

RISK MANAGEMENT AT MOBILE WORLD CORPORATION

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Abstract: *The study applies the financial risk measurement by using financial ratios and Default risk model (Edward I. Altman's Z-Score model) and operational risk measurement by measuring the quantity of operational risks and quality of risk management. The results are consistent with the explanations of the measurement by financial ratios and default risk model and quantity method of operational risks and quality of risk management that there is Good comment for financial status of Mobile World Corporation and operational risk figured out as Event risk. As a result, TOWS method is used to reach the solutions for the risk found out.*

• Keywords: *risk assessment, financial risk, operational risk, risk management assessment, mobile world corporation.*

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1. Introduction

Risks can come from various sources including uncertainty in financial markets, threats from project failures (at any phase in design, development, production, or sustainment life-cycles), legal liabilities, credit risk, accidents, natural causes and disasters, deliberate attack from an adversary, or events of uncertain or unpredictable root-cause. Risk management is the identification, assessment, and prioritization of risks (ISO 31000:2009) followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Risk management's objective is to assure uncertainty does not deflect the endeavour from the business goals. It is important in an organization because without it, a firm cannot possibly define its objectives for the future. If a company defines objectives without taking the risks into consideration, chances are that they will lose direction once any of these risks hit home.

Mobile World Investment Corporation operates under two distribution formats: the thegioididong.com (under the brandname of Mobile World), and "dienmay" (under the domain of Consumer Electronics). Over the past years the Company has been continuously growing despite the unfavourable macroeconomic conditions. Mobile World has been awarded with several international prizes by prestigious organizations, including The Global Growth Enterprise by the World Economic Forum, the Top 5 Fastest Growth Retailer in Asia - Pacific 2010 by Euro monitor International, and the Top 500 Retailers in Asia-Pacific

by Retail Asia magazine for 6 consecutive years (2010-2015). Besides, Mobile World's success story has been taught in many leading American business schools such as Harvard University, UC Berkeley, and Tuck School of Business.

As a result, the risk assessment and management of Mobile World Corporation shall be an important part for investors, company owners, regulatory authorities as well as other stakeholders to understand the big success story of this company.

In this study we especially focus on one type of risk, namely the risk of bankruptcy of the company. As a tool of measurement, we apply the Altman Z-score. The Altman Z-score is a formula that was developed in 1967 by Prof. Edward I. Altman. With this score, which is based on five different categories of financial ratios that can be calculated using data from a company's annual report, we can make prediction about the credit-strength of the analyzed company, it means whether the company underlies a high probability of being insolvent. This is crucial for any decision making process of stakeholders.

2. Literature review

2.1. Theoretical framework of risk and risk management

Risk, according to ISO 31000:2009 is defined as the "effect of uncertainty on objectives". There are two types of risk as financial risk - "risks associated with financing, including financial transactions and loans in risk of default" and operational risk - "the risk of indirect or indirect loss due to inadequate or failed internal processes, people, and systems or from external events".

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Risk management is the identification, assessment, and prioritization of risks (defined in ISO 31000 as the effect of uncertainty on objectives) followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Risk management's objective is to assure uncertainty does not deflect the endeavor from the business goals.

In the next section we explain financial risk and how calculation can be made to assess the profitability, leverage, liquidity, solvency and activity of companies. Based on that, the Altman Z-score is introduced for further use of risk measurement.

2.2. Risk measurement

2.2.1. Financial risk measurement

Activity ratios: Measure the efficiency of a company's operations. Major activity ratios include inventory turnover, days of inventory on hand, receivables turnover, days of sales outstanding, payables turnover, number of days payables, working capital turnover.

Liquidity ratios: Measure the ability of a company to meet short-term obligations. Major liquidity ratios include the current ratio, quick ratio.

Solvency Ratio: Assess a company's ability to fulfill its long-term obligations. Major solvency ratios include debt ratios and coverage ratios.

Profitability ratios: Net profit margin, ROA, ROE.

Cash flow analysis (CFO, CFI, CFF): Cash flow to revenue, Cash to income, Debt coverage.

Default risk model: Edward I. Altman's Z-Score model

$$Z = 1.2x_1 + 1.4x_2 + 3.3x_3 + 0.6x_4 + 1.0x_5$$

Where: x_1 =Working capital/Total assets (%); x_2 =Retained earnings/Total assets (%); x_3 = Earnings before interest and taxes/ Total assets (%); x_4 =Market value of equity/Total liabilities (%); x_5 =Sales/Total assets (number of times).

