Enabling Strategy and Innovation: 
Achieving Optimized Outcomes from Planning to Execution

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td><strong>The Lean, Mean Fighting Machine</strong></td>
<td>4</td>
</tr>
<tr>
<td>· Operations at the Forefront</td>
<td>4</td>
</tr>
<tr>
<td>· Manufacturing Excellence</td>
<td>4</td>
</tr>
<tr>
<td><strong>Lean Operations - a Catalyst for New Product Development</strong></td>
<td>6</td>
</tr>
<tr>
<td>· Innovative Product Development</td>
<td>6</td>
</tr>
<tr>
<td>· <em>Case Study: Calearo Antennae Spa</em></td>
<td>6</td>
</tr>
<tr>
<td>· Operations Agility at Calearo</td>
<td>7</td>
</tr>
<tr>
<td>· Motivated and Skilled People</td>
<td>8</td>
</tr>
<tr>
<td><strong>IT and Operational Excellence Lead to Supply Chain Transformation</strong></td>
<td>9</td>
</tr>
<tr>
<td>· Supply Chain Transformation</td>
<td>9</td>
</tr>
<tr>
<td>· <em>Case Study: Royal DSM, N.V. (DSM)</em></td>
<td>10</td>
</tr>
<tr>
<td>· Integration, Transformation, and Excellence in Operations at DSM</td>
<td>12</td>
</tr>
<tr>
<td>· Achieving Global Strategic Governance</td>
<td>12</td>
</tr>
<tr>
<td>· Supporting Long Term Growth</td>
<td>13</td>
</tr>
<tr>
<td><strong>Conclusion</strong></td>
<td>14</td>
</tr>
<tr>
<td><strong>Acknowledgements</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>References</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Author’s Biography</strong></td>
<td>15</td>
</tr>
</tbody>
</table>
Enabling Strategy and Innovation:
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The global economy is driving change across industries and reshaping relationships among companies in a variety of ways. With the help of technology-enabled operations, companies are leveraging resources to create new competitive advantages. This rapidly changing environment requires companies to operate quite differently from what was required in the producer-empowered industrial economy. This new era calls for agile and flexible organizational structures and supply chain networks that anticipate the market demands and innovate and adapt as necessary. These innovative, agile, and fast-response capabilities require superior operations.

In this article we look inside two outstanding companies: Calearo Antennae Spa, an Italian company that has gained a competitive advantage with its operations-enabled product lifecycle management, and Royal DSM, N.V., an $8 billion Dutch enterprise that re-engineered its information, communication, and technology (ICT) organization and transformed its global supply chain footprint. In both cases, excellence in operations and clear use of Information Technology (IT) has led to their sustained competitive advantage. The lean and efficient modus operandi proves to be a catalyst for innovation, speed, and strategic agility.
Operations at the Forefront

Throughout the 1990s, most companies focused on IT initiatives that promised to bring order to the back-office giving rise to the process enterprise, using methods to streamline core processes, combine related activities from numerous departments and eliminate activities that didn’t add value. The process enterprise was meant to replace the turf and hierarchy battles with new approaches to leadership, performance measurement, compensation, and training—all focused on customers and teamwork, all harmonized with integrated and streamlined processes. When the New Year’s celebrations ended and companies got over the year 2000 (Y2K) hump, electronic commerce and web development stole the spotlight, as companies anxious to earn dividends on their Enterprise Resource Planning (ERP) investment focused on their front-office in an attempt to develop new channels and reach new markets. However, as the late Michael Hammer emphasized in his 1999 seminars, perhaps this focus on the front office was too hasty saying, “Putting a website in front of lousy processes merely advertises how lousy they are.” Indeed, a study by Deloitte Consulting (2008) titled “The Second Wave” projected that companies post Y2K would spend significant efforts in optimizing those same back-office processes that they had spent time on integrating in the 1990s.

