers. They will take care about the customers and fix their problems and questions. The **periodic care about clients** will keep the good partnership with the company and increase likelihood in the future business.

#### **4.3.3 Speak to new customers**

The **signing up new contracts** will definitely lead to the increase in the revenues. Company should speak directly to other banks which represent the potential customers. It should also focus on increasing of its **awareness among new customers**. The company can meet new clients and investors as well during the **attendance conferences**. There is also many marketing tools which should be used. Company can **publish press release and articles** about new products and offered services. Those should be published in **the financial, expert magazines and white papers**. Other marketing activities such as the setting up the account on the social networks, adverts on the internet or television are not valuable because company's target group creates the special groups of customers who are focused on the performance of the company and its quality.

#### **4.3.4 Modification related to products**

To consider the fact that customers of company are the banks, there is definitely possibility to **increase the product prices**. Company should not be afraid of the loss of them because of the possible mark up. Banks represent the rich group of the clients which insist on the quality and outcomes more than on the high price.

The **modification or current products** will help to expand on the markets. The company should focus on the development of new feeds for the core products and change of the functionality whereby can consequently cover the European equities markets, US and European futures markets, Interest rate markets and Foreign exchange markets. New product portfolio will increase the chance to speak to new customers and maintain competitive advantage in the industry.

As was mentioned hereinbefore, the company has to improve quality of its products. Those should be bugs free or with the minimum of them. Moreover, the assuring of the delivery products on the time and the local support to customers is essential. Other way how to offer the better services and quality of the products is based on the **documentation**. That document is the regular related product in the industry of information technology. Nevertheless, the company does not have sufficient numbers of the employees and does not keep up to provide it. The documentation provides the important instructions and guidance that helps to launch the new products successfully. It explains its functionality and feeds whereby the process of installation and consequent running are simplified. In case of some troubles, the users can find the important information from which will draw instruction what and how to do that. The engineers have not been focusing fully on the development of new products because they still had to go back to the sold products and fix their bugs. The launching of documentation would definitely save engineers time, satisfy the customers' needs promptly and save their time as well.

Other point is **the overall acceleration of the sale cycles**. It sometimes happens that the sales man of company speaks to new customers and consequently closes with new clients the parole agreement in advance. However, the all process of real signing up and realization or projects is very slow because company simply has not enough employees to meet new commitments. Therefore, the capital

does not flow in the company. The company should use that interest from new potential customers and ask them for **prepayments**. However, there has to be certainty that company is able to deliver the products with the full quality and fulfill the deadlines. That can be achieved only with **hiring new people**. That fact is key point for company and author will provide more suggestions on that topic in the other category.

#### **4.3.5 Increase numbers of the employees**

The majority of the current problems are based on the lack of the engineers. Those represent the very valuable workforces especially because these people are not only the IT engineers but they also have to dispose the excellent information about financial products and knowledge about stock trading. Lately, it has been started to be difficult to keep them in the company because of the interests from the banks and competitive companies which has been trying to hire them. Company should focus mainly on the employees' motivation to avoid their leave. There is a problem that banks are really rich institutions and if the employee is more oriented on the money, there is the huge potential that he will leave the company. Therefore, company definitely cannot cut the staff costs because that would definitely not help the current situation. That fact is confirmed by the current situation on the labor market of IT engineers. There seems to be enough of them but it is difficult to find the good ones who will understand the technology well and will be the contribution for the company. Company used to do interviews with new people by itself but that process was lasting very long time that could have been used for the development. Nowadays, the company occasionally tries to find somebody but it is not considered as high priority on that so new staff is not being hired and its number are still low. That leads the company's inability to fulfill its contracts and loss of money. There are three ways how the situation can be improved:

- Motivation of the current employees
- Recruiting new employees
- Outsourcing of other firms for the helping works

The first point represents the **motivation of the current employees** that the company should pay a lot of attention. The motivation depends on the needs of each engineer and therefore, the manager be the person who can identify these needs at least and consequently, harmonize those needs with the company's needs. The critical factor is usually the rate of the wage. That is important to say that the company pays them quite good money in comparison with the average salaries in the industry. That is caused mainly due to higher requests on the knowledge about finance sphere. Nevertheless, as was mentioned hereinbefore, banks have been representing the potential threat for company because they have been trying to hire company's employees. However, the current company's advantage consists in its small size where everybody knows everybody and there is the friendly atmosphere when management of company often has dinner with all company's employees in both London and New York. In comparison with the distant environment of banks where there are anonymous people, the friendly company of the several people can be important factor for some engineers. Instead of money, the company can offer them other motivation which will support their satisfaction and could mean reason to stay. The company can build the friendship and good relation by the realization of the **team building activities** which started to be very popular lately. Moreover, the **conferences attendance** could be interesting for them and it could also extend its knowledge in the sphere as the by-product. Other way how to keep employees satisfied are share options. Company can issue options and offer those to employees. That will increase their effort for work and also motivated them to stay.

