

Center for Food and Agricultural Business

Syngenta: Changing a Global Company

Early Success

Every day, almost half of the world's population eats rice, but in 2010, productivity was a critical issue with yield increases not sufficient to meet forecasted demand. Growers in Asia faced challenges such as labor shortages, increasing costs and inefficient use of water. Mitigating the risks of those production challenges moving forward would require transforming rice production, something that would be difficult to accomplish. More than 200 million smallholders grow rice in Asia and reaching these growers was going to be a challenge. Many of these growers in developing areas still resorted to planting by hand, a labor-intensive and back-breaking practice. However, Syngenta, with a strong presence in the Asian rice market, saw an opportunity to grow by taking on some of those challenges and transforming rice production along the way.

By looking at the production system as a whole, rather than the individual components, Syngenta discovered insights that could solve some of the production challenges from 2010. During the rice crop's life cycle, the seedling stage, or the first 60 days of production, is critical to the crop's ability to reach its maximum yield potential. The project, known as TEGRA[™], created a way for small-scale farms to buy the highest-yield-potential seedlings available and have them sown directly into the rows of their fields.

The process starts with high-quality rice seeds that are specially coated with a seed treatment before being planted. This seed coating helps protect the young, densely planted seedlings from early ailments. Once the seedlings are ready for transplant into the grower's fields, they are removed from the seedling fields in small patches, like that of sod grass, and placed into flat trays for transport. For sowing in the grower's fields, the seedlings are placed in rows at a much lower density than the seedling phases. The traditional transplanting process is typically done by hand as workers spend their day painstakingly bent over in the flooded fields, trekking through mud to place the seedlings into the soil. With TEGRA[™], the transplanting process is mechanized by a yard-tractor-sized machine outfitted with tall, narrow wheels that navigate

This case study was prepared by Elizabeth A. Yeager (assistant professor), David A. Widmar (research associate) and W. Scott Downey (associate professor), all from Purdue University. The authors would like to thank Syngenta and particularly Corey Huck (head, U.S. sales), Marian Stypa (head, global product biology), Travis Dickinson (head, product management and business planning), Dan Burdett (head, customer marketing) and Marvin Schrage (field sales representative) for their assistance. The case is a basis for class discussion and represents the views of the authors, not the university. No part of this publication may be reproduced or transmitted in any form without written permission from Purdue University.

the flooded fields. Further equipped with shelves to hold the flat trays of seedlings, the mechanized transplanter accurately meters the seedlings into precise rows.

The launch of TEGRA[™] in 2010 proved to be successful. In trials, yields increased almost 30 percent, resulting in \$270 extra profit per hectare¹ and a return on investment as high as 150 percent. According to Muttineni Veeraiah, a rice grower in India's Andhra Pradesh region, "From transplanting to harvesting, my crop stays in better condition than it did with the conventional methods I used before."

Across the globe, a similar revolution has taken place in sugarcane production. The new technology is called PLENE[™]. Syngenta raises sugarcane seedstock in growth chambers, slices the seedstock into plugs and applies growth- and yield-improving treatments to the plugs, which are then mechanically planted. This technology increases yields and reduces the dependency on laborers, who would otherwise need to walk the fields with machetes to manually cut the long sugarcane seedstock into plugs for planting.

Background of Syngenta

Syngenta, with \$14.2 billion in sales for 2012, is relatively young in its present form. Established in November 2000, Syngenta is the result of the merger of agribusinesses Novartis and AstraZeneca. Syngenta's inherited strengths from the two companies date back to 1758. Syngenta's name actually means "bringing people together." With a collection of people, products and expertise, it developed a corporate structure surrounding its key products, primarily crop protection and seeds. Crop protection included the manufacturing, distribution and sales of herbicides, insecticides and fungicides for all customers. The seeds unit was responsible for the sales of agricultural seeds. Syngenta's entire operating structure, from financial reporting to management reporting and its sales force, evolved around this productbased structure.

