My M&M'S®

An Internal Corporate Venture

MY M&M'S® is a customizable version of the familiar M&M'S® product found at almost every supermarket checkout counter and convenience store. It emerged from innovations in process technology that enabled the printing of personalized images or expressions on every tiny candy piece. These customized candies are now a popular item at birthday parties, weddings, and other special occasions. The case underscores the challenges faced by managers innovating within companies whose success has been built on a very different business model.

Hackettstown, New Jersey. USA. June, 2003.

When Neil Willcocks moved from Britain to the United States to work as director of Mars, Inc.'s Advanced Development Group, he was fascinated by the success of the company's M&M'S® candies. "It had become part of Americana—like Coca Cola." He found it on store shelves and display racks wherever he went. And when the company experimented with selling individual orders of the tiny candy pieces in a customer's choice of color, the market response was enthusiastic. People ordered pounds of orange and black candies for Halloween, green ones for St. Patrick's Day parties, and red, white, and blue mixes for July 4, U.S. Independence Day.

Wondering about other possibilities, Willcocks engaged an artist to create images that might be printed on each candy piece. Mars had been printing the letter "m" on M&M'S® candies for years using a 1950s engraved rolling drum technology (offset rotogravure). Why not print something else and sell it as a special occasion, customizable product?

The process development group Willcocks directed was behind the idea and began thinking broadly about how more effective printing technology could be developed and applied. But when Willcocks shared the artist's images and the new business idea with other managers, the response was lukewarm. He was told, in effect, not to waste too much time on personalization.

Indeed, the idea of making and selling a customized product flew in the face of Mars' operating philosophy that had made it the world's largest candy and snack food company: high volume, low cost. "But my process engineering people," he recalls, "wouldn't take no for an answer. They wanted to keep working on the concept." Willcocks agreed to support them. Together, they would handle it as an underground project.

Though Willcocks's initial concept had encountered resistance, top management's concerns with market saturation and anemic growth would give him a second chance.

The Company and Its Culture[1]

Mars, Incorporated, is among America's ten largest privately held enterprises, and a consumer products powerhouse with more than fifty business units operating in 65 countries around the

[1] To learn more about Mars and its culture, see Chapter 10 in The Fast Path to Corporate Growth, by Marc H. Meyer, Oxford University Press, 2007.

world. With some 64,000 employees (in 2009) and an estimated US$27 billion in annual revenues, the company owns some of the world's most popular snack food and confectionary brands, including M&M's®, Snickers®, Milky Way®, 3 Musketeers®, Dove® chocolate and ice cream bars, Kudos® snacks, and Skittles® candies. It is not only the world's largest confectionary maker; it is also the largest manufacturer of pet food, with brands such as Pedigree®, Whiskas®, and Royal Canin®.[2] Mars' experience in snack food retailing had also led it to develop the Klix® electronic vending equipment business and, in Europe, Flavia® packet-based coffee and teas. Its 2008 acquisition of Wrigley Company added that enterprise's brands to its list.

Frank Mars founded the company around the turn of the last century in Tacoma, Washington, where he produced a small line of locally marketed gift chocolates. In 1920, he moved to Minneapolis to grow the business. There, after visiting a local drugstore, Mars got the idea for a chocolate and malted milk snack that could be enjoyed anywhere. The result was the Milky Way bar—an immediate success. Snickers, a peanut-filled bar, followed, as did 3 Musketeers. All have been enduring successes. Frank's son, Forrest Mars, joined the family business in the 1930s and established the enterprise in Europe with a manufacturing plant outside of London. He also used an acquisition to enter the pet food business.

As Forrest Mars traveled through Europe in the 1930s, he observed a Spanish company producing panned candies, coated in chocolate, with sugar providing both a barrier and special taste. That encounter inspired his development of the now ubiquitous M&M'S®, which was introduced in 1941 as a chocolate candy that would not melt in a person's hands during hot weather.

Through the years, the company developed an egalitarian culture and relatively flat organizational structures. Those characteristics remain in place today. There are no private offices in any of the company's plants or offices. And despite Mars' size, people still know other people around the globe to a remarkable extent. Every employee, including the President, punches a time clock, and the company offers a "punctuality" bonus to people who show up on time. There are no executive parking spaces. Whoever arrives at work first is entitled to the best spaces.

