BYGB 7988 Business Performance Management Risk Analytics

Section 2

Case 1

Instructor: Dr. W “RP” Raghupathi

Prepared By: Regan Alt

Question 1. What challenges does Thomas Schmall face upon becoming CEO of Volkswagen do Brasil (VMB)? Briefly discuss.

- Challenges Schmall faced when becoming CEO of VMB in 2007:
    - VMB was going through a restructuring plan due to previous 7 years of consecutive losses
    - The 2 key consumer indicators ‘Things gone wrong’ (TGW) and “Customer Satisfaction Index” (CSI) were behind management objectives

- Macroeconomic situation in Brazil:
    - Brazilian currency had appreciated against the dollar and euro
    - Increased costs in labor and raw materials made Brazilian automobiles unattractive in the export market
    - Global automotive competitiveness prevented VWB from raising prices to cover excess capacity costs

- The economically difficult years made a bureaucratic and conservative VWB culture and atmosphere due to the fear of instability among the workers

- Schmall did not want to repeat history using cost reduction, employee layoffs and capacity downsizing

(Q1) How analytics can help mitigate some of the challenges:

- Schmall wanted to build a high performance team that would make VWB the industry leader in quality, innovation, sales, and profitability in South America
- Analytics could be used to define new Key Performance Indicators at micro level to mitigate some of the challenges
  - By improving productivity, Schmall could eliminate customer dissatisfaction, improve inefficiency and maximize employee value by optimizing each phase of production process
- KPI Strategy:
  - *Customer indicators*: Use customer analytics to respond to consumer demands, achieve target market share, grow sales per customer, improve loyalty index
  - *Personnel Indicators*: Measure employee analytics, so they feel more accountable to meet the performance indicators and progress further past them. Improve employee benefits such as healthcare.
  - *Process Indicators*: Accelerate turnover rate using product and customer analytics by reducing lead time in response to market demands
  - *Financial Indicators*: minimize costs, gain majority of Brazilian market share to bolster economy and providing for domestic and international consumers

Question 2. Describe VWB's new strategy.

- New strategy consists of reeducating the VWB management team to spend money wisely in order to expand market share, improve processes and innovate new products
- Also, revamp relationships with key stakeholders (employees, suppliers, dealers) by shifting the mindset of the company down to the factory floor
- Schmall wanted to implement a Strategy Map based on: Finance, Customer, Internal Process, and Potential and Growth
- The VWB Executive Committee translated each strategy map's objectives into specific indicators and assigned an executive to each goal
    - Each executive had to monitor and achieve the performance targets for each of the objectives metrics, by relaying the initiatives to employees and driving performance

(Q2) How does business performance management help execute this strategy? What support may analytics provide?

Using predictive analytics and business performance measurements to execute this strategy:

- Using Predictive analytics:
    - Helps Schall determine what would happen regarding specific scenarios unfolding, i.e meeting revenue numbers or expanding market share
    - Can be used to adjust product offerings and pricing in real time by gauging consumption patterns to predict which vehicles will sell in certain markets at certain times

- Implementing Business Performance Management:
    - To manage budgeting and better understand other capital investments such as building a new factory
    - To look at data by region within Brazil so it can react to fluctuations in the market more quickly
    - To create R-squared models for developing capital-asset pricing models to enhance marketing campaigns
    - To streamline business processes, enhance shareholder value, and create a more flexible organizational structure that can adapt to market changes more dynamically

Question 3. How does the strategy map (Exhibit 4) and Balanced Scorecard (Exhibit 5) help Schmall and Senn implement the new strategy?

Strategy Map (Exhibit 4):

- The Strategy map facilitates the translation of Schmall and Senn's new strategy for VWB by identifying the challenges the organization faces (financial, customer, internal processes, potential and growth)
- It breaks down the objectives that will be used to overcome these challenges in each category
- Ultimate goal is to achieve sustainable and positive financial results

Balanced Scorecard (Exhibit 5):

- The Balanced Scorecard helps by addressing the metrics needed to be met for the VP of each team, who then transfers the objectives to employees more effectively
- Each department can use the overarching strategy and apply it to their particular group
  - Can tie targets to individual performance and compensation system to incentivize employees and understand how their own productivity supports the overall strategy

(Q3) What are the strengths and weaknesses of the scorecard and its implementation?
How does a scorecard relate to analytics? [2 slides].

Strengths & Weaknesses:

- Strengths:
  - The scorecard addresses serious deficiencies and thus can act as a link to VWB’s long-term strategic objectives through short-term micro-level actions
    - Ex: mitigates dependency on financial indicators to measure company performance, allowing managers to focus on Customer Satisfaction Index instead
- Weaknesses
  - The scorecard may only be implemented effectively if all VP’s and teams collaborate and stay on track
  - May also require a lot of investment in time and money if the strategy calls for new technology or employees to be retrained

How the Scorecard Relates to Analytics:

- The scorecard provides the framework for VP’s to integrate customer, product, operational and financial analytics to achieve VWB’s overarching objectives

Question 4. How can Schmall and his team use the scorecard to deal with the challenges faced by the company in January 2009?