Other way how to increase the number of employees represents the **recruitment of the new ones**. It is difficult for company to go through the recruitment process by itself because the company wastes the time and money. There are solutions how to address that:

- **The cooperation with the universities** – the current students can participate in some helping works or can be hired on the internship. It would be easier to hire them in the work lately. That solution would also decrease the staff costs.

- **Hire the employment agencies in UK and US** – those can help the company to hire new employees whereby the company does not have to pay so much attention to these activities and saves time and money as well. Nevertheless, the final interviews have to be done by the company itself in order to recognize experienced people who will match the company's challenging demands.
- **Outsourcing** - that suggestion was mentioned hereinbefore in more details.

#### **4.3.6 Changes in the structure of the equity**

The results of vertical analysis as the first uncovered the huge number of the *Current liabilities* in 2010 which represented almost 70% of the company's equity. That fact was not obvious from the beginning because the company did not use any of borrowed capital sources except the some small interest of the bank overdrafts. The exceeding values were confirmed by the results from solvency ratios which showed the precise numbers of the company's fundings and highlighted the fact, that company's equity were created by keeping of current liabilities. In the comparison with the industry average, in the year 2008 company was under that average and in year 2010, the company was above average. On the base of that situation, the financing of the business cannot be based on the current liabilities from the long term perspective. It is recommended for company to pay its suppliers lately than the customer pay the company but there are some limitations which are not desirable for the smooth running of operations. Therefore, the structure of the *Equity* is created only from the shareholder's equity and current liabilities over reported period. Moreover, the current liabilities had the increasing trends and the company was less and less financed itself with own sources. Company definitely should consider the possibilities of getting the borrowed capital and apply for some bank loans. That is cheaper than own capital and decrease the taxes. Other way how to get the borrowed capital is issuing the bonds. The advantages of those two ways can be facts that the expectation of the lender are not so high in comparison with the investors who put money in own capital, expected returns via dividends and get the rights to participate in the management of company which is not always wanted.

## CONCLUSION

The main aim of this thesis was the thorough analysis of the selected company from different aspects. The author analysed the company through the usage of wide spectrum of the analysis which were focused on the internal factors but the external environment of the company as well. On the base of those findings, the author has suggested the proposals which match the specific character of the company and can lead to the improvement of the current situation of the company.

The paper is divided into the theoretical and practical part. The theoretical base represents the starting points and the author draw from those information in order to apply them into the specific conditions in the company. The outcomes of the practical part are the results of the financial, SWOT and Porter's five forces analysis.

The subsequent findings have uncovered that the company has faced the unfavourable situation when it is loaded by the previous negative results. The company started to focus on the different type of products under new management 3 years ago. Its current situation reflects that fact because the company acts as a start-up company in spite of its longer existence. The company has not achieved the profit in any year and was not able to cover its costs with the revenues. Its liabilities were paid through the shares issued when company increased its share capital. Results of bankruptcy tests have proved the negative position of the company and threat of going bankrupt. The rest of resulting values of the financial analysis were usually negative and showed the inefficient management and inability to meet its commitments. The majority of the efficiency ratios were not possible to be applied because of the lack of the information in the financial statements. In the frame of those results, the board of directors did not recommended to pay the dividedns.

SWOT analysis has referred that company has many strenghts and opportunities which should be used in the future. Nevertheless, it has also many weaknesses which cause many problems and unfavorable situation. The Porter's five forces mentioned the only one competitor that started to develop the same product. Company has majority of the customers on the market and longer experience in

that sphere though, but it is currently unable to do its business well with regards to its weaknesses. Company has discovered the niche on the financial market though but nowadays, it is more important to keep this position and focus on the improvements of the management.

The suggested proposals are divided into several categories which provide detailed information serving as the advice focusing to changes in the organizational structure, orientation on the current customers, speaking to new customers, modification related to products, increasing the numbers of the employees, and changing in the structure of the equity. The realization of those suggestions will lead to more efficiency in the management of the company and subsequently, to the improvement of the financial situation. The main aim of the thesis was fulfilled.