It is clear, now, that business operations have returned to the forefront of corporate strategy through various operations initiatives to squeeze out costs, increase efficiencies, and enable strategy and innovation. Indeed, more so than ever, executives are being challenged to streamline, automate, integrate, and optimize business processes in a volatile global marketplace. Successful operations executives have turned logistics into a competitive advantage and purchasing into a growth engine through lean manufacturing, Six Sigma standards, real-time data analytics, and global sourcing as their operations specialists simultaneously are facing heightened challenges from terrorist threats to regulatory hurdles.

Manufacturing Excellence

For many years, manufacturing was treated as a low-end commoditized activity that could easily be outsourced/distributed to low-cost, developing countries. Current evidence however, suggests that companies should address manufacturing productivity as a long-term, trans-organizational strategic imperative and not as an isolated operational or functional issue, particularly with the challenges of energy prices, politics, infrastructures, and increasing costs associated with developing nations. These challenges have led many companies to move their operations back home, closer to the customer.

In their recent book, Kaj Grichnik and Conrad Winkler (2008) of Booz Allen Hamilton, a strategy and technology consulting firm, suggest that “… manufacturing remains one of the great underused and unrecognized sources of competitive advantage and share value.” Rather than assume that outsourcing is a pliable strategy, the authors suggest that companies should develop a longer term, more holistic strategy and learn how to better strategize, innovate, and adapt. Grichnik and Winkler suggest a data-driven approach of peeling back and analyzing operational data buried in the four dimensions of: technological distinction (i.e., process and product design centered), network sophistication (i.e., supply chain organization and structural centered), in-plant transformation (i.e., systemic and operational centered), and labor modernization (i.e., people centered).

The importance of manufacturing excellence was recently emphasized in an interview on NPR Morning Edition. Wilbur Ross, who established much of his $1.7B net worth by rebuilding companies that actually make things, exclaimed “The U.S. service economy is out of balance. I don’t think you can really have our historic standard of living if what the economy consists of is flipping hamburgers, swapping pieces of paper in the stock market, and suing each other.” Companies today are developing competitive advantages by building
and enhancing operational capabilities. The ultimate goal is to build a global, flexible, and reconfigurable supply chain network. As global market conditions shift, this supply chain network will adapt accordingly. Despite the fact that practically all of the knowledge and tools required to achieve manufacturing excellence have been public knowledge for nearly 20 years, companies in many industries are still challenged by their attempts to achieve operational excellence. A recent study by authors from Stanford, McKinsey & Company, and the London School of Economics (http://cep.lse.ac.uk/management) found that “common” management techniques such as setting targets, monitoring performance, and “lean” manufacturing actually help companies become more productive and profitable. The authors concluded that U.S. companies were found to be the best-managed and the most-productive, but that other countries from Germany, Italy, Poland, China, and India were not far behind. For sure, best practices are quickly learned and adopted across industries, and multinational companies seem to have the greatest influence in the adoption of this. The link between lean management and productivity appears everywhere. But as Grichnik and Winkler pointed out, traditional production systems offer little guidance on how to achieve “lean” within the Western context of labor laws and unions. Best practices for achieving lean are available, but implementing them in a specific context is a daunting task. They refer to this as the “fat ballerina” principle: A manufacturing operation needs to get in shape before trying to dance. Faced with competition from the lower-cost developing nations, many manufacturing operations in Europe and the U.S. are under pressure to produce more with less.