In a general context, the lower the Z-Score, the higher risk of bankruptcy a company has, and vice versa. Scores below 1.81 signify serious credit problems and can mean that the company is probably headed for bankruptcy, where as a score above 3.0 indicates a healthy firm. Scores in the ranges between 1.81 and 3.0 signify firm's conditions needed to be investigated. For investors in the stock market, the value of Altman Z-score can have a great influence on their decision whether to buy or sell a stock. When the Altman Z-Score value is closer to 3, investors may consider purchasing a stock because they expect that the value of the firm will

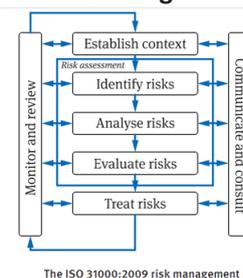
rise in the future due to its healthy financial condition. On the other hand, there is a tendency for investors to consider selling or short-selling a stock if the value is closer to 1.8, because it is supposed that the company is going to face credit problems in foreseeable time and thus decrease in value.

2.2.2. Operational risk measurement

Quantity of risk: According to "Sound Practices for the Management & Supervision of Operational Risk", Basel, operational risk could be defined as "the risk of direct or indirect loss due to inadequate or failed internal processes, people, and systems, or from external events". Quantity of risks could be measured based on People, Process, Systems, Events and Overall. Based on World Bank assessment criteria, these risks could be assessed at High, Moderate and Low degree.

Quality of risk management: Based on recent researches such as ISO 31000 for SME, Risk Management Standard from Institute of Risk management (IRM) and other updates, risk management process has a process as follow.

Figure 1: Risk management process



Source: IRM

Throughout this guide, the term risk is used to describe an uncertainty that has positive or negative consequences; or both positive and negative consequences. Many risks have both positive and negative consequences. The term "risk treatment" is defined as "a process to modify risk". The standard includes the following note: risk treatments that deal with negative consequences are sometimes referred to as "risk mitigation", "risk elimination", "risk prevention" or "risk reduction". The definition of "risk attitude" is defined as "an organization's approach to assess, and eventually pursue, retain, take or turn away from risk". When a risk has a positive consequence, the "pursuit" of the risk is a logical course of action in order to enhance the achievement of objectives. Based on World Bank assessment criteria, the Quality of Risk Management is assessed based on: Board and Senior Management Oversight; Policies, Procedures and Limits; Measurement, Monitoring, and MIS; Internal Controls and Internal Audit.

Degree of quality of risk management could be assessed as Strong, Acceptable, Weak scale

Figure 2: A combination of quantity of risk and quality of risk management

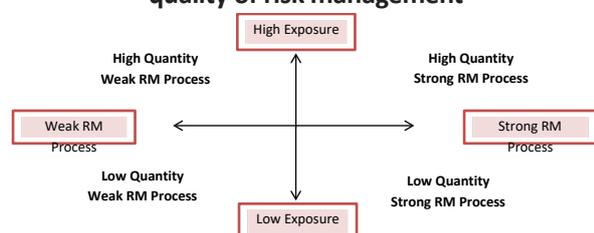


Table 1: Examination Scope Based on Hypothesis

High Quantity - Weak Management	High Quantity - Strong Management
+ Confirm risk assessment + Low reliance internal measures + Full on-site procedures	+ Confirm risk assessment + Rely on internal measures + Modified on-site procedures targeting specific areas
Low Quantity - Weak Management	Low Quantity - Strong Management
+ Confirm risk assessment + Low reliance internal measures + Target "Management" section of on-site procedures	+ Confirm risk assessment + Rely on internal measures + Minimal on-site procedures

Source: World Bank

2.3. Managing Risks

Based on the effects of risk factors to possible outcomes, the writer selects the most concerned risk to find the solution by using TOWS analysis of the company.

3. Risk Management at Mobile World Corp

3.1. Company introduction

Mobile World Corporation has its full name as Mobile World Investment Corporation with the stock code like MWG. The company was established under Business Registration License No.4103012275 issued by Planning and Investment Department in Ho Chi Minh City as of the date of 16 January 2009 and other documents with chartered capital at 1,119,567,790,000 VND and invested capital is 1,474,956,147,637 VND. In 2004, thegioididong.com was established and now become the top No.1 retailer in Vietnam with 960 supermarkets (each has area from 100-200 m²) nationwide. In May, 2015, dienmay.com (created in the end of 2010) was officially changed into Dien may Xanh Supermarket, which specializes in electrical appliances and digital products and have 250 supermarkets nationwide in 2016. In the end of 2015, the very first store named Bach Hoa Xanh appeared. Till the end of 2016, Bach hoa Xanh has completed the first trial period with more than 40 supermarkets majoring in Tan Phu, Binh Tan, Ho Chi Minh City areas and achieved positive revenue and good feedbacks from customers. Vui vui.com – the first B2C electronic commercial website was built in the beginning of 2016

and official went into work in delivery in Ho Chi Minh City in Oct, 2016.

