Assignment 3 – Task 1 – Strategic Financial Management

MBA Programme LSIB

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1. Impact of key resource decisions on meeting strategic objectives of the company:

1.1. Company presentation:

According to its official corporate website (2018), Goodyear Tire & Rubber company is an American manufacturing company founded in 1898 by Frank Seiberling. The company is specialized in designing, producing and commercializing tires and rebber based products. According to the tire specialist website Tyrepress (2017), the company is considered as one of the top 3 tire manufacturers worldwide.

1.2. Example of key resource decisions:

Business administration is about orchestrating the fundamental core components of a given organization. Examples of these core components are: strategy, marketing, human resources (HR), information technology (IT) resources.

1.2.1. Human

Let's consider an example of a key HR decision made by Goodyear during its recent history: according to an article published by the Financial Times and written by Sharman (2015), the company planned to close the Midlands rubber operation in the UK which corresponds to a suppression of 330 manufacturing jobs. This strategic decision was justified because of the local currency evolution during the past few months in addition to the general state of the tire market since 2010. This is also explained by the very aggressive competition coming from the low cost tires imported from China.

1.2.2. Financial

An example of key financial decision operated by Goodyear since its founding is the financial investment in R&D. In fact, according to the European Rubber Journal (2017), Goodyear invested M360$ in R&D in 2015 which is 2.3% of total sales. This is of the same order of magnitude than Bridgestone 2.5% which is the worldwide tire market leader.

1.2.3. IT

Digitalization is not an option but it's an outstanding powerful weapon that should be mastered and adopted. This is particularly true in the modern era of industrial revolution, internet of things (IOT) and Industry 4.0.

According to Patil (2017), Goodyear is launching a connected fleet based on IOT which makes business analysts wonder whether the entire business model of Goodyear will change during the IOT integration in the core business of the company.

1.3. Analysis tools:

1.3.1. Budgeting

Budgeting stands for planning financially a given project by setting up a detailed plan for future actions. The budgeting can be summarized in the following steps:

- Initiating and integrating:
- Allocation of resources
- Coordinating
- Monitoring and controlling
- Modifying
- Assessing performance

Designing an efficient Budgeting is key for optimizing the use of financial resources. The latter is key in the sustainability of the company as cited previously.

1.3.2. Gap analysis

According to Rouse (2014), a gap analysis is a strategic tool comparing "the target goals against the current state". The common points between the gap analysis tools are the following:

- Current state: the effective status achieved.
- Future state: the desired state where the organization wants to go.
- Gap description: Based on the previous 2 elements, outline the gap between the two states.
- Proposals: Based on the previous analysis, build an action plan aiming at removing the gaps between the effective and the target status. Generally, this operation is initiated through a brainstorming process

1.4. Critical assessment of the consequences of inadequate resources:

Inadequate resource management may have dramatic consequences on the performance of a given organization.

Let's take again the example presented above regarding suppressing job positions inside Goodyear. In the case when this HR decision is inadequate, internal skills and workforce of the company would be lost. If the savings generated by the job suppression are lower than the value destructed by this operation, the final financial numbers of the company will be lower than the initially targeted ones.

Secondly, let's take again the example of investing financially in the R&D by Goodyear. If the long term Return On Investment (ROI) gathered from the R&D are lower than the Return On Equity (ROE) of the company, then the company would lose money over time by destructing value.

Finally, let's take again the example of Goodyear investing on IOT. An inadequate IT resource management would be focusing on building the IOT infrastructure inside Goodyear without taking care about training and adapting the employees to this new business model. A mismatch between the employees' skills and their working culture have generally a dramatic impact on the company sustainability. Hence, such an IT resource decision should be synchronized with an adequate HR training and adaptation.

2. Financial statements analysis

The financial information presented in the following sections is extracted from the financial specialist website Morningstar as well as from the official annual reports of Goodyear downloaded from their official corporate website (2018).

In the current section, several accounting ratios are assessed and critically analyzed. Since the ratio analysis should not be static over time, the different provided financial statements are provided for 2 consecutive years: 2015 and 2017.

2.1. Balance sheet

Based on the financial information provided by MorningStar website, the following balance sheet is reported for Goodyear company, all numbers are expressed in $M:

Balance sheet component	***Dec 2015***	***Dec 2017***
Total current assets	6141	6079
Total non-current assets	10298	10985
Total assets	***16439***	***17064***
Total equity	3920	4603
Total current liabilities	4957	5025
Total non-current liabilities	7562	7436
Total liabilities and equity	***16439***	***17064***

Table 1 : Balance Sheet

- Current ratio:
  - It's also called the working capital ratio. It takes into account both the current assets and liabilities of the balance sheet. Its assessment is provided in the table below
  - The obtained values show that the current assets are around 20% more than the current liabilities. This confirms that the company is not facing a risk in covering its liabilities in the short term.

Formula	***Value in 2015***	***Value in 2017***
Current ratio = current Assets/Current liabilities	1.24	1.21

Table 2 : Current ratio

- Working capital:
  - Working capital assesses in a quantitative and monetary manner the difference between the current assets and current liabilities
  - The assessed values show that the working capital of Goodyear company is still positive between the 2 considered years which is a good financial sign.

