

Quantitative Analysis: Ducati Expansion Break Even Analysis

Student's Name

Institutional Affiliation

GOLDESSAYS

Quantitative Analysis: Ducati Expansion Break Even Analysis

Introduction

All business enterprises exist to make profit. Any business that does not make a profit or at least break even will eventually fail, regardless of the amount of capital ploughed into it. The need for making a profit is core to businesses, although they operate in the uncertain business environments that change based on multiple dynamics. In order to ensure that businesses under their care are able to stay afloat in a tumultuous operating environment, managers are expected to make sound decisions in response to the external environment, internal goals, drives, and objectives. The use of mathematical based quantitative analysis techniques enables managers to make accurate models that depict the possible outcomes of pursuing certain options. Quantitative analysis entails one assigning value to the specific factors with an aim of replicating reality in mathematical terms. It is useful for obtaining performance measurement, financial analysis, and evaluations (Investopedia, 2014).

The Ducati Motorcycle Company

Motorcycles appeal to man's innate sense of adventure and speed. They represent mobility and versatility and embody power and control. Worldwide sales of motorcycles are over 1.6 million units annually (Gavetti, 2002). Indeed, of all the motorcycle brands available in the market, few can come close to achieving the superstar status of the Ducati. The Ducati Company was founded by Antonio Cavalieri Ducati and his three sons in 1926, and started off as electro-mechanical products manufacturer dealing in razors, radios, and other consumer products before it ventured into motorcycle manufacturing after the Second World War (Gavetti, 2002). Its first motorcycles were wildly mopeds referred to as "Cucciolo" (Gavetti, 2002). The innovative nature of the company saw it developing the new ways to harness power in motorcycles, and it

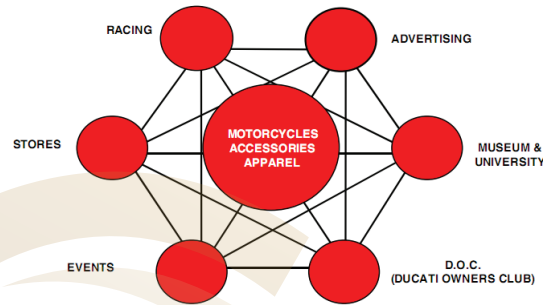
has proven superiority repeatedly, as Ducati motorcycles dominate international motorcycle racing circuits. The Ducati brand is more than just about motorcycles. It is about passion, innovation, design, and Italian ingenuity. The current CEO of the company, Federico Minnoli, knows this all too well (Gavetti, 2002). He was able to turn around the Italian company, which was on the brink of bankruptcy, into one of the world's most profitable motorbike manufacturers in just five years, earning him the moniker "turnaround artist" from the Forbes magazine. One may wonder how he was able to do that. He leveraged the company's brand as the single most important asset and used it as the core of his strategy to revive the business (Gavetti, 2002).

Ideally, Ducati bases its marketing strategy on seven income streams all tied into the Ducati brand name. They include racing and income generated from racing events, advertisement revenue through its affiliation with racing events, as well as its magazines and websites, Ducati stores, which stock Ducati brand motorcycle, spares, and accessories and apparel. Ducati has established a museum and university that attracts Ducati motorcycle aficionados, who go by the name "Ducatistas", from all over the world to come to learn about the company's rich history and innovation while learning about the design and engine dynamics (Ducati, 2014).

Indeed, Ducati owners' club caters to all Ducati owners worldwide and gives the company a means to reach and interact with its worldwide fan base through the club events. Ducati branded apparel has become a source of income for the company, since it uses its already recognizable brand to get Ducatistas and motorcycle racing enthusiasts to identify with and share in the company's sense of achievement and glory by wearing Ducati branded apparel. The company has launched Ducati brand racing gear and outfits, as well as normal, everyday clothing ranging from t-shirts to sweatshirts. It even has Ducati brand children's accessories for future Ducatistas generations (Ducati, 2014).

Figure 1: Model of the Ducati income streams.

(Gavetti, 2002).



Ducati Expansion Strategy

Ducati has been able to maintain its tight grip on the superbike segment of the motorcycle industry. However, there is a need to consider pursuing alternative markets in order to cushion market fluctuations and to expand the company's management and performance portfolio (Mishra & Jaisankar, 2007). According to the data available on the motorcycle-market segment share among the major players, the best segment to pursue this expansion will be the cruiser motorcycle segment. The data is shown below:

Figure 2: Motorcycle-market segment share among competitors (Giavetti, 2002).

	<i>Off Road/ Dual Purpose</i>	<i>Cruiser</i>	<i>Touring</i>	Sport			
				<i>Hyper-Sport</i>	<i>Super-Sport</i>	<i>Sport-Touring</i>	<i>Naked</i>
Ducati							
HD							
BMW							
Triumph							
Honda							
Kawasaki							
Suzuki							
Yamaha							

Source: Case-writer elaboration

The best segment to attempt growth is in the cruise category. It offers unique advantages since one major player, the American motorcycle company, Harley Davidson, dominates it with

other players making minor forays into it (Gavetti, 2002). Ducati is in a position to capture the European cruiser market, since it has extensive distributor networks in Europe, a strategic international management, as well as an already established advertising presence, as compared to the American company that has to work with external subsidiaries (Mishra & Jaisankar, 2007).

In order to support the conclusion with math, the statistics shown below cover the production and sales of motorcycles and does not include spin-off businesses, such as apparel and advertising revenue. By ensuring they sell 3,650 units of the various models within 2 years, they will break even. The following costing tables illustrate the way this can be achieved.

Activity	Time	Approximated costs (Euros)
R& D and design	6 months	3 million
Manufacture	8 months	19.5 million
Misc	48 months	2.5 million
Promotions and exhibition	24 months	7 million
Activities of Sales	48 months	8 million
Advertisement Initial	6 months	3 million.
Total		43 million Euros

Table 1: Motorcycles Activities, Timing and Costs (Gavetti, 2002).

Break-Even Analysis

Cruiser model	Total produced	Gross Production Cost	Total Cost (€)	Sales price	B.E units
Model 1	2500 units	€ 6,500	16 million	€ 10,000	1,600
Model 2	1300 units	€ 10,750	21.5 million	€ 15,000	1,400
Model 3	1000 units	€13,000	13 million	€ 20,000	650

Table 2: Break-Even Analysis (Gavetti, 2002).

In conclusion, the company needs to research and design three viable cruiser motorcycle bikes suitable for the European market within three months. The three bikes will be a low cost one, a middle cost, as well as a high-end model.



References

Ducati. (2014, January). Apparel: A Look for Every Ducatista. *Ducati Publications. The Redline Magazine.*

Gavetti, G. (2002, March). *Ducati*. Harvard Business School Publishing. Boston, Massachusetts.

Investopedia. (2014).

Mishra, P., Jaisankar, S. (2007). *Quantitative Techniques for Management*. School of Distance Education. Brathiar University. Coimbatore.