Syngenta was formed as an organization of specialists. The company created experts in a specific product area, like corn rootworm traits or corn rootworm insecticide. These experts spent their day working on their respective technology, both of them marching toward the goal of reducing yield loss to the rootworm pest, but they had little, if any, interaction with each other. Innovative technologies like TEGRA[™] and PLENE[™], which pull from both seed and crop protection technologies, would be nearly impossible to create under Syngenta's product-based structure.

Figure 1 shows the strong growth Syngenta has seen in sales. Since 2007, Syngenta's sales have grown from \$9.4 billion to more than \$14.2 billion in 2012, an average annual growth of 10.2 percent. Sales in 2012 were primarily comprised of \$10.3 billion in sales from crop protection products, or 72.5 percent of total sales, and \$3.2 billion in seeds sales, or 22.5 percent of total sales (Figure 2).

¹ 1 hectare = 2.47 acres

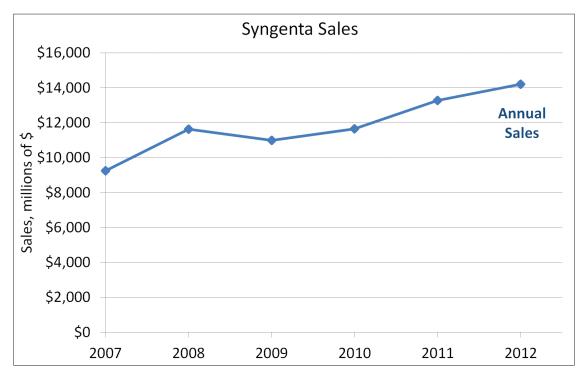


Figure 1

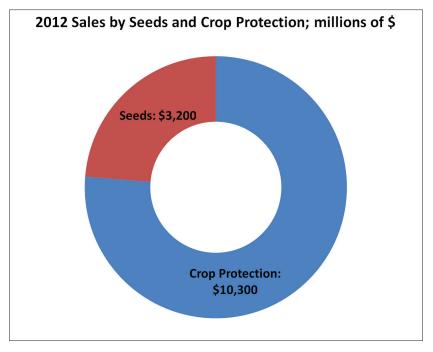


Figure 2

A Strategic Change

In February 2011, during a release of the 2010 annual financial results, Syngenta globally announced it was undertaking a shift in its strategy. For a host of reasons, Syngenta would be rolling its seed and crop protection divisions together to think more like the grower. The new business model created global platforms and centered its focus on crops instead of products. While Syngenta was widely regarded as a product leader, overall, their 2010 sales of \$11.641 billion still lagged in comparison to many of the other technology companies in the agriculture sector. Monsanto, BASF, DuPont, Dow and Bayer all sought to take advantage of opportunities in agriculture and had sales of \$10.5 billion, \$84.96 billion, \$31.51 billion, \$53.67 billion and \$41.46 billion, respectively. However, of these, only Syngenta was focused solely on agriculture. The announcement was breaking news to nearly everyone. The opportunities surrounding the TEGRA[™] and PLENE[™] projects, which were cited as motivation for this strategic shift, were known across the organization, but shifting the way everyone worked was completely unforeseen. These new opportunities would require Syngenta to think about projects differently and define new strategies to best capitalize on the opportunities and add value to customers.

This new strategy did not change what Syngenta fundamentally did as a company. The change was in the thought process in which they approached the creation of new offerings and the sales of these offerings. While misperception could occur, Syngenta's strategy was not merely an attempt at bundling. Instead, the integrated offerings could provide a greater value than the previously separate product offerings. Figure 2, from before, showed Syngenta's previous way of thinking about the business: seeds and crop protection. Figure 3 illustrates how the company looks at its business today — from nine cropping units.