Formula	***Value in 2015***	***Value in 2017***
Working capital = current Assets-Current liabilities	1184	1054

Table 3 : Working Capital

- Debt to equity:
  - This ratio aims at assessing the ability of the company to cover its long term debt by using its own equity.
  - The assessed values show that this ratio is bigger than 1, hence showing that the company is not covering its external debt on the long term. This shows also that the company is relying heavily on the external long term debt in financing its activities.

Formula	***Value in 2015***	***Value in 2017***
Debt to Equity = Debt/Equity	1.31	1.10

Table 4 : Debt to Equity

2.2. Income statement

The income statement of Goodyear company for 2015 and 2017 are reported in the below table. This is extracted from MorningStar website (2018). Based on this data, several ratios are assessed and analyzed.

Income statement component	***Dec 2015***	***Dec 2017***
Revenue	16443	15377
Cost of revenue	(12164)	(11719)
Gross Profit	4279	3658
Total operating expenses	(2614)	(2437)
Other income expenses	(645)	(8)
EBITDA	1718	1994
Operating income	1665	1221
Net income	***307***	***346***

Table 5 : Income statement

- Gross margin
  - This ratio reflects the gross profit ratio wrt net sales. It reflects the efficiency of the company in generating gross profit based on the cost of the sales performed before adding any other expenses.
  - The gross margin is ranging between at about 25% during the past 3 years with a slight decrease between 2015 and 2017. This gross margin can be considered as a medium performance and perfectible. In fact, according to the financial data of Bridgestone which is considered as the tire market reference and leader (MorningStar, 2018), the company the gross margin of the latter company is of the order of 40%. Hence 25% of gross margin should be improved by
    - Targeting new markets and raising the revenue
    - Decreasing the COGS by negotiating with the suppliers and optimizing supply chain of the raw materials

Formula	***Value in 2015***	***Value in 2017***
Gross margin = Gross Profit/Net sales	26.02	23.79

Table 6 : Gross Margin

- Net margin
  - This ratio is one of the most important and it's considered as the bottom line of the financial performance of a given company. In fact, this ratio reflects the efficiency of the company in creating a net income after deducting all the tangible and intangible expenses encountered.
  - The assessed profit margins between 2015 and 2017 show a slight increase which is a positive indicator. A 2% net margin is considered as a medium performance by comparison to the market leader Bridgestone that makes a net margin of the order of 8% (MorningStar, 2018) in the past 3 years.

Formula	***Value in 2015***	***Value in 2017***
Net Margin = Net income after tax/Net sales	1.87	2.25

Table 7 : Net Margin

- Efficiency ratios

- These efficiency ratios are expressed in days and they are called respectively: days of collection, days of inventory and days of payment. The below table reports the formula for each of them as well as their assessment for Goodyear company in 2015 and 2017.
- The reported efficiency ratios show that the days of collection represent almost half of the days of payment. This can be considered as a good performance since the company spends half less days in collecting cash from customers than days in paying its own suppliers. On the other hand, the high value of days of payment can be an opportunity for the company to negotiate with its suppliers a lower price for raw material against reducing the days of payment. Days of inventory should be minimized in order to reduce the related cost. This can be performed by an optimization of both the supply and the sales chains for respectively the raw material and the final tire to be sold.

Formula	***Value in 2015***	***Value in 2017***
Days of collection=receivables/salesx360	46.16	45.03
Days of inventory=inventory/COGSx360	77.04	84.31
Days of payment=payables/purchasesx360	84.72	84.03

Table 8 : Efficiency Ratios

- ROE, ROS and ROA
  - ROE stands for return on equity. According to Kennon (2017), ROE is one of the most important financial metrics. ROS stands for Return On Sales and ROA stands for Return On Assets.
  - The ROE of Goodyear company during the past 3 years is of the order of 8%. By comparison to the market leader Bridgestone that is performing a mean of 13% of ROE during the past 3 years according to MorningStar (2018). The ROE and ROS are both of the order of 2%. They are also medium performance by comparison to Bridgestone that signs respectively 8% and 7% for ROS and ROA.

Formula	***Value in 2015***	***Value in 2017***
ROE	8.15	7.60
ROS=net income/sales	1.87	2.25
ROA=net income/assets	1.78	2.06

Table 9 : ROE, ROS and ROA

2.3. Cash flow statement

The cash flow statement of Goodyear is reported in the table below.

Cash flow component	***Dec 2015***	***Dec 2017***
Cash flow from operating	1687	1158
Cash flow from investing	(1262)	(879)
Cash flow from financing	(985)	(415)
Net change in cash	***(685)***	***(136)***

Table 10 : Cash Flow Statement

- General tendencies
  - The general cash flow is negative during the past 3 years. This may explain the heavy debt and high leverage ratio reported previously.
  - On the other hand, let's outline the decrease of the deficit of the net change in cash during the past 3 years which is a good tendency that the executives should carry on.