Volume and Efficiency Rule

Efficiency is a key operating principle at Mars and has led to sophisticated process engineering and careful management of supply chains. Though product R&D has always been important, high volume, low prices, and distribution to grocery, mass merchants, and convenience channels are king. "Tons R Us" is an expression commonly bandied around by Mars people. Cost of goods and conversion costs, measured by the tonne, are important metrics for any business plan seeking senior management approval.

By the late 1990s Mars had begun feeling the effects of market saturation. As one Mars executive put it:

> We already owned a huge percentage of available retail shelf space, leaving little room for growth. A big sales effort would increase revenues somewhat, but not enough to move the needle in a major way. Marketing and R&D would periodically come up with extensions or different package sizes of our successful brands, but introducing them was costly, and many would experience sales slips once we let up on the initial promotional effort. In some cases these new products simply cannibalized sales of our other brands. It was like pushing water up hill.

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[2] M&M's®, Snickers®, Milky Way®, 3 Musketeers®, Mars Bar®, Dove® Kudos®, Skittles®, Pedigree®, Whiskas®, and Royal Canin® are registered trademarks of Mars, Incorporated.

Experimentation

Given the maturity of its current market categories, senior management in Mars knew that it had to break out into new food occasions to achieve meaningful organic growth. Mars already had specialty M&M'S® shops located in four key cities and a high-end chocolate store (Ethel M's) in Las Vegas. These were not dramatically moving the sales "needle" but they were useful test beds for new business model approaches. For instance, the four M&M'S® shops allowed customers to create their own color blends, using stock M&M'S® colors—an offer that proved fairly popular.

The idea of customization caught John Helferich's attention. As Vice President of R&D, Helferich was Neil Willcocks' boss. "I was scanning the horizon, looking for some way for us to build confidence in our ability to work outside Mars' core model." He recalled Willcocks' idea and asked him to develop it further. Tapping his R&D budget, Helfrerich gave Willcocks' team $250,000 to work with. Their goal was to experiment with different ways to print—both words and pictures—on flat chocolate surfaces using inkjet technology and edible ink. And before long they had a working model.

Willcocks found himself in an uncomfortable position. He had an idea and a functional inkjet printer, but no real interest from marketing or top management, who viewed the idea of customization as interesting, but "not a big idea" capable of supporting a serious new business outside Mars' core. The only interested party was a manager in the UK, who wanted to use the new inkjet printer for a local product promotion. Feeling that he had come to a dead end, Willcocks agreed to ship the equipment straight away.

Hours before the printed equipment was scheduled for air shipment across the Atlantic, Willcocks received a call from, Paul Michaels, general manager of Mars USA. Michaels, who had guided the M&M'S® brand growth years earlier, had gotten wind of events and told Willcocks that *no way* would the equipment leave the building. "I wondered if I was in deep trouble," Willcocks recalls. Instead, his project was about to get a new lease on life. Michaels talked to him and Helferich about the concept of customized M&M'S® and their market possibilities, and he gave them the green light to pursue it aggressively.

The team pushed the customization concept forward using fellow employees as an initial test market. Using the old rotogravure technology, they began making up small batches of personalized candies for company events: employee birthdays, retirements, and weddings. These were a big hit with employees, and the team received more and more requests as word of personalized M&M's traveled around the Hackettstown facility. "Each event required us to engrave a special rotogravure printing drum at about $1,500 apiece. That wasn't a major expense," Helferich recalls, "but it certainly wasn't the path to cost-effective customization."

The team redoubled its efforts to master ink-jet printing on the curved surfaces of M&M'S®, and it soon had a working prototype. This opened new commercial possibilities. With ink-jet technology, order lead times for internal event candies dropped from five weeks to a matter of hours, and the $1,500 cost of each order set up disappeared. "We seemed to have the basis for a real business—one for which we could charge a lot of money."

Getting Serious

Within a few months, a landmark event appeared on the Mars calendar. Caught by a case of innovation fever, Mars' senior management asked product line and R&D managers to make a case for their latest and most promising new ideas. An off-site "Pioneer Week" was planned two month in the future as the setting for this show-and-tell event. John Helferich didn't have to think twice about his unit's best and brightest idea. But could they put together a plan for a real business in just 60 days? Neither he nor anyone else on the team had any business start-up experience. No one had given any thought to the operation elements of this potential new business: pricing the product, communicating with individual customers, taking and fulfilling orders, safeguarding peoples' credit card numbers, and so forth. Every team member was acculturated to a giant firm that produced 100 million M&M'S® candies every day, loaded them onto 18-wheel trucks, and sent them off to Wal-Marts and similar distributors. Could they model a profitable business that produced one or two thousand candy pieces for a small number of individual customers? Would the company's marketing, finance, and manufacturing people embrace their idea or try to kill it?