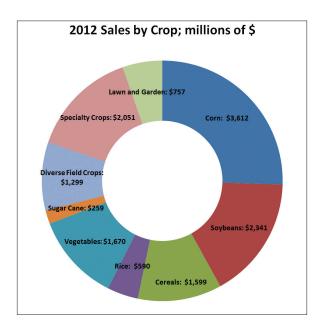


Figure 3

The strategy, known by a host of names including "Integration," "One Syngenta" or "Integrated Crop Solutions," had three clear core objectives: Innovate, Integrate and Outperform.

Innovate: By pulling the efforts of multiple teams together, "crop-based pipelines" were created where all the seed and crop protection technologies and products for a given crop would be evaluated and considered together. Building on the early successes of TEGRA[™] and PLENE[™], innovations that came from seed and crop protection technologies working together, the company developed a platform where efforts were combined by crops. From the corn rootworm example earlier, the next innovation in corn rootworm technologies would come from the efforts of everyone working on corn rootworm technologies.



Source: Syngenta Annual Review 2012

Integrate: The core of the strategy's integration component was pulling the seed and crop protection units into a single entity that centralized around the crop. This was done, in part, to "create unique solutions to meet grower needs, with an integrated offer in the field drawing on our deep knowledge and understanding of agriculture."

Pulling the seed and crop protection units together changed the way Syngenta functioned as a company. The financial report, management structures, and the sales force calling on retailers

and growers saw changes. The company created high-level platforms that decided the efforts for improvement to corn, for example, at a global level.

A major advantage of the strategy was the savings from integration. Total annualized savings by 2015 are expected to be \$150 million from integration alone. Additional savings of \$500 million from procurement and supply chain efficiency are also expected.

Outperform: The final core to the new strategy was to, frankly, outperform the competitors. Outperforming the competitors should start in the grower's fields, where, from that success, market share would advance, profitable growth could take place and ultimately, the shareholder could receive stronger dividends.

Innovate

Since its beginnings in 2000, Syngenta has positioned itself in the market as a leader in product development. Leveraging their strong investments in R&D, Syngenta constantly found ways to develop the best new products on the market.

Strategic planning research has shown that market leaders master and focus on one of three value propositions: product leadership (the best product), operational efficiency (the lowest total cost) or customer intimacy (the best total solution). Figure 5 illustrates this concept, the market leader discipline. This discipline states that a company will lead, innovate and revolutionize a market in one of the three areas, and then only benchmark with competitors



Adapted from: "The Discipline of Market Leaders: Choose Your Customer, Narrow Your Focus, Dominate Your Market



for the other two areas to ensure they cross the threshold of performance. The new strategy is a shift in Syngenta's focus from a product leadership to a customer intimacy discipline.

At the heart of Syngenta's shift in strategy was the desire to innovate. Projects like TEGRA[™] and PLENE[™] created new opportunities for the company. Innovation that usually only took place in the research and development labs could now happen in the fields by individuals — growers, Syngenta representatives and Syngenta supply chain partners — who worked together. Traditional R&D projects are extremely costly, have uncertain outcomes and take years of investment. New innovations, such as TEGRA[™], took existing products and offerings (the rice genetics and seedling crop protection technologies) and packaged them into a single offering (high-yield-potential seedlings sown into growers' fields). These offerings, often referred to as "Solutions," create a lot of value because they can be sold at a price greater than the sum of the components, increase growers' yields and create sales to new customers.

Integrate

North America, Syngenta's second-largest region (only narrowly trailing the Europe, Africa and Middle East region in sales), has met the integration challenge head-on. Integration is putting a change in the way Syngenta works and is viewed within the supply chain. In a system where a grower's and agricultural retailer's seed and crop protection representatives were historically two different subject-matter experts, they are now one person who is supported by the Syngenta network of agronomists. This change was critical as Syngenta wanted to turn the tide and move questions from "What product should I use?" to "How can I grow more bushels, and how can I do it better?" In a market where Syngenta focused on providing the best products (a product-leadership position), the focus is now shifting to a strategy closer to the farmer: the company is trying to think more like the grower.