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### Appendix 1 Balance Sheets over period 2008 – 2010

<b>Consolidated balance sheets</b>			
<b>Assets</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Non-current assets</b>	40,361	29,298	49,765
Property, plant and equipment	40,361	29,298	49,765
<b>Current assets</b>	1,172,217	1,183,845	1,321,436
Inventories		108,385	91,149
Trade and other receivables	340,819	501,799	1,089,557
Tax assets	15,030		
Financial assets	300,000		
Cash	516,368	573,661	140,730
<b>Total assets</b>	1,212,578	1,213,143	1,371,201
<b>Current liabilities</b>	307,552	748,506	1,325,441
Trade and other payables	307,552	748,506	1,325,441
Net current assets	864,665	435,339	-4,005
<b>Net assets</b>	<b>905,026</b>	<b>464,637</b>	<b>45,760</b>
<b>Equity</b>			
Share capital	15,226,859	16,226,859	17,355,294
Share premium	4,469,110	4,469,110	4,469,110
Merger reserve	23,729,845	23,729,845	23,729,845
Share Option Reserve	35,400	142,502	251,177
Translation reserve	51,155	50,176	50,213
Retained earnings	42,607,343	44,153,855	45,809,879
<b>Total equity</b>	<b>905,026</b>	<b>464,637</b>	<b>45,760</b>

## Appendix 2 Income Statements over period 2008 – 2010

<b>Consolidated statements of comprehensive incomes</b>			
	<b>2008</b>	<b>2009</b>	<b>2010</b>
Revenues	363,895	288,635	1,160,043
Cost of sales	90,299	125,228	300,203
<b>Gross profit</b>	<b>273,596</b>	<b>163,407</b>	<b>859,840</b>
Administrative expenses	2,332,521	1,716,070	2,646,799
<b>Operating loss</b>	<b>-2,058,925</b>	<b>-1,552,663</b>	<b>-1,786,959</b>
Finance income	45,171	7,305	748
Finance costs	4,406	1,154	1,377
<b>Loss on ordinary activities before taxation</b>	<b>-2,018,160</b>	<b>-1,546,512</b>	<b>-1,787,588</b>
Tax on loss on ordinary activities	10,293	0	131,564
Profit on sale of operations	1,080,205		
<b>Retained loss for the year</b>	<b>-927,662</b>	<b>-1,546,512</b>	<b>-1,656,024</b>
<b>Other comprehensive income</b>	<b>59,859</b>	<b>-979</b>	<b>37</b>
Exchange differences on translating foreign operations	59,859	-979	37
<b>Loss and total comprehensive income</b>	<b>-867,803</b>	<b>-1,547,491</b>	<b>-1,655,987</b>

### Appendix 3 Cash Flow statements over period 2008 – 2010

<b>Consolidated cash flow statement in GBP</b>			
	<b>2,008</b>	<b>2,009</b>	<b>2,010</b>
<b>Cash flows from Operations</b>			
Loss before tax	-937,955	-1,546,512	-1,787,588
Adjustments for:			
Depreciation	22,351	22,312	21,255
Gains on disposal of operation	-1,080,205	-	-
Share based payments	35,400	107,102	108,675
Currency translation differences	-113,691	5,172	-592
Income tax received	114,231	-	-
Net interest	-40,765	-6,151	629
<b>Σ</b>	<b>-1,773,252</b>	<b>-1,418,077</b>	<b>-1,657,621</b>
Increase/Decrease in trade and other receivables	100,437	-160,980	-376,194
Increase/Decrease in inventories	27,747	-108,385	17,236
Increase in trade and other payables	333,220	440,954	576,935
Write-off of tax asset	-	15,030	-
Increase/Decrease in provisions	85,399	-	
<b>Net cash outflow from operating activities</b>	<b>-2,063,687</b>	<b>-1,231,458</b>	<b>-1,439,644</b>
<b>Cash flows from investing activities</b>			
Proceeds from disposal of operation	1,045,233	-	-
Purchases of property, plant and equipment	-26,232	-11,249	-41,722
Realisation of financial asset	-300,000	300,000	-
<b>Net cash outflow/inflow from investing activities</b>	<b>719,001</b>	<b>288,751</b>	<b>-41,722</b>
<b>Cash flows from financing activities</b>			
Issue of shares	2,011,500	1,000,000	1,048,435
<b>Net cash inflow from financing activities</b>	<b>2,011,500</b>	<b>1,000,000</b>	<b>1,048,435</b>
<b>Net increase/decrease in cash and cash equivalents</b>	<b>666,814</b>	<b>57,293</b>	<b>-432,931</b>
Cash and cash equivalents at beginning of year	150,446	516,368	573,661
Cash and cash equivalents at the end of year	516,368	573,661	140,730