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Innovation in procurement from rural India using enterprise mobility strategy: a case study

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Abstract

Purpose – The fundamental rule for sustenance in the business world for organizations is to explore new ways to discover themselves and to realign the business strategies with the changing environment, apply new management concepts and adopt new technologies so as to have a faster response to the changing business situation. With more than 600 million user base of mobile phones in India, it may be useful for the Indian companies to set up an enterprise mobility strategy akin to their information technology strategy and take maximum advantage of this mobile wave. The paper aims to discuss these issues.

Design/methodology/approach – The paper discusses methodology adopted to bring in and manage change in its process of procurement in a big organization "Marico," one of the largest players in the Indian FMCG sector. A detailed process which "Marico" adopted to bring change in procurement process and its supply chain was studied with the help of long interviews and available secondary data.

Findings – Heindl mode (2008) on the steps on continuous innovation are what Marico followed though process started in Marico much earlier. The case emphasizes how innovation models can be followed even to bring change in big corporate houses.

Practical implications – Marico did formulate an enterprise mobility strategy as an innovation in its procurement process can pave the way and learning for other FMCG companies to benchmark its strategies against the one adopted by "Marico" the company of the study to find out the gaps exiting and therefore, the scope for improvement.

Originality/value – "Maricio" is a unique example of continuous innovation and change in procurement from rural India which revolutionized the industry and bought bigger revenue and less hassles for the company.

Keywords Innovation, Enterprise mobile strategy, Marico, Rural India

Paper type Case study

1. Introduction

India, despite its phenomenal growth in the recent years, its leading position in information technology (IT), service industry, has about half of its population living in rural areas. The rural India lacks the basic infrastructure facilities, education in English and even economic activities. However, rural India is rich in agriculture and therefore, the Indian food and retail sector and FMCG companies need to get more active in the rural areas of the country.

Till date, despite a greater use in customer-centric applications, mobile technology has a higher focus on voice communication to wireless data transmission. Though mobile technology has been applied to some business applications yet very few has studied ways to improve business process, or the implications of mobile technology for business applications or critical factors of the same.

Marico India is trying to innovate the procurement process and supply chain with mobile technology in the rural areas – and mobility has a huge potential. The company

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has implemented ERP in both Marico India and South Africa and is also being successful in creating a very efficient and reactive supply chain with a close association with the semi-urban and the rural India. The mobile phone integration added further to the efficiency of the supply chain.

1.2 Review of literature

FMCG companies struggle everyday with issues of low delivery efficiency, unsatisfactory order accuracy and below expectation customer services. Companies should continuously review its existing order and delivery operation practices on the basis of the generic business model given by Chung and Yuen (2003). The objective of finding an opportunity to benchmark company's performance in the past was to eliminate non-value-added activities in the short-term horizon and to create value for all stakeholders in long-term perspective. Equally important is the change in mindset of management from traditional to a technology enabled thinking process.

Mobile technology has two level impact on business operation: first, to enable communication between all stakeholders: employee, customer and suppliers and second, to reinvigorate business process and operations with changing data sources. Through faster, timely and efficient communication and enhanced level of information sharing among stakeholders lead to increase in organization's productivity, responsiveness, efficiency and finally to improved profitability. Change due to the data access pattern further increase efficiency and responsiveness of business operations. For example, insurance agents, hospitality industry, transportation agencies are able to respond and provide well-timed services to its customers.

A number of researchers have studied mobile technology and application for business operations (Matskin and Tveit, 2001; Lee and Ke, 2001; Kannan *et al.*, 2001; Balasubramanian *et al.*, 2002; Ting-Peng *et al.*, 2007). The majority of the studies focussed on finding reasons of adding value to the product and services through mobile (Raisinghani, 2001; Varshney, 2003; Tarasewich *et al.*, 2002; Varshney and Vetter, 2002), on evaluating the effect of short-message advertising (Tsang *et al.*, 2004), to explore possible design of mobile device and enhance the accuracy of contents of short messages. However, there are very few studies on adoption of enterprise mobility as a strategy.

Jagun *et al.* (2008) categorized micro-enterprise supply chain relative activities as a series of trading activities based heavily on information in the three main steps of trading: information acquired prior, during and after trading. Prior to trading activities like information about the existence of the other party, their reputation and reliability, prices offered by them, etc., during trading activities like offered items, its price, quality and other required items as part of negotiation and information after trading, i.e., if terms of the trade agreement have been violated, etc.

Samuel *et al.* (2005) did a qualitative research on Africa and Egypt concluded advantages of the use of mobile phones for suppliers of small firms as increased profit, substantial time savings and better communication through the supply chain (Aker, 2010). Developing countries are attractive market for big business, but, reaching to grass-root level is a challenge. The increased number of mobile phone users in a country like India, is opening new avenues and creating innovative ways to reach to end customer and supplier.