The venture team had just sixty days to answer those questions and to create a business model and a business plan for what they dubbed "My M&M's ." (See Figure 1)

Figure 1 Custom-printed candies: the earliest versions

Learning the Business

Since no one on the team had ever planned or operated a new venture, a consultant was brought in to help. With his coaching, they developed a segmentation strategy, a Web channel plan, and a business model that included estimates of capital and financial projections. The market segmentation strategy (Figure 2) shows a sharp contrast between the segment focus of standard M&M'S® (a commodity candy) and the many possible usage occasions for customized MY M&M'S®.

Launch and Learn

Everyone knew that their estimates and plans were unlikely to survive initial contact with real customers. Consequently, the team decided to develop and launch an internal version of the business to test out its concepts and systems. Mars employees in this experiment would represent the market. An i*ntra*net site would be used as an order taking link to "customers." And a small scale printing/packaging line would handle manufacturing. The reasoning behind this internal prototype was simple: use customer feedback to better calibrate pricing and minimum order sizes; improve and perfect all systems of the business prior to a public launch of the My M&M'S® enterprise; and do it all within 60 days.

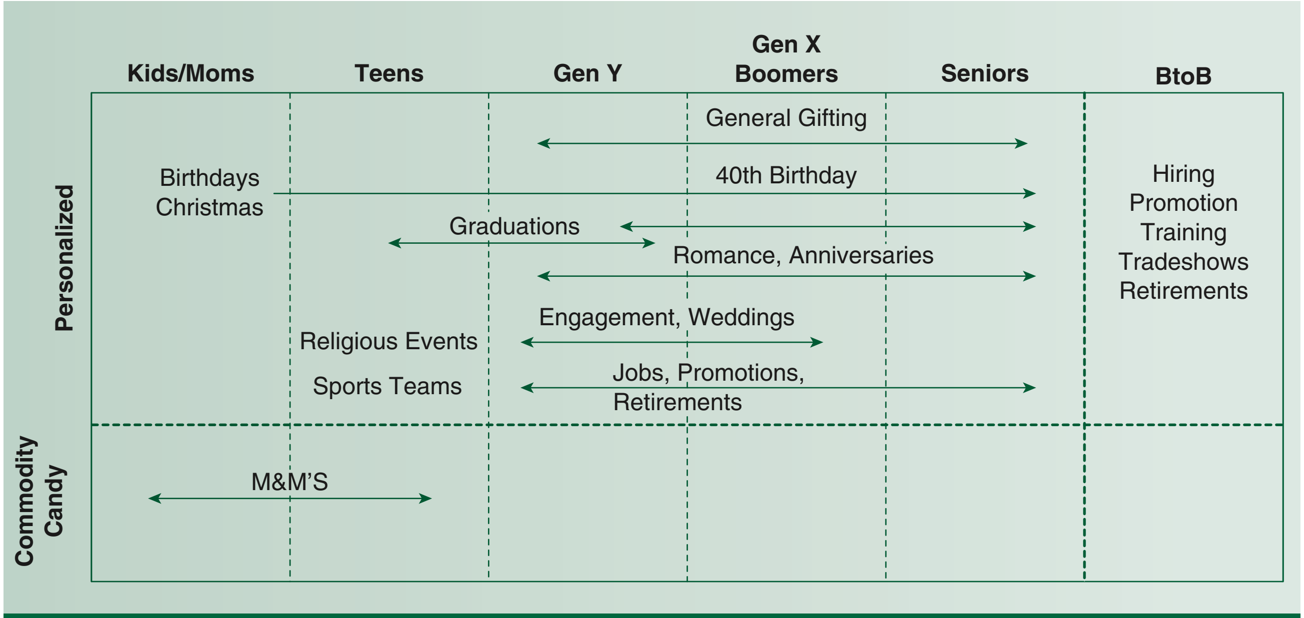

Figure 2 Initial market segmentation

Source: Adapted from Marc H. Meyer (2007). *The Fast Path to Corporate Growth.* Oxford University Press, N.Y.