On the surface, the motivation for pulling the seeds and crop protection units together in the United States and the rest of North America is straightforward. Rather than selling a product for a grower's problem, the integrated strategy will now position Syngenta and its representatives to work with the grower to find the right product across all Syngenta offerings. Previously, if a grower was having problems with corn rootworm, a conversation with a seed representative would have focused on seed products, while the same conversation with a crop protection representative would have focused around crop protection products. Now, with the integrated strategy, the grower's conversation with a Syngenta representative will include all the possible products Syngenta has to help with the problem, from both the seed and crop protection specialist. This represents a challenge for the internal marketing of the company and a shift in company culture.

Traditionally, the focus has been on external marketing to the grower; however, in order to change the company's culture, internal marketing became a primary focus following the 2011 announcement. How do you get more than 27,000 employees to develop new expertise while still using their existing knowledge of the company and its product lines? Syngenta

realized they needed more generalists, a better understanding of customer needs and innovate approaches in harnessing and compiling this information to a customer-value-added solution. There was also the realization that the company needed to be more proactive in envisioning the customer 20 years from now. How will the world change, and will there be more demand for commodity-driven products that can be offered at low costs or specialized high-value products?

One of the first challenges was motivating the employees who come in direct contact with customers and getting everyone to work as a team. Many of the seed and crop protection representatives had to learn about all the product offerings and become a general sales representative or transition into a role as a specialist supporting the representatives. Changing the view of the customer, who previously worked with multiple representatives under the traditional external marketing approach, can be a challenge. The interactive marketing component becomes crucial. The quality of service and the adaptability of the customer working with the production specialist heavily depends on the quality of the customer-employee interactions during the sales calls. Not only must the customer believe they are receiving exceptional service from the specialist, but also, the quality and success of the product recommendations must be at least as high as in the earlier system.

In reality, the opportunity for conversation between the Syngenta salesperson and the end user (grower) can be difficult. Seed supply relationships are generally already set. It is quite common for customers to seek a single- or two-brand seed relationship while having multiple crop protection relationships at the same business. This is due to the complexity of the seed product offerings or products. Because of this objective, resellers may limit the actual grower interaction with the Syngenta salesperson. Another fundamental difference is that growers expect a more personal relationship with the seed supplier than the crop protection supplier due to the heightened complexity of the seed product and correct seed placement. Therefore, a reseller may have highly recommended a Syngenta crop protection product but have a limited or no seed relationship with Syngenta. Due to these alliances or partnerships, resellers may limit the grower/Syngenta relationship, curtailing Syngenta's seed sales calls and opportunities. This can cause some discomfort between the reseller partner and Syngenta, as Syngenta desires to sell its broad portfolio of crop protection and seed versus the reseller's objectives of supporting Syngenta crop protection but Monsanto's or their own in-house brand (i.e, Cropland or DynaGro) seed.

The service marketing triangles (Figure 6) illustrate the traditional path of external marketing, internal marketing between the company and employees, and the crucial interactive marketing between the employees and customers. The top triangle represents Syngenta's efforts, while the lower triangle represents the local retailer's efforts. This illustrates not only how Syngenta's new strategy changes the efforts of Syngenta's marketing, but how it also affects the relationship Syngenta has with its supply chain retailers and how those retailers position Syngenta products to their grower customers.