2. Objective

The objective of the paper is to study how innovation in procurement process under changing environment helped Marico to improve its procurement process and reduce

cost on one hand, and improve information flow across the supply chain on the other hand. Innovation in process or product in a big corporate usually faces a lot of obstacles. The present study was carried to study how a big FMCG company could use innovative models and methods to improve upon its supply chain. The paper discusses the steps the company adopted for moving from one stage to another in the innovation process.

The study can pave the way and learning for other FMCG companies to benchmark its strategies against the one adopted by "Marico" the company of our study to find out the gaps exiting and therefore, the scope for improvement.

3. Marico: an innovative company

As per the annual release of Marico under Bombay stock exchange all Marico's businesses, namely, consumer products in India, international business and Kaya skin solutions register good growth year after year. Growth in volume is also significant in every quarter of reported results. As per the report company's portfolio comprises of daily consumable items offered at price points that do not necessitate a significant one-time outlay. Resulting in robust top-line growth for the company. Though for a shorter period, like all other FMCG companies, Marico is also facing some deceleration in the rate of growth, but still growing at a healthy pace.

Strong belief on "easier to regain margins than to recover lost consumers" philosophy led the company to opt the strategy of maintaining its unit volume margins across most of its portfolio. Hence in external inflation environment Marico's profit margins could not match pace with overall revenue growth. Marico owns 12 brands, deals in 100 SKUs, 1,500 suppliers, through seven factories, 15 contract manufacturers, 30 depots and 1,000 distributors to reach out to two million retail outlets and thereby 130 million consumers.

The company faced challenges like many brands and more products, therefore higher sales and more markets to track, increased predictions to make, higher production to plan, higher SKUs to trace, more number of pallets and truckloads to construct and new routes to decide, led to adoption of IT solutions at an early stage to resolve most of the problems, before its competitors could move. This led to the need to innovate new methods to reach to end customer and strengthen the supply chain.

3.1 History of being "the first" (history of innovations)

As early as in 2000-2001, when most of the people in the country were not even aware about IT and its usage, Marico was the first company in the country to invest in a fully integrated IT system consisting of ERP business application with a supply chain management (SCM) suite with Advanced Planning and Optimization (SAP APO) component, Business Intelligence Solution for Supply Chain Performance Management, technology supported partnerships with major distributors, vendor managed inventory and online exchange of distributor sales and other information (source: Marico internal document).

These resulted in 50 percent decrease in SKU stock outs, 50 percent decrease in excess inventory at distributors, 25 percent decrease in company's average total inventory and more than 60 percent decrease in supply chain exception-handling costs.

3.2 The second innovation in supply chain: buying copra online

Marico, most renowned for its Parachute coconut hair oil buys 4 percent copra (coconut) grown in the country. As per the company reports copra forms roughly

50 percent of Marico's total purchase portfolio and the company procures more than 600 million coconuts in quantity terms and rupees three billion in monetary terms on an annual basis (2003-2004).

Traditional process. Traditionally copra buying at the company used to be over the telephone. Copra suppliers from all locations used to make a call every day to central buying office to inquire about the day's buying rates. After thorough negotiation for price for their quantity copra would be sold to the company. Initially the process worked for Marico for some time, however, old and outdated it was, but as the company's grew with time so as the copra requirements too. Price discovery through telephone became increasingly time consuming and buying efficiency dropped to an undesirable low.

The increased number of brokers and middlemen made the entire exercise even more complicated and time consuming for Marico's. Brokers more or less began to call the shots in negotiations and farmers lost direct touch with Marico.

Time for a change: buy copra online. Marico got on a lengthy yet meticulously designed strategy in order to get away from time consuming traditional procurement process. In 2003, it introduced a gradual overhaul of the transaction process, which was divided into two steps.

Company decided to get away with negotiation of price and to reduce the buying time, the company began buying in three different sessions of one hour each. Company allowed vendors to make their own sell-offers over the phone. Based on the quantity and price information supplied by the vendors, Marico would take a final call on whether to buy or not, without spending any time on negotiations.

The second step was more revolutionary in terms of familiarizing the supplier base which was mostly the farmers with the basics of IT and introducing them to the benefits of internet. Marico provided e-mail IDs to each of its vendors and taught them how to use the internet for communication. This encouraged vendors to tied up with local cyber cafes to facilitate internet access to these vendors. As a result of this, vendors began sending/receiving transaction data via e-mails and communication between the two parties became faster and more precise.