Pricing was an initial point of contention. The team felt strongly that personalized candies should command a substantial price premium over standard M&M'S®. Willcocks felt that a unique, one-of-its-kind product, supported with the tremendous branding of core M&M'S®, justified premium pricing, plus he knew that there would be substantial R&D expense to refine and improve the product in the years ahead. The company's marketing department was more cautious, however, and requested a low test price. The team bowed to their wishes and set the price at about twice the retail price of standard M&M'S®.

The Website launched with no advertizing or public relations other than word of mouth amongst M&M enthusiasts working with Mars itself who wanted customized candies for their own personal occasions. At the launch price per pound, these "customers" buried the Website with orders. After being "live" for just 4 hours, the My M&M'S® team had enough orders for the entire month, given its single production machine. The team decided on the spot to double the price hoping to keep orders in check. When the Website was turned on again the following week, just the opposite happened. The team had to turn off the Website after just two hours. *The more they raised the price, the more consumers wanted to buy!* Higher price conveyed the special nature of customizing the world's most popular candy brand.

Marketing staff in the company, however, remained cautious on pricing. They were fearful that this early high-demand experience might be an unsustainable aberration. Unable to reach a consensus, the parties initiated a consumer research study.[3] Respondents in the study were asked to make trade-offs between product features, packaging features, and price. One finding was that $20 per pound before shipping costs was about right. Another finding was that male respondents were substantially less price sensitive than women and professed that they would continue to buy even as the price continued to increase (See Figure 3). After further discussion and analysis, the team tried to choose a middle-ground price point between the female and male segments. And, shipping was made an additional charge. The team also reduced the minimum order size to two pounds. (Since launch, the MY M&M'S® team has supported its premium pricing relative to traditional M&M'S® with a range of new features, including the ability to print jpegs on the candies! See Figure 4.)

[3] The study was conducted by students in the High Technology MBA Program at Northeastern University.

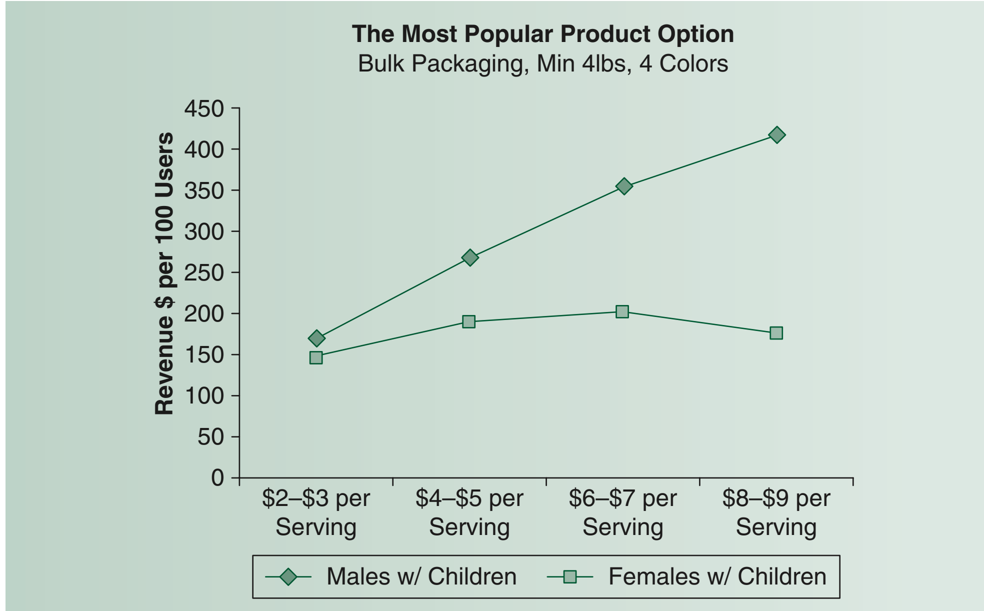

Figure 3 Market Research Results

Source: Adapted from Marc H. Meyer (2007). *The Fast Path to Corporate Growth.* Oxford University Press, N.Y.

Figure 4 The Next Generation of My M&M'S®

Source: Image used with permission of Mars, Inc.

Creating Financial Projections to Make the Business Case for Senior Management

Based on its experience with internal sales and pricing changes, the team put together financial projections for the business showing sales, cost of goods, shipping costs, and other expenses. It also estimated the cost of adding new printing machines and the number of new machines needed as volumes grew. The major assumptions that the team used for its financial planning were as follows:

- The price per pound: $25, which did not include shipping and handling.