Given the current pressure on profit margins, lean manufacturing principles provide an excellent framework for squeezing costs out of manufacturing. Using less of everything implies less inventory, less capacity, and fewer buffer resources. In reality, the leaner the system, the greater the possibility of destabilization and the greater the need to adapt rapidly. Adaptability requires awareness—knowledge of the environment and, more importantly an understanding of the context. The more this awareness becomes real-time, the greater the relative benefit is. The ability to connect and source information in real-time within manufacturing and across the supply chain using technologies that enable quick, effective responses is what drives real-world awareness—all of which is crucial to the success of any lean manufacturing initiative. Many companies have combined lean manufacturing principles with such things as Six Sigma (i.e., output variance reduction), information technology, and best industry practices. The ability of a factory to profitably replenish the supply chain while dynamically responding to unpredictable change becomes ever more essential.
Innovative Product Development

Developing, launching, supporting, and ultimately profiting from new products and processes represent challenges facing manufacturers in industries as diverse as computer chips and potato chips. Product innovation brings new challenges daily—environmental concerns, shorter product life spans, globally distributed sites, and project teams. Todays manufacturer must deliver high-quality products quickly and cost-effectively while retaining and building a customer base, reducing service costs, and complying with international regulations. This requires the integration of business processes and product data across the many business functions that are involved in the product life cycle management process. A study from the Aberdeen Group (Jackson, 2008) reported the top five pressures facing product development organizations to be: shorter product development schedules (91%), reduced development budgets (38%), increased product complexity (30%), accelerated product customization (15%), and increased quality-related costs such as warranty (11%). The Automobile Original Equipment Manufacturer (OEM) market provides a certain complexity that makes achieving and sustaining operational excellence particularly challenging.

Case Study: Calearo Antennae Spa

“There is significant pressure as an Automotive OEM supplier. We must guarantee 4-5% cost savings incrementally each year and this, in hand, reduces our margins. We respond to this market by tightly controlling costs and eliminating waste, throughout the entire business process from the client interface to outbound logistics and invoicing. We must optimize our processes and maintain a culture of productivity. We have no tolerance for waste.”

Roberto Ronzani, Technical Director

Calearo Antennae Spa (Calearo), headquartered in Vicenza, Italy, has grown and prospered over recent years due to its investments in research, development, operations, and service. The key to this success is in its efficiency in new product development and rapid time to market without compromising on quality or service. “Between 2001 and 2005, our company grew significantly, in fact over 300%, due to the introduction of our multi-functional antenna system that has an integrated GPS telephone system,” explains Mr. Ronzani. “We had to have a very fast service response time-to-market with tailor made solutions that addressed specific client needs, at a competitive price.” Calearo largely attributes its success to the investments it makes to develop new product development, agile operations, and its people.

For example, when a major Auto OEM client needed a new solution, Calearo was able to respond in less than three months while the nearest competitor took more than six months to deliver a solution that did not meet all the client’s technical requirements. “Flexibility is critical: not only in reference to time but also to customized integration of R&D and production, combined with excellent customer relationships. When we talk about customer service, such as when a client comes to us with a new problem, the question is how to resolve this technical problem in a timely manner.”

The Calearo product development research teams study the evolution and applications of technology very closely. “We generate new ideas, we present them to our clients, and we can then sense their needs and anticipate their requests. This not only helps our company’s image as a leader, but it means that we respond very quickly to our clients’ requests.”

In a recent OEM Auto client request involving a new technology, Calearo had already started on the research and feasibility study well before the call from the client. It had the foresight to anticipate the needs of its clients and the agility to move quickly in a new direction in response to these anticipated market needs. This
has become a competitive advantage for them. “We are constantly developing new products and proposing solutions to the market before the customer asks for it. In this way we are able to quickly sense and respond to customer needs.”

This is, however, a two-way street. Companies must have mechanisms in place—such as dashboards for full visibility and access to accurate, timely data—to sense changes in the market, adjust, and move quickly. “We have a rolling forecast. Our clients input their three month forward forecast, and this is automatically updated every week through Electronic Data Interchange (EDI). One hundred percent of our OEM clients use this as well as 80% of our non-OEM clients.” Once an order is confirmed, Calearo typically delivers within a day or two. “We also have clients who will modify their orders on the day of delivery due to unexpected production changes. We can sense this in real-time and respond by adding an extra lot as required and ship the same day.”