On the Marico side, one of the biggest advantages has been the significant improvement in the buying efficiency. Managing time spent on buying transaction decreased from six hours to <30 minutes. According to the company this time saving led to higher production time and allowed the company to concentrate on other areas of business. Marico is now planning to increase the number of its collection centers and even buy copra directly from the farmers.

3.3 Third innovation: entreprise mobile strategy

Buying and selling copra with online and through e-mail again has its limitation. All copra growers/farmers are not literate and internet savvy. This process made them dependent on cyber café owners or internet users. The second issue was net connectivity in all rural areas due to poor infrastructure at that time. The ubiquitous presence of mobile phones in India led to another innovation in company's procurement process and then comes the enterprise mobile strategy. This initiative of company started in 2006 onwards.

Enterprise mobile strategy: idea generation and market study. For this research, the key was to understand the existing business of Marico and take a 360-degree view of the macro and micro environment. Hence a top down approach was followed, where the enterprise mobility strategy was devised by linking it with the organization's

vision (Figure 1) and charting how the enterprise mobility will help in fulfilling that vision.

In order to devise the enterprise mobility strategy that impacts all business functions, it is essential to understand the role played by each and every member who comes under the purview. Therefore, a two-phased approach was undertaken for this research.

Phase 1: discussion with stakeholders. The objective of the discussion with all stakeholders was to get practical insight, and understand the ground reality and validating of assumptions. Figure 2 represents the stakeholder ecosystem at Marico.

Phase 2: primary research. Primary research was conducted to benchmark Marico practices with respect to competitors, and to identify key players in Enterprise Application Space. The objectives of this phase were to:

- Identify industry trends on mobile application development (MAD) and its use in FMCG sector.
- Benchmark Marico with respect to competitors in terms of use of mobile applications in FMCG sector. Identify industry wide best practices that can be applied in Marico.
- Benchmark the current MAD process of Marico with the best practices.
- Identify future trends in MAD that Marico needs to look at before scaling up the MAD process.
- Feasibility study of a possible tie up with mobile virtual network operator to provide customized mobile application as per the requirement of Marico.

Figure 1.
Value tree for Marico

Figure 2.
Marico stakeholders

4. Analysis and findings

Before bringing the change, it was important to understand how this change will fit into the company's strategy and value system. Prior to devising the mobility strategy it was important to understand the importance of mobility in Marcio's operations and how this strategy fits into the organization's value system.

Discussion with the stakeholders of Marico revealed that the enterprise mobility strategy must be aligned with the business strategy of the company, and thereby, fulfill the values of Marico.

Figure 3 shows the role enterprise mobility strategy can play in fulfilling the long-standing values of Marico like being consumer centric or being innovative and at the same time having a global outlook. Objective of Marico's IT always was to be the best in class and Marico's mobility management strategy should help in fulfilling this vision.

This phase of research also fueled a diagnostic study of the current state in Marico to identify areas where mobility can enhance performance. Figure 4 identifies the three key areas of Marico's business, where adopting an enterprise mobility strategy can benefit the company in a big way in the coming future. To support increase collaboration with vendors, and bring down costs of procurement to increase purchase efficiencies an internal team was deployed with GPS tracking and mobile technologies in Marico. Contract farming management system to increase productivity and acreage of contract farming and the Kardi Buying Cockpit system to acquire real-time information on Kardi seed market across 300 mandis are worth mentioning projects of Marico's innovation initiatives.

The launch of the portal had lead to a completely paperless transaction scenario at Marico. Right from bid to payment all the processes had become paper independent and were carried out on the portal itself. All the vendors had been moved on the copra portal. Now, adding mobile devices to this process brought in the much desired mobility and portability to the system, which got further extended to local language