3.2. Company's risk status

3.2.1. Financial risk measurement

Financial risk measurement of Mobile World Corporation can be based on the results of research as follows:

- Activity ratios: Overall, activity ratios of MWG implies that the credit policy MWG applying is quite strict, which may hamper sales. Besides, although numbers of day inventory on hand of the company is quite good, and inventory management system of MWG is at good rate. MWG's working capital management is in good condition. As a result, cash conversion cycle of MWG is in good condition as well. Furthermore, working capital management of MWG is superior.

- Liquidity ratios: In general, liquidity ratios of the company reflect the good and acceptable liquidity condition of MWG which proves a healthy business.

- Solvency ratios: Overall, MWG could have the potential solvency risk albeit for the current good debt management system.

- Profitability ratios: Above all, MWG's profitability ratios are still very high, which marks a substantial profitability condition of the company.

- Cash flow analysis: To sum up, cash generating ability of operations of MWG is currently in the problem. Having a look on the cash flow statement of MWG in 2016, we could easily recognize the negative value of cash flow from operations and the positive net cash flow due to the appearance of positive financing cash flow, which majorly comes from money from loans (at approximately 19,961.551 billion VND) (an increase than 8,129.262 billion VND in 2015).

Based on the financial analysis of MWG as above, we could figure out the company is still under the investigation of financial risk and financial leverage owing to the cash flow from operations per total debt value and should be investigated more clearly.

As a result, the writer goes deeper by measuring the health of the firm. And it is recommended to apply Edward I. Altman's Z-score model.

$$Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$$

Based on the figure calculation from financial statement, X1 (Working Capital /Total assets) is at 0.09; X2 (Retained Earnings/Total assets) is at 0.15; X3 (EBIT/Total assets) is at 0.14; X4 (Market value of equity/Total liabilities) is at 3.00 and X5 (Sales/Total assets) is at 3.00. As a result, total Z-score is at 5.56.

With the final Z-score result at 5.56 scores (>3.0 scores), we could infer from the value that the firm is currently at healthy status, albeit it is in the question of financial risk and financial leverage of the operating cash flows.

3.2.2. Operational risk measurement

Quantity of Risk

People

The number of staff by the end of 2016 is more than 26,000 employees, higher than in 2015 with 15183 persons. Among that, the number of staffs in supermarkets accounts for the largest percentage (88%). Stood second is the staffs of Business Development department with 1183 in 2016 versus 336 in 2015. Third is of Logistics – Supply chain with more than 500 persons during 2 years.

Bonus or rewarding system: Apart from contractual salary, MWG implements a wide range of salary and bonus policies to recognize and motivate employees to stay engaged and work more productively. Finally, MWG is committed to providing employees with a FRIENDLY, ENGAGING, PROFESSIONAL, STABLE working environment and a fair opportunity for advancement.

Training: MWG regularly organizes training courses such as the New Staff Training Program, Combined Field Training, Professional Development, Soft Skills Training for Call Centres, Customer Care, TCC, E-learning as well as special courses training for the management team, the office block.

Processes (Execution, Delivery & Process Management)

Store Openings: Area Managers shall cooperate with Ground Development Department to look for a potential place to open a store. Based on detailed analysis, Ground Development Department shall decide to select the place and continue on the upcoming procedures and transfer the place to Sales Department (handled by Area managers) to inform and work with Brand Department (in charge of goods selection, purchasing, and dealing at best prices..) and other related parties such as Human resources (training staffs), Marketing (in charge of shop image management, incentive programs), Accounting (in charge of cashier), Administration to complete all necessary processes to open a store at an agreed/fixed date.

The core store supervising department: Sales Department (with the structure as: 1.Lowest: Store manager/ 2. Area Manager/ 3. Regional Sales Manager/ 4. Highest: Senior Regional Sales Manager).

All departments work collaboratively in mutual supports.

Delivery system: Brand department shall appoint its inferior named Logistics dept. to do the timely calculations. Central warehouses shall delivery goods nationwide. Inventory is managed and handled within 30 days dictated by ERP system.

Sales and marketing campaigns: MWG apply the same campaigns (banners, loudspeakers, standees, TVs, newspaper, online advertisings, etc) nationwide for every shop at agreed time.

Systems (Business Disruption & Systems Failure)

Modern IT system is used to control the business systems such as ERP system for controlling inventory management system (Accounting). For fresh products, the system is being built, Goods – prices - incentives (Marketing), Employee Appraisal Program for Sale point ticking after work hours (Human resources); Hotline for receiving prompt feedbacks from customers (Sales & Customer services).