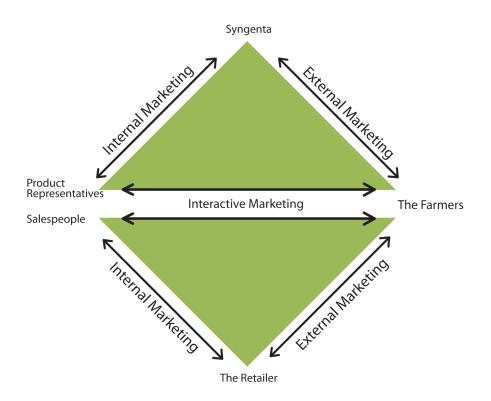


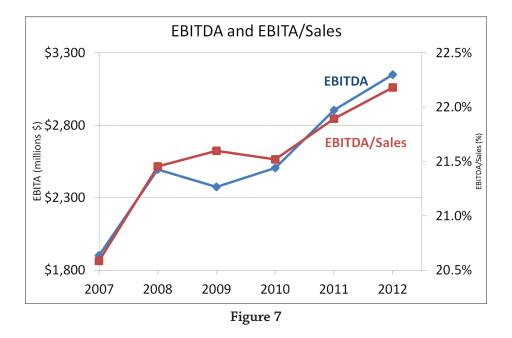
Figure 6 Adapted from: Kotler, P. and G. Armstrong, (2012) "Principles of Marketing," 13th Edition, Pearson Education, Inc.

Outperform

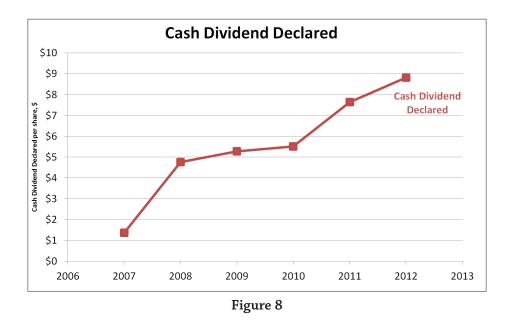
The third and arguably most fundamental component of the strategy is Syngenta's commitment to beating their competitor's performance. Figure 4 outlines three points of performance Syngenta is focused on: the grower's fields, Syngenta's market share and creating profitable growth.

By increasing the value of a grower's production in the field, Syngenta has outlined goals to gain an average of 0.5 percent market share, targeting an earnings before interest, taxes and amortization (EBITDA) margin in the range of 22 to 24 percent by 2015. The company also wants to have a cash flow return on investments in excess of 12 percent and a continuous increase in the dividends.

Figure 7 shows Sygenta's EBITDA and EBITDA margin (measured as EBITDA divided by sales) since 2007. Strong growth in both EBITDA and the EBITDA margin has been reported. EBITDA increased from \$1.9 billion in 2007 to \$3.2 billion in 2012; meanwhile, EBITDA margin increased from 20.6 percent to 22.2 percent over the same time period. In 2012, the EBITDA margin crossed into the lower range of their 2015 goal, just two years into the strategy.



For Syngenta's goal of increasing dividends, Figure 8 shows the annual dividend per share declared since 2007. Overall, the dividends have increased from \$1.36 per share in 2007 to \$8.82 per share in 2012, or an average growth of 110 percent annually.



Another measure of performance at the stockholder level is stock prices. Figure 9 shows Syngenta's stock prices since 2007. After a sharp decline in 2008, Syngenta's stock price has risen over the past five years (June 2, 2008–May 29, 2013). Syngenta's stock price (ADR) hit its high of more than \$87 per share (ADR) in February 2013. For comparison, Appendix 1 illustrates the stock prices during the same time period for Syngenta's major competitors.



From published financial reports, it is evident that the cost of integration was not minimal. As shown in Table 1, the total cost of integration through 2012 is reported at \$265 million. In relative terms, the total cost of the integration is 13.6 percent of the \$1.875 billion in net income reported in 2012 alone.

2012 Total	\$102 million \$265 million
2011	\$149 million
2010	\$14 million

Table 1. Annual Cost of the Integration Strategy

A majority of the integration costs (\$91 million) were associated with severance and pension payments. These efforts are reflected in Syngenta's reported employee turnover rate, shown in Figure 10. In 2012, the reported employee turnover rate reached a five-year high at 12.4 percent. At the same time, the global work force of Syngenta has continued to grow. In 2012, the number of employees grew to 27,262, or 3.5 percent more than in 2011.