**Operations Agility at Calearo**

It has been more than 25 years since the world became aware of the importance of manufacturing excellence to achieve competitive advantage. The Toyota Production System (TPS) and Total Quality Management (TQM) are two programs that were aggressively studied and implemented in companies around the developed world. But, in many industries, plants that have successfully implemented these manufacturing practices on their quest to have efficient and agile operations are few and far between. The competitive advantage of excellence in operations remains high today, in part, due to how difficult it is to achieve and sustain this level of performance.

“We also look at low cost automation that can guarantee quality. We work together in teams – including our Kaizen Promotion Office (KPO), R&D Group, Quality offices, and the productivity teams – to eliminate defects. We visually communicate, and map our processes and look at the needs and requirements of all the stakeholders and we integrate this into our solutions. Our Lean program, launched a couple years ago, has increased productivity by 30%. We also focus on lead time and cycle time reductions. We can now produce a lot in 1 day (total elapsed cycle time) where it used to take us 5 days. We also work on reducing Work-In-Process (WIP), minimizing material movements, eliminating non conforming goods, and increasing warehouse turns.”

Technology is critical to Calearo’s success. It has been running an enterprise-wide integrated software system since 2005. The entire company is integrated from R&D through to Quality, Logistics and Administration. “Before we had this integration, it was difficult to find data at times. For example, for something as simple as the company organizational chart, we maintained five different versions in five different databases. When production launched an order, we could have had multiple versions of the Computer-Aided Design (CAD). Which one was correct?” With its intense focus on 0-waste through lean and six-sigma programs, and its commitment to maintaining one version of the truth (i.e., having an integrated system with a single database) Calearo has complete visibility and it has nearly eliminated errors from occurring. This transparency also enables them to make data-based decisions. “There are a number of key performance indicators (KPI) that we use across our organization, but the most important ones include: cost (real versus standard), non-

**“Our six-sigma and lean initiatives allowed us to produce much smaller lots. We have lean operations and we have lean R&D. You must be very efficient in R&D as well as production in order to spread development costs over a smaller number of units. Coincidentally, we pay a lot of attention to our technology.”**

Roberto Ronzani, Technical Director
conformance, lead-time, and inventory turns in the warehouse.” With its EDI, and other tools, its clients interface directly to its ERP system. “We have more tools to measure and assess our performance. We work with Kanban to further reduce our complexity.”

**Motivated and Skilled People**

Integrated, enterprise-wide packaged software systems allow a company to leverage industry and cross-industry best practices. Whereas integration and efficiency in operations inevitably imply the standardization of best practices across many critical processes, companies must establish their core competencies and focus attention and resources to ensure that these core competencies are adequately developed. One specialized area that is critical to Calearo’s sustained business performance is the recruitment of very skilled Electronic Engineers with particular skills in radio frequency (RF), Microwave, and Electromagnetic systems. But regardless of what kind of expertise a company requires, it is equally important to ensure that these specialists and generalists are motivated to work together and are able to share information, communicate, and collaborate effectively. “People are very motivated in this company and this is a critical factor to success. We have achieved very positive results using lean manufacturing principles and visible planning processes. We use white boards, flipcharts, post-it notes, and color coded charts to help the entire team understand visually where they are on various projects. Then they can look at what is scheduled, or not, and where they need to be. Our people are motivated when they see the results that they are able to achieve by improving their processes. This leads to increased performance from our people.” Its systems and technologies give Calearo real-time access to critical data required for six-sigma and Kanban. It is also ISO (International Standards Organization) certified. It makes extensive use of problem solving and decision making (PSDM) tools, as this provides structure, common language, and visible thinking to its PSDM processes.