Challenges in 2009:

- Excess capacity due to unsold production from the fourth quarter was troublesome
- The 2009 Brazilian economy was unstable and riddled with uncertainty due to the global financial crisis which threatened to reduce global economic growth and trade

Implementing the Scorecard:

- To determine whether there was enough demand and potential revenues to resume higher production levels
- The VP of Supply, Operations, Product Development and Sales and Marketing would have to collaborate to see where they could cut discretionary spending to meet each topline goal
- Due to the downturn of global economic trade, they could continue expanding market share domestically, and maintaining a production volume strategy that adapts to industry volatility

(Q4) What other types of analytics may the team consider? Give examples of metrics ← → analytics.

Metrics to Consider:

- Using management dashboards to bring together information such as timing of product releases (through graphs and charts) which portray performance insights to employees at every level
- Create KPI's to develop a competitive advantage in the automotive industry, increase Return on Investment, and improve Customer Satisfaction Index
- Parsing the internet for insights in demand levels and success of marketing campaigns using big data, web and text analytics
- Reward and recognition systems could be used to drive performance and motivate employees, leading to a greater Employee Image Index and Efficiency Indicators
- Utilize Business intelligence (BI) tools to derive what factors truly drive performance and be able to predict future Net Cash Flows

Question 5. Develop 3 insight charts for Volkswagen/car industry relating to performance.

Insight 1: Volkswagen's higher-end vehicles have more miles per gallon compared to competitors

- The chart shows the variability between average price per vehicle and how many miles on the highway the car lasts per gallon.
- The insights derived from this chart indicate Volkswagen's most expensive vehicles can last more miles per gallon (mpg) than its competitors at the same price level.
- Since Volkswagen consumers get more mpg on the highway at a lower price, Volkswagen marketers should emphasis this competitive advantage to gain more market share. They could also price these vehicles higher to increase revenues, since competitors offer much higher prices for much fewer mpg.

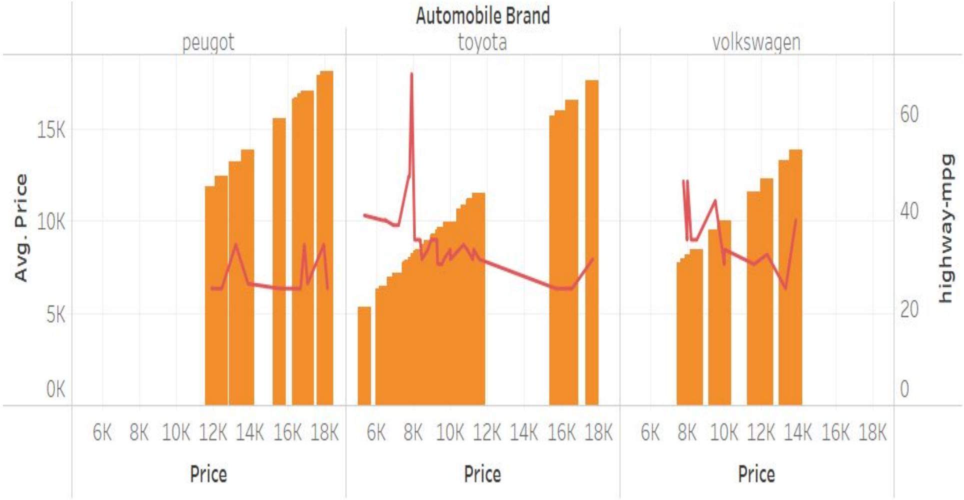


Figure 1: Relationship between automobile price and highway miles per gallon

(Q5)

Insight 2: There is a positive correlation between a automobile's price and their average normalized losses

- This chart shows the positive correlation between relative average loss payment per insured vehicle per year and the price per vehicle, for each automobile maker.
- The price per vehicle is represented by the width of the bar, and thus it is evident the three most expensive automakers render greater normalized losses on average than the less expensive vehicles.
- Volkswagen appears to have only slightly more normalized losses than Mercedes-Benz, but at much lower prices. They could use this insight to highlight to consumers their vehicles are cost slightly more to fix damages, but are almost half the price than those of leading competitors.

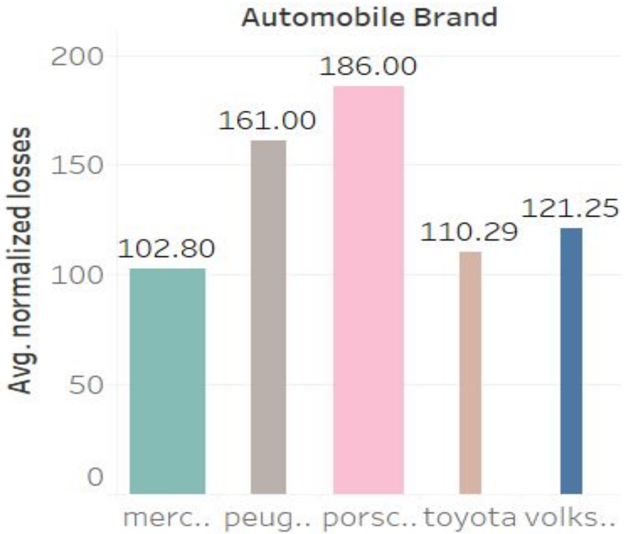
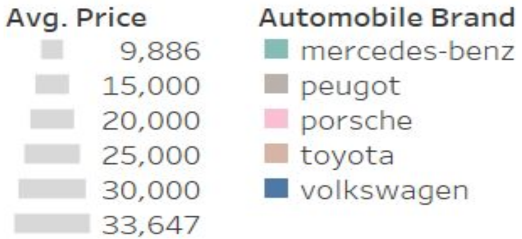