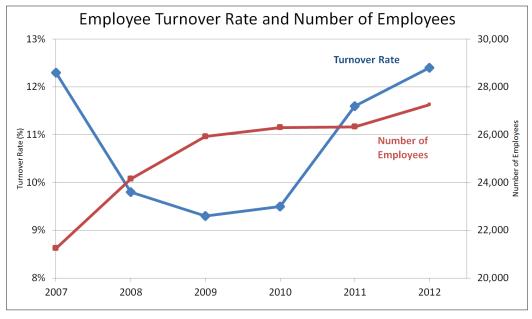


Figure 10

Conclusion

By the end of 2012, the majority of the strategy shift had been completed with growth in sales and profitability. For investors, the stock price has continued to increase. In early 2013, Syngenta stock prices reached the highest level since inception.

In the United States, innovative technologies for irrigated corn, including a partnership with an irrigation system provider, are taking shape and showing early signs of success in grower test plots. However, a cloud of caution currently surrounds Syngenta as they ramp up and introduce the Solutions. Scalability, or taking Solutions like TEGRA[™] and PLENE[™] from the lab and test plot scale to massive commercialization, has proven to be challenging. Standard operating procedures used for product development and commercialization have needed adaptation for commercialization. Moving from relatively shelf-stable offerings to live seedlings and cuttings increases the difficulties associated with storage and transportation of the Solutions.

The "One Syngenta" system is in place and fully deployed. Until the changes become more obvious and more evident across the global organization, the full impact of this strategy will be unknown. Nonetheless, based on initial examinations of EBITDA margin, dividends and stock prices, Syngenta appears to be headed in the right direction.

Discussion Questions

- 1. In general, does Syngenta's strategy make sense?
- 2. Do you think the Solutions Syngenta is putting together, such as PLENE[™] and TEGRA[™], will be successful in the marketplace? In general, how could Syngenta make Solutions more attractive to the customer?
- 3. What competitive responses would you anticipate?
- 4. What response do you feel growers in North America will have to this strategy? How about retailers?
- 5. How can Syngenta increase acceptance and build customer trust to ensure their strategy is sustainable in the long run?
- 6. If Syngenta does this correctly, does this make them a market leader?
- 7. Given the large differences in agronomic practices, crops and regulations around the world, can a global company be grower-centric?
- 8. By changing the "employee" from a seed or crop protection specialist to a production generalist, Syngenta is trying to change the interactive marketing component. What risks does Syngenta face here?
- 9. With respect to the Innovation goal, how does Syngenta's shift in strategy change its value proposition in the market? Is this change a good one for Syngenta?
- 10. With respect to the Innovation goal, how does Syngenta, a global company, manage a change in value proposition, and by effect, its market leadership?
- 11. With respect to the Innovation goal, does this change in value proposition and market leadership change Syngenta's customer base?
- 12. For the Outperform goal, are the correct metrics for measuring this goal in place?
- 13. How do financial markets and stockholder opinions influence the implementation of this strategy? What contingencies should Syngenta's leadership plan for?

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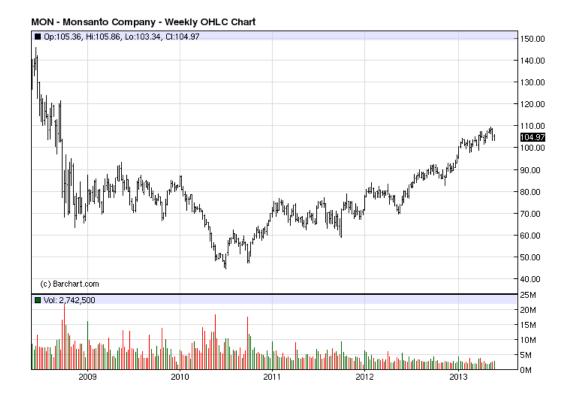
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Appendix 1



Competitor Stock Prices for 6/2/2008-5/29/2013