Scott Newton, partner with Thinking Dimensions Management Consultancy and advisor to several Italian companies, points out that “Managers typically do not think that their product development processes can benefit from lean thinking. Product development is considered knowledge work and this would suggest that these tasks are not nearly as repeatable as they are in manufacturing. Standardizing these tasks would simply kill creativity. Well, Calearo has found that although each development project involves unique challenges and unique solutions, there are a lot of activities that are repeatable. By institutionalizing these activities, Calearo focuses its resources and efforts on activities that distinguish it from others. In this way, it leverages its lean mindset of efficiency and productivity to support and enable its creative and innovative processes.”
Supply Chain Transformation

The supply chain has been defined simply as the series of steps, and related information, that a company needs to design, produce, distribute, sell, and support its goods. It is considered to be the spine of the corporation. Many would say that the supply chain is not just a business process competency that supports the business, but rather it IS the business.

Supply chains are as unique to each corporation as a fingerprint. What works for one business won’t necessarily succeed at another. Like everything else, effective supply chains must be aligned with the business strategy. Supply chain operating models are designed to create a competitive advantage for a business and they must achieve specific performance metrics. Perhaps the most important characteristics of a superior supply chain as suggested by Lee (2004) are that:

- They are agile, able to quickly respond to sudden changes in supply or demand;
- They are adaptable, able to evolve over time as the environment (e.g., economic, political, demographic, technology) changes;
- They are aligned with the interests (e.g., strategy, profitability, environmental, social) of all stakeholders;

— Lee, HBR 2000, The Triple-A Supply Chain

Most, if not all, companies today are on a crusade to control supply chain costs in order to satisfy shareholder expectations for greater return on capital investments and to meet customer demands for lower prices. For manufacturers, that means a constant focus on eliminating waste and reducing all costs such as those for raw materials, component parts, production, distribution, and operating costs (e.g., energy use, waste disposal). Working in tandem, buyers and suppliers along the supply chain continuously look for ways to cut costs and increase innovation.

An Aberdeen survey (Viswanathan, 2008) of over 805 supply chain executives from all over the world identified that 80% of companies are involved in the transformation of their domestic or international supply chains. More than 90% of companies have started to or have already redesigned their domestic supply chains, and 80% of companies have started to redesign their international supply chains or have begun to do so. The top three pressures driving companies to focus on supply chain transformation today are cost containment (68%), followed by escalating customer service demands (49%), and the restructuring requirements brought on by the increase in industry acquisition and divestiture activity (44%). The Aberdeen Group defines the top supply chain transformation drivers and enablers as: supply chain responsiveness (the ability to quickly identify and react to changes in supply, demand, and execution threats and opportunities), strategic alignment with business objectives and internal stakeholders (those designed to support and drive business objectives), integration/collaboration with trading partners (the integration of end-to-end supply chain processes), and gaining sustainability through green initiatives. Every industry has unique supply chain challenges and opportunities that make superior supply chain performance a difficult goal.

The pharmaceutical industry, for instance, faces a host of escalating challenges like patent expirations, falling R&D productivity, pricing pressures, and increasing regulatory controls, as well as opportunities like maturing biotechnologies, global networks, new trading partner collaboration models, and emerging markets. Competitive advantage is gained from a firm’s ability to innovate and adapt so as to minimize risks, overcome challenges, and pursue opportunities. The quality of a company’s manufacturing and distribution operations will either diminish or accelerate its ability to get products to market and create sustained value. The supply chains of the future must be intelligent, efficient, innovative, and agile.
Similarly, the intensification of competition in the global chemical market has forced producers to innovate to improve efficiency and service quality. As firms within the industry approach the limit of their efficiency gains from their production processes, their entire supply chain then becomes the focus of major cost saving and productivity improvement initiatives. The industry is challenged by congested transport infrastructures, rising fuel and labor costs, and customer demands for shorter lead times and greener operations. The chemical industry, being relatively transport-intensive, also has the added burden of absorbing increasing environmental and transportation costs.

Across all industries we see significant productivity and cost performance through improved information, communication, and collaboration technology capabilities, often the main driver of supply chain improvement. Across each industry we see disparities in how each company deploys and benefits from these technologies. To gain maximum competitive advantage, companies must often drastically re-engineer their supply chain processes. In many cases, companies are significantly redefining their footprint. The resulting benefits justify the extra cost and effort that this entails when programs are carefully planned and executed. The next section reports on one company that has achieved operational efficiency and adaptability, and can thus focus its efforts on innovation and the environment, to drive supply chain performance and advantage for all of its stakeholders.