Figure 2: Relationship between automobile maker's normablized losses and the price per vehicle



(Q5)

Insight 3: A vehicle's level of riskiness is associated with average price per automaker

- This chart shows the average riskiness, where 3 is the riskiest, associated with the vehicles average price for each automobile maker in the dataset.
- The insights derived from this polynomial trendline with an R-squared of .490 and P-value of 0.0060 suggest level of a car's risk can factor into price.
- Volkswagen, highlighted by its average price per vehicle has a slightly higher risk factor than a majority of the other carmakers. They could invest in research and development to offer a safer car at a higher price, such as honda or jaguar.

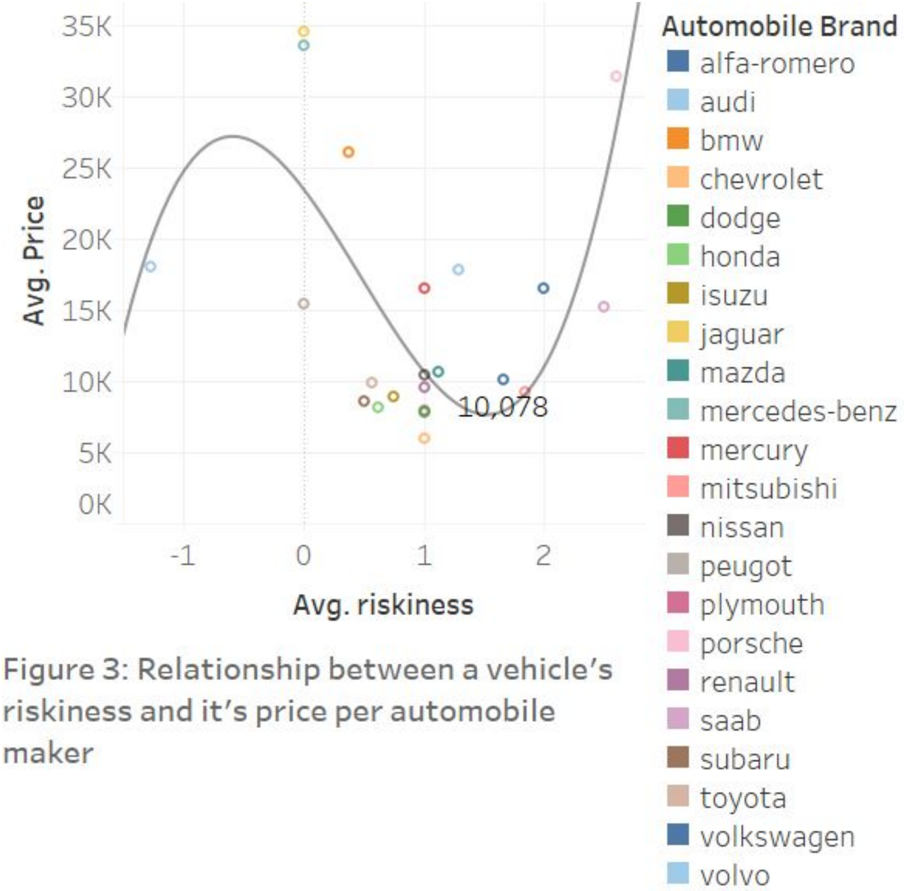


Figure 3: Relationship between a vehicle's riskiness and it's price per automobile maker

(Q5) Interpret the results. Provide insight to make informed decisions at Volkswagen

- Based on this analysis, it is recommended that moving forward Volkswagen highlights their competitive advantage of offering lower prices on average per vehicle with higher miles per gallon on the highway compared to competitors.

- Additionally, Volkswagen has the opportunity to emphasize their unique selling point that their vehicles garner fewer normalized losses on average for the price of the vehicle, compared to higher-end brands such as Peugeot and Porsche. This could improve both company image and Consumer Satisfaction Index if they consider the cost per vehicle outweighs the potential loss in damages if they were to get into an accident.

- Overall, Volkswagen offers good quality vehicles at a lower price than high-end retailers. Depending on the consumers preference for miles per gallon, riskiness, and repair costs relative to vehicle price, Volkswagen has the potential to expand to almost every market around the world.

Automobile data source: https://data.world/uci/automobile