External events (Clients, Products, and Business Practices; Damage to Physical Assets)

There are macroeconomics risk, competitive rivalry, loss of goods at the supermarket and risk of inventory price decrease.

Risk assessment

People: There are currently 26000 people in MWG at the end of 2016. Personnel in the store system are suitably recruited, well-trained and familiar with job requirements. Besides, they are well-supported, got promotion or considered for rotation every 6 months by the human resource and reward policy of the company. Quantity of Risk: Low

Processes (Execution, Delivery & Process Management): The activity consists of few control points; simple, easy to understand activities and a relatively non-specialized knowledge base. Moreover, extensive use of straight-through processing with little or no manual intervention (ERP system). Besides, branches, operation centers and personnel operate smoothly within a local geographic area (nationwide in Vietnam). Quantity of Risk: Low

Systems (Business Disruption & Systems Failure): The organization's business operations utilize industry standard networks. Moreover, MWG retains a non-stop level of technological innovation, and selectively implements emerging technologies that are consistent with its business plan. Quantity of Risk: Moderate

External events (Clients, Products, and Business Practices; Damage to Physical Assets): MWG is facing the macroeconomics risk of unstable exchange rate, high unemployment rate, high inflation rate, a

decrease of consumer trust in the future. Besides, strong competitions with other retailers are very fiercely. Furthermore, risk of inventory price decrease has been hampered the operation process of the company quite far. Apart from that, the fear of losing goods at supermarket has been another issue of MWG. Quantity of Risk: High

Company's risk management status

Board & Senior Management Oversight & Policies, Procedures and Limits: Based on the Annual report of MWG 2016, Boards of Directors and Managers are strictly controlled and supervised by Supervisory Board. Year 2016 is the year MWG finishes expanding dienmayxanh chain throughout 63/63 provinces, completes the trial of mini grocery supermarket model "Bach hoa Xanh" and with the plan as above, Boards of Directors and Managers have performed all the rules and requirements of the company's business plans and regulations.

Monitoring and Management Information System & Internal Control, Audit: Assumptions, data resources, and procedures used for monitoring are appropriate, adequately documented, and tested for reliability. Operational risk is systematically identified and assessed, impeded at least annually by supervisory board. Supervising and evaluating commitments of all departments to the supermarkets/stores are conducted (including promotional expense management procedures, business cost management procedures, store management procedures, business process management at supermarkets, inventory and cash control at supermarkets, cost of renting business premises control process, procedure to control the use of loans). Supporting and consulting in building up IT and monitoring systems of the company are implemented. Besides, External Audit Company's team has already been assessed for education levels, skills and resources and effectiveness to be chosen as Ernst & Young Vietnam Co., Ltd by Supervisory Board. Quantity of Risk: Strong

Whole reflection of every risk occurrence and assessment

Based on the analysis above of Financial Risk and Operational Risks, we assesses and selects Operational Risk 4 - Event Risk for impact of macroeconomics on the current operation of MWG and its competitive rivalry to go deeper and look for recommendations to soften this issue.

4. Solutions and suggestions to improve risk management at the firm

Since the risk is assessed as high exposure but under the controlling status of strong risk management,

the strategies to suggest recommendations should be as follows.

- Confirm risk assessment
- Rely on internal measures
- Modified on-site procedures targeting specific areas

Due to the fact that we have already realised the risk of the economy's macroeconomics (unstable exchange risk, high unemployment rate, high inflation rate, a decrease of consumer trust in the future), fierce competitions with other retailers, fear of inventory price decrease, losing goods at supermarket, it is a must that MWG should follow the above recommendations. More apparently, MWG should set up its strategies by maintaining the current growth of thegioididong.com chain, focusing on Dienmayxanh.com in 2017 -2018 and switching to Bach hoa xanh from 2018 and developing Vuivui.com in the long-term.

Conclusion

The study has shown the operational risk (event risk), which reveals the current difficulties of MWG. MWG is now facing the downturn of macroeconomics, competitive rivalry, a decrease in inventory price and loss of goods in supermarkets. As a result, we propose the suggested solutions for the risk above as: Maintaining the current growth of thegioididong.com chain; Focusing on Dienmayxanh.com in 2017 -2018; Foster Bach hoa xanh from 2018; Long-term prospect - develop Vuivui.com.

To sum up, although Mobile World Corporation has big risks, methods to solve the issues of the company always prove its outstanding operations and performances to make preparations for handling unexpected events in the short-term and long-term future. And this story should be learned for any companies from now on.

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