**Case Study: Royal DSM, N.V. (DSM)**

Over its 100+ year history, DSM (originally Dutch State Mines) has repeatedly demonstrated its innovativeness and ability to innovate and stay ahead of market trends. With its origins in coal mining, DSM (headquartered in Heerlen, the Netherlands) diversified into fertilizers, petrochemicals, industrial chemicals, performance materials, and life sciences products (see Evolution insert). DSM’s recent foray into bioterials/biologics and other environmental friendly initiatives, and the industry recognition it receives as an innovator, was largely enabled by the company’s efforts towards IT-enabled operational excellence, allowing DSM to successfully execute its strategic planning outcomes. For instance, in 2000, DSM set forth to execute its five-year strategic planning process, referred to as Vision 2005 (see M&A actions Vision 2005 insert), to divest its petrochemical and grow its life science businesses. Following the sale of its $2B petrochemical division to SABIC in 2003, the acquisition of Roche’s Vitamins and Fine Chemicals division significantly expanded the company’s operations in Life Science Products. DSM’s ability to quickly execute on acquisitions and divestitures was in large part due to its lean, efficient, and agile business operations built upon IT-enabled business process reengineering, standardization, and streamlining initiatives.
With the ability to quickly integrate its newest acquisition, DSM Nutritional Products, the company was able to minimize its risks and quickly achieve its ROI along with other synergistic benefits. The Animal Nutrition and Health business of DSM Nutritional Products provided DSM, for instance, with a key input into the feed/food supply chain. Besides manufacturing and premixing feed additives, DSM Nutritional Products therefore impacts different steps of the food supply chain (see Investor Relations insert). DSM’s products affect the quality of the feed and the level of animal performance. Additionally, the products positively influence processing and the quality of meat, fish, milk, and eggs, and therefore improve the marketability of end products. DSM’s ability to create high-performing supply chains via quick turnaround acquisitions resulted in its competitive advantage.

Today, DSM’s activities are grouped into five clusters: nutrition, pharmaceuticals, performance materials, polymer intermediates, and base chemicals and materials. DSM serves a plethora of end markets ranging from agricultural and automotive to food and beverage, cosmetics, medical, and transportation. For example, DSM Food Specialties, for example, is a producer of highly specialized ingredients for the nutraceutical industry. DSM Nutritional Products produces vitamins, carotenoids, polyunsaturated fatty acids, nutraceuticals, citric acid and other citrates, and other fine chemicals for use in dietary supplements. The $24-25 billion U.S. dietary-supplement market is believed to be rising at double-digit rates (Thurston, 2008). As this market consolidates, companies must have more access to global supply chains that ensure cost advantages in sourcing ingredients, like those DSM provides, as well as a range of other product categories. The agility and speed that DSM has built allows it to be a key player in this global nutraceutical supply chain. At one time, the life sciences and pharmaceutical supply chain issues only appeared on the board room agenda of major firms when things went wrong. Today, it is subject to a great deal of scrutiny, as companies around the world focus on how best to launch new drugs, assure the safety and supply of those drugs, and simultaneously cut costs. A brief look at how DSM built this competitive advantage is presented below.
Integration, Transformation, and Excellence in Operations at DSM

DSM has demonstrated an impressive ability to restructure their organization and business processes in a remarkably fast and decisive way to proactively respond to apparent market shifts. The divestiture of its petrochemicals business and subsequent acquisitions to grow its life sciences and materials sciences business were completed successfully, contrary to the growing number of failed M&A stories reported in the press.