- Free cash flow (FCF)
  - FCF assesses the cash that a company generates from operating after accounting for all capital expenditure.
  - FCF is decreasing between 2015 and 2017 by 60%. This may mainly due to a decrease in the cash flow from operating by an order of 45%. In fact, the capital expenditure amount is changing much less by an order of only 10%.

Formula	***Value in 2015***	***Value in 2017***
FCF=Cash flow from operating-capital expenditure	704	277
Cash flow from operating	1687	1158
Capital expenditure	(983)	(881)

Table 11 : Free Cash Flow

2.4. Balanced scorecard

According to Lucco (2017), the Balanced Scorecard is one of the best management reporting frameworks available. It's used for:

- Set up objectives to be accomplished
- Build action plan towards these objectives
- Assess priorities
- Measure and monitor performance by using adequate Key Performance indexes (KPIs)

As reported previously, recommendations can be formulated as direct conclusions of the performed financial analysis. Goodyear executives can use this kind of financial analysis and summarize it in a Balanced Scorecard and hence setting up the financial objectives, evaluating of the current financial status and the path how to reach better performance.

3. Evaluation of tangible and intangible resources

The assets are the main resources that an organization should use in the most efficient manner in order to produce value. Assets may be of two different natures: tangible and intangible:

- Tangible assets are intuitive and easy to identify and evaluate. In fact, they are physical in nature and can be assessed quantitatively in an objective manner. Examples of tangible assets are: inventory, land, buildings, machines, computers etc.
- Intangible assets are not physical in nature. Intangible assets may be definite like a patent or indefinite like the brand name. In the modern international market, intangible assets are gaining increasing power. In fact, mergers, acquisition as well as joint ventures are becoming a daily practice in today's business. Consequently, very important intangible assets such as the goodwill is playing a strategic role in every modern company.

Goodwill in particular plays an important role especially in the case of multinational groups such as Goodyear. The Goodwill of the company as well as other intangible assets are reported in the table below:

- Intangible assets including Goodwill represent a small fraction among the total assets of the order of 4%. This seems to be very low but it's even higher than the ratio presented by the market leader Bridgestone that makes barely 2% of intangible assets among the total assets. Hence, having a small proportion of intangible asset seems to be a common behavior of this market. This may be an opportunity for a competitive advantage to build for Goodyear to

invest more in R&D and create more value within the intangible assets by producing and commercializing more patents.

- In addition, Goodyear may optimize its brand name that exist since the 19th century. In fact, this is an intangible asset that the company should leverage in order to raise more equity coming from the investors and hence reducing the dependency on the long term debt reported previously

Resource	***Value in 2015***	***Value in 2017***
Tangible assets	15746	16330
Goodwill	555	595
Other intangible assets	138	139

Table 12 : Tangible and Intangible Assets

4. Cost Volume Profit (CVP) analysis

Cost Volume Profit analysis is a managerial strategic and economic tool that aims at formulating executive decisions based on basic economic information. In fact, one of the major objectives of a CVP analysis is to evaluate the breakeven point (BEP). BEP is the point where the organization experiences no income or loss.

A major use of the CVP is the sensitivity analysis regarding the pricing strategy. In fact, what if scenarios can be tested by using this formula. For example, an increase in the price of units sold decreases the final BEP. On the other hand, it also decreases the will of customers to purchase the product. Hence a good trade-off should be found between the final price to be adopted and its impact on the performance of the organization.

The table below reports an assessment of the BEP units for Goodyear between 2015 and 2016. It can be seen that the even if the gross margin, the fixed costs and the total units sold remain almost the same, a slight increase in the BEP units can be outlined. Hence Goodyear needs to sell more tire units in 2016 than in 2015 in order to recover its expenses. This is mainly due to a deep change in the pricing strategy. In fact, the price per unit sold dropped by almost 8%. This is in its turn due to a drop in the variable costs by an order of 10% probably due to the drop in oil price in 2016. In fact, the main raw material for manufacturing tire is rubber which is processed based on oil and petroleum. It can be outlined at the level that the sales strategy did not leverage enough this drop in the raw material market. In fact, the price per unit sold in 2016 could be dropped less than 8% which would decrease the BEP units and increase the final net profit of Goodyear in 2016.

Finally, let's remind that CVP analysis has some limitations that should be well known by its user. Some of them are the following:

- CVP is based on a strong hypothesis supposing that price and cost per unit are constant over time which is not true in real markets
- CVP makes a clear distinction between fixed and variable costs which is utopic.
- CVP analysis provides indication on a single product and it's unable to handle many products at the same tie.

Resource	***Value in 2015***	***Value in 2016 and***
Net sales	16443	15158
Variable costs	12164	10972
Gross margin=revenue-cost of revenue	4279	4186
Fixed costs (FC)	2614	2617

Tire units sold(N)	166.1M	166.2M
Price per unit sold(P)=Net sales/N	99.00	91.20
Variable cost per unit (v)=variable costs/N	73.23	66.02
Breakeven sales units(BEP)=FC/(P-V)	101.4	103.9

Table 13 : Data for CVP Analysis

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