Figure 3.
Role of enterprise mobility strategy in fulfilling values of Marico

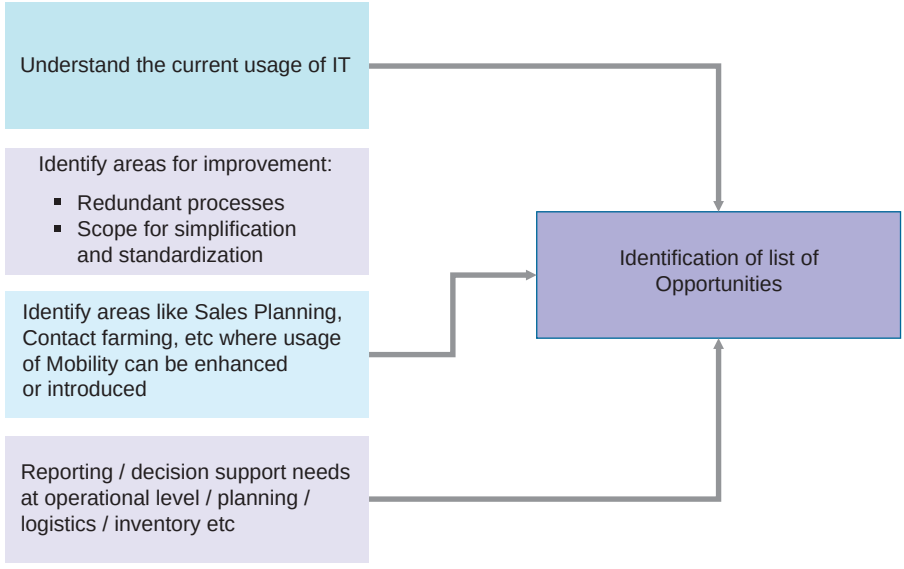

Figure 4.
Opportunity identification for enterprise mobility

communication, including voice-based and data-based communication between the vendor and the company.

The points of interface between business strategy and mobility strategy were drawn, keeping value chain of Marico as the backbone of the strategy.

Benefit of innovation in process to Marico. Innovation in the enterprise mobility strategy enabled the company to use mobile phones for doing the following value-adding activities:

- mobile printer facility connected using bluetooth for instantaneous bill payment;
- surveys from various bulk markets for rates using mobile devices and automated updation of the same to the central server;

- increase the reach of supplier base by providing the supplier a means of communication through mobile devices;
- bidding process can be done through message-based application;
- warehouse management through mobile devices for better decision making;
- inventory tracking through mobile devices, giving more control over inventory movement and logistics;
- group SMS at the time of crisis or any emergency communication to be spread across any vertical or horizontal in the organization; and
- all internal routine approvals done on mobile devices to save on time and cost of administering them

5. Discussion and conclusion

Many FMCG companies have adopted mobile phones as part of their IT strategy, but used it primarily for sales and marketing purpose. However, sustainability of such strategy is not beyond question since users will always have the choice to download the application but not continuing to use it.

On the other hand, such innovations may help the brand reach more users, and stay competitive in its supply chain. The transition from a broadcast medium like a television screen to a personalized screen of the mobile device gives not only an immense opportunity to the FMCG companies to reach out to the right target group, but also gives them enough space to control any campaign launched to lure the vendor and customers.

Entreprise mobile strategy of Marico is tailored to work with the existing procurement and supply chain processes. The process of "procurement to production" is still the same but differentiating part of the strategy occurred in the way solutions were delivered – from the grass-root level supplier awareness and marketing piece, to process innovation and finally to new models of SCM.

Steps for continuous innovation in company (source: Heindl, 2008):

- Step 1: define organization's mission, vision and values.
- Step 2: assess trends, and perform SWOT analysis.
- Step 3: find improvement opportunities – incremental change.
- Step 4: find growth opportunities – breakthrough, radical change.
- Step 5: select an opportunity for further experimentation.
- Step 6: gather and analyze relevant information.
- Step 7: generate creative ideas or solutions.
- Step 8: experiment and turn creative ideas into innovations.
- Step 9: decide on what innovation to implement.
- Step 10: design and test innovation.
- Step 11: plan and implement innovation.
- Step 12: obtain feedback for continuous improvement.

The innovation process at Marico to migrate traditional copra buying over phone to the internet and finally to mobile phones closely follow the steps in the above list.

The innovation process of adopting an enterprise mobility strategy is perfectly aligned with the organization's mission, vision and values of being consumer centric, boundaryless, opportunity seeking and innovative. The company assessed the trends of the market as in second step to spot the strengths of mobile penetration among its vendors and formulated its strategy accordingly. The Step 3 was to identify the improvement opportunity and bring in the incremental change over the existing copra buying portal. Marico followed the fourth step of finding growth opportunities too, by bringing in radical change in the way vendors used to interact with the company or its competitors. Marico also used this platform to integrate payments to the vendors as suggested in the fifth step to explore further experimentation. As depicted in the sixth step, Marico gathered and analyzed the ways mobile phone is used by its competitors to connect with stakeholders. A careful observation of the information collected added by an experimentation on multiple creative ideas lead Marico toward the decision of which innovation to implement. Before rolling out the entreprise mobile platform, it was tested on a pilot group for effectiveness and utility over the existing procurement platform. Though innovation process at Marico started much before Heindl (2008) model was published, but, there is similarity in steps followed by big organization like Marico.

The innovation process is replicable in any business in a similar environment. The companies do not need to entirely reinvent the way, product or processes but should feel a need to develop innovative solutions to address some customer needs that were almost ignored completely by existing players in the market.

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