Former DSM EVP and Corporate CIO Jo van den Hanenberg explains, “There is a lot of euphoria over mergers -- but often the euphoria stops with the acquisition and, in the end, nothing happens because there is not sufficient direction and no real ‘merging’ to achieve the expected synergies. What DSM experienced with the ICT organization is that if the organization has a vastly diversified set of systems and infrastructures it’s hard to effectively merge two organizations.” Current CIO and EVP Aloys Kregting adds, “I agree. It helps if you have your own IT services as that will help simplify the integration process. Also, if you have a scenario-based acquisition toolkit, much of the thinking work can be done in advance.”

In order to thrive in an environment that is dynamic, uncertain, and highly competitive, DSM developed an ICT strategy focused on three important concepts: global standardization of ICT infrastructure and enterprise business models, a service-oriented and business-aligned information technology organization, and an operational excellence program. The latter has yielded significant process improvements with regards to business models and work processes, for example, the standardization of most of its core supply chain processes: prospect-to-order, order-to-cash, purchase-to-pay, and manufacturing excellence.

Achieving Global Strategic Governance

The first element, global standardization of ICT, involved organization-wide acceptance of a standardized infrastructure (e.g., desktops, servers, networks, Internet, business application software, service providers, etc.) and common enterprise models of DSM business processes. DSM restructured its supply base so that it only had to deal with a manageable level of reliable suppliers for hardware, software, and services. Aloys Kregting emphasizes that a company should not work with too many suppliers. “It is important to work in certain areas with regional suppliers because ‘global’ suppliers are not truly global since they work with subcontractors. What you need to be able to do is to increase your level of directorship or coordination. We are the owners of the processes and the architecture, and we coordinate the activities between the different suppliers.”

The second part of the ICT strategy was the transformation of the ICT organization itself from a purely technical organization—built around highly skilled people solving technical problems—into a business-oriented management organization with service-delivery skills. Focus was placed on understanding business problems and determining the best solution, using technology as indicated to achieve value. To achieve this, the technology staff developed new consultant-like skill sets, particularly project management.

In the new environment, instead of focusing on developing single solutions for a technology problem, ICT employees found themselves managing projects consisting of diverse groups of technologies and business unit professionals from both DSM and vendor organizations. The technical work was done by whatever entity—inside or outside—that was best equipped to do it. Outsourcing partners that had been developed over the years continued to be utilized for e-mail and distributed computing, end-user support, networking, business process development and reengineering, and application hosting. This ICT standardization and business process simplification effectively facilitated the acquisition process and enabled faster and smoother integration into the DSM organization.
The third component of his ICT strategy revolved around how information technology initiatives were identified, justified, and paid for. Again building on the notion of service delivery rather than technical problem solving, under the new model, all major information technology investment projects had to be approved by DSM’s ICT Governance Board which was heavily weighted towards business oversight, consisting of two Managing Board members, the CIO, and four business group directors who rotated periodically. This acquisition alone doubled the size of DSM’s life sciences business. DSM acquired Roche’s vitamins business when its prospects were declining.

Ruud Neeskens, DSM’s Senior Manager for ICT Applications, addressed the role ICT played in turning around the newly acquired vitamin business. “Roche had been run much more like a pharmaceutical company, looking at growth in the top line but not paying much attention to operational excellence and growth in the bottom line. That’s okay if you are in a high growth phase, but that phase was over for vitamins. So DSM acquired this company clearly with the intention of bringing in its operational excellence knowledge. We would be able to improve significantly on profitability…and still make it a very interesting business for many years to come.”

The successful IT standardization efforts led to a program of business process standardization, dubbed Project Apollo. This enhanced clarity around business operations led to some surprises, as previously uncovered aspects of its operations were made visible when processes were documented and data was delivered. The business units discovered how more transparent their business is because of ICT. For instance, they learned that they had 85 different pricing structures and, therefore, no control over their pricing policy. Today they have only three pricing policies. Another unit had over 40,000 different product codes in one area. The actual problem and resolution to this kind of complexity is discovered the moment that IT provides them with the right systems and data.