- Shipping and handling: Since special insulated cardboard boxes were involved, delivered by UPS, an average price of $12 was added to shipping and handling. Large order amounts over 10 pounds would be charged twice as much for shipping and handling. Given the labor intensive process for packaging goods and the special box materials, the team did not expect to make any profit on these shipping and handling fees—at least not in the beginning.

- Minimum order size: 2 pounds. The majority of consumers would order between two and four pounds of candy. Business customers would order less frequently, but in much greater volumes, with an average order size of about 10 pounds of custom printed candies.

- Orders per day: The team thought that 300 orders per day in the first year was reasonable (based on the test launch of the MY M&M'S® Website internally). The team thought that this amount could easily double year over year over the course of the first five years. The team also segmented its buyers into consumers and businesses. In the beginning, it thought that only 5% of the orders would come from businesses—but that over time, the B2B part of the business would grow to 20% of the business by the fifth year of operations. Within these segments, the team also saw three quarters of the demand coming from first time users, and the other quarter coming from repeat purchases by existing customers for other family occasions. These percentages were just the opposite for business customers who would purchase the candy for hiring, promotion, retirement, product announcement, and educational events.

- Cost of goods: in the range of $3 per pound, including labor and the use of clear cellophane bags as the packaging for the product. The team expected that over time, it could add all sorts of value-added packaging that would be supplied by third parties. As noted above, the cost of the insulated shipping cartons was born by a "breakeven" shipping charge—separate from this cost of goods.

- Capital invested into printing machines. Willcocks' process engineers had done a marvelous job designing high speed printing equipment for the round M&M candies. Conveyor belts load within the candies (blank side up) would zip by and special purpose piezo electric printheads would add the customized messages. (Several years later, this technology would be enhanced to print high quality images on the same surface area!) The team performed calculations on the throughput rate for improved versions of its prototype machine and determined that each one could produce 200,000 pounds of printed candies a year. And it estimated that each machine, loaded up with multiple printheads, a conveyor system, and control technology would cost about $500,000 fully loaded with equipment, installation, and maintenance.

- Advertising to grow revenue. The team had been amazed by the explosive demand for the product just in its internal trials. Word of mouth had capped out production capacity on the prototype machine in under 4 hours! However, the team knew that it would have to advertise to generate the hundred plus million dollars in revenue that it wanted to achieve in the future. Speaking with the company's advertising agencies, the team determined that for this type of business planning, $1 in advertising could be expected to generate $10 in revenue.

Show and Tell

The proforma P&L developed from these estimates and assumptions prompted the first executive to see it to remark, "You are in the ballpark. That would be a very nice business." This was encouraging, and specific line items in the P&L were refined over the next month in consultation with experts from different parts of the company.

Getting approval from top management, however, would not be easy. Many aspects of the nascent venture were troublesome. Order taking, fulfillment, and logistics were going to be entirely different than those used to support conventional M&M'S® and Mars' other snack food products. My M&M'S® would involve small, discrete orders shipped directly to thousands of customers—the opposite of traditional M&M'S® transactions, which were characterized by large quantities shipped in bulk to a handful of retailers and distributors. Indeed, the company was totally geared for mass production, not small batches. "Ton R Us" was baked into the DNA of company decision makers. Could a small order business earn enough to make the venture worthy of attention?

As they prepared for "Pioneer Week," Helferich and Willcocks wondered how they should make their presentation. With all the excitement generated by the internal trials, this was still not going to be a walk in the park. Not even close. They knew that there would be challenges such as, "How do you know that personalization is just not some new fad?" Or, "What do we know about making print heads or developing specialized inks?" Or, "I like it, but it can't be a pet project in R&D anymore. It's time to place it under the core M&M'S® team." What could Helferich and Willcocks say to the executive committee to get behind My M&M's® as a new business?

Discussion Questions

1. Define a business model for this venture and explain how it would differ from the model followed by traditional M&M'S® candy. What parts of the core business does My M&M's® leverage?
2. Create a simple P&L using the estimates and assumptions provided in the case. Then, develop a capital plan for buying the machines that scales with your revenue projections. Calculate a return on these assets.
3. If you were the team leader, how would you sell the venture to senior executives schooled in "Tons R Us?"