ICT’s cross-industry outlook gave it an advantage over other functional groups that tended to look only within their own industry for innovation. Van den Hanenberg explains, “When you are in the IT industry, you have to look across very broadly, because…the pockets of innovation, and the trends, are happening across multiple different industries, multiple different geographies. Businesses normally look only to the best practice in their own industry. And then most of the time they are taken by surprise, because there will be always somewhere a competitor who finds the best practice over industries.”

Supporting Long Term Growth

As DSM envisioned the creation of new business as a core part of its growth strategy, the processes its ICT group developed for the integration of Roche Vitamins set the stage for creating the next level of ICT support services. By re-conceptualizing its architecture and internal capabilities, ICT is working to support innovation processes and give new ventures a leg up. This innovation greenhouse leverages the IT system backbone in which to place new start-ups. The start-up can automatically, in a very natural way, learn the necessary business processes and then easily scale-up or scale-down. Kregting explains, “The DSM ICT group is spending more time and energy on the business innovation side now. Ambitious target setting is leading to substantial results. In the first part of this decade, these initiatives were perfect for DSM and they were indeed perfectly executed. In the current phase of DSM, operational excellence and continuous improvement are no longer enough. We have to continue to enhance our Innovation, Accelerated Growth, and Emerging Markets capabilities to continue success in executing our transformation initiatives. It is as Darwin said, ‘It is not the biggest or strongest that survive, but the one that can adapt to its (changing) environment.’”
The ability to operate with absolute efficiency in today’s global business networks is critical to sustaining competitive advantage in a commoditizing global economy. By focusing on their unique core capabilities, standardizing and squeezing efficiencies out of their core business processes, business network participants spend less on duplication and more on innovation, resulting in higher degrees of differentiation, greater customer willingness to pay a premium, and thus higher returns on invested capital.

Effective companies utilize skills and expertise, proven processes, and on-going governance policies to achieve optimal outcomes from planning to execution. They recognize that to be truly successful in their journey to excellence, internal business and IT organizations must collaborate, execute, and regularly review operations and strategic objectives. Only when this is done can an organization be innovative, agile, and enable fast response capabilities according to the ever changing competitive environment.
Acknowledgements

“Enabling Strategy and Innovation: Achieving Optimized Outcomes from Planning to Execution” is a report written by Dr. Ed Watson, E. J. Ourso Professor of Business Analysis in the E. J. Ourso College of Business at Louisiana State University. This report draws on a previous study of DSM (with Dr. Lynda Applegate at Harvard Business School) and from interviews conducted (with Calearo) and translated by Mr. Scott Newton (Managing Partner at Thinking Dimensions Management Consulting). This report was sponsored by SAP, but the findings and views expressed in this report do not necessarily reflect the views of the sponsor. My thanks are due to all the interviewees for their time, consideration and insights. Special thanks also go to Ms. Meg Stone, Ms. Amanda Brice, and Mr. Chris Gaunt at LSU for their designing and proofing work.

References


Author’s Biography

Ed Watson is the E. J. Ourso Professor of Business Analysis in the E. J. Ourso College of Business at Louisiana State University. From 2001-2007 he served as the Director of the SAP University Competency Center (UCC) at LSU. Ed previously worked as University Alliance Program Manager at SAP and he has held engineering and consulting positions in the software and automotive industries. Ed has taught various courses in LSU’s Traditional, Executive and Professional MBA Programs on topics such as operations and supply management, IT management, enterprise systems, and business process reengineering and he has been awarded multiple teaching and service awards. He has published over 80 articles, book chapters, and technical reports in diverse areas such as production planning and control, design and analysis of supply chain systems, IT-enabled transformation, factory planning, IS service delivery, quality management, and experiential learning in education. He has consulted on productivity and resource management for many companies including General Motors, Ford New Holland, PPG, Xerox, Whirlpool, Alcon Surgical, and Gates Rubber.
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