It's for you to figure it out

The core competence theory of Hamel and Prahalad is not a panacea. There aren't simple answers to many questions, but those who can figure it out emerge winners

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Does the theory of core competence have any practical relevance? I would like to congratulate Prof. Y L R Moorthi (*Indian Management,* March, 2005) for making interesting observations and raising thought-provoking questions on this issue. The very questions and issues raised by him are the reasons why many organisations fall short in using the theory. If core competence is indeed theory, it is no different from so many others that do not provide a universal remedy for every paradigm. Every theory has a limitation known only after it is discovered and so proved. As Moorthi rightly concludes, "one should never go to a theory looking for wholesale solutions to real-life problems." But, equally, without theory there would be no guided direction.

Core competence is a concept of how to think developed by Gary Hamel and C K Prahalad. Nutrilite (part of the Alticore Group of the US, of which Amway Corporation is a part) has developed many core competencies. Nutrilite manufactures food supplements. It has developed competence and technology to produce the finest quality supplements because every ingredient used comes from a 'natural source that is organically produced'. To produce the finest natural quality of fruits, vegetables, flowers and roots, the company has developed competence in organic farming. So, much of what it gets at the top end (fruits, vegetables and flowers) depends on what it does at the bottom end (under the soil and to the leaves). In other words, Nutrilite has developed the competence to get the finest quality yield without the use of fertilisers, pesticides and insecticides. Core competence is about discovering what is it that you do which consistently beats your competitor to your customer.

Core competencies can be identified from core products. Gears were Kirloskar's core products; what it did better than competitors was its core competence

Any theory or propounded concept has arguable corollaries. So, we can look at it in the direction that best provides us with a solution. And Prof. Moorthi has done a marvellous job challenging the core competence concept with his questions. In my over two decades of experience, much of which has been in senior management capacities in engineering-manufacturing businesses, I have applied the concepts and found them to be workable. I am, therefore, writing this to share another point of view. I will stick to hardcore engineering manufacturing industry examples to keep the length of this response short, although there are others to cite.

Theory into action

Mysore Kirloskar Ltd (MKL) produced several end-products and many more identified core products. One such core product was high precision gears and shafts. Honda's core competence lies in its ability (processes) to manufacture low-vibration, low-noise, high-performance combustion engines and low-noise smooth and efficient transmissions. It has now taken this competence further into building aero-engines and executive jets. Similarly, Mysore Kirloskar's core competence lay in its (processes) ability to produce high-velocity, high-precision gears (the company had many other competencies, but we will use just one).

When the company moved into high-precision lathe manufacturing (many years ago), they did not have this competence. By this I mean to say that this was neither the core competence nor the core product that drove the development of the end-product – high-precision lathes. It was the other way around. The company was a large supplier of cone pulley machines to America. Europe and America needed high-precision, geared head lathes. There was a market opportunity for the company to develop a new range of machines. They did not have the competence for one of the core products – high-precision gears and shafts. So what did they do? They went about developing the required core competence and, over a period of time, became adept at it.

Picking right

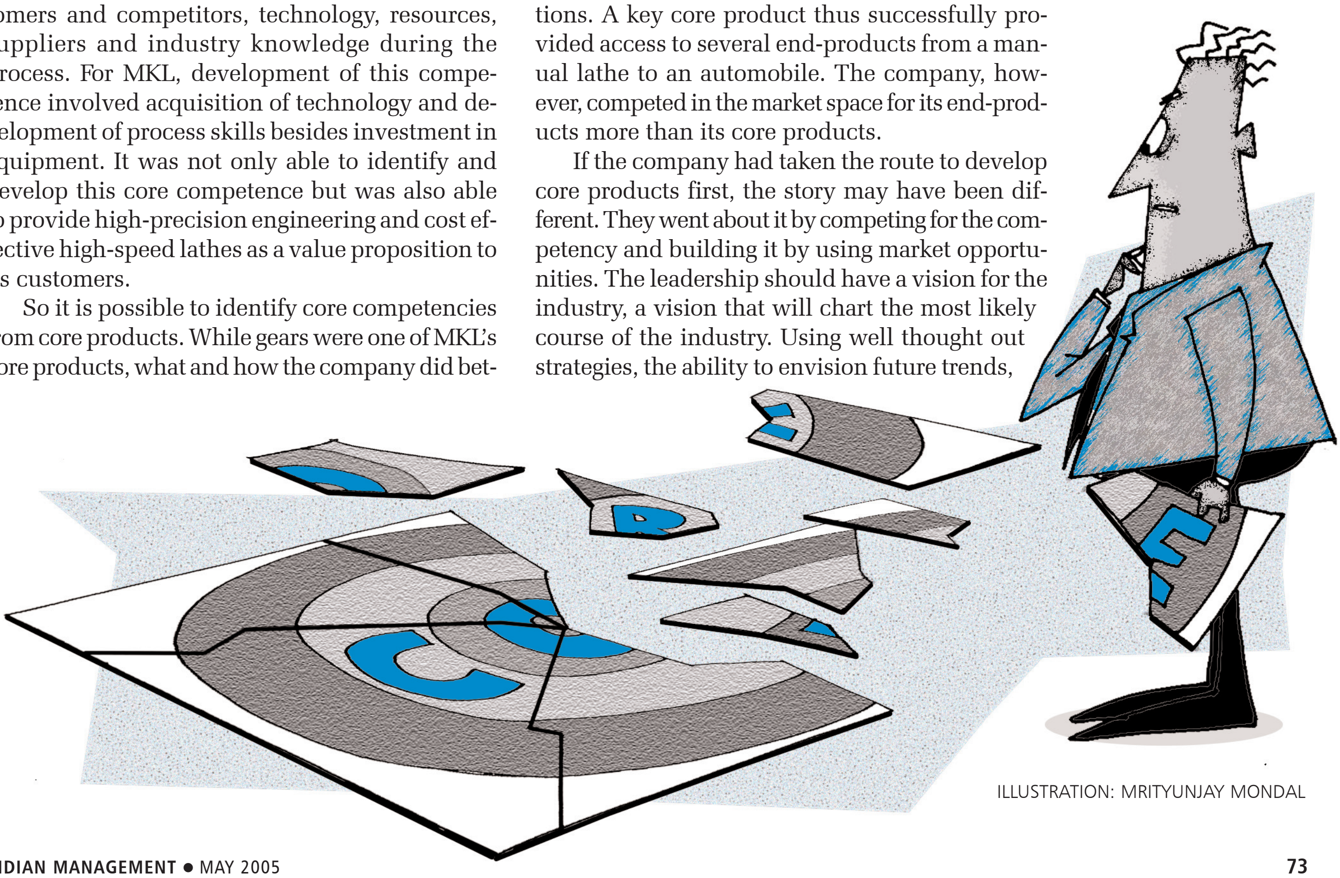
Identifying core competence may not be easy in all cases. But surely one needs to apply all knowledge and available information about customers and competitors, technology, resources, suppliers and industry knowledge during the process. For MKL, development of this competence involved acquisition of technology and development of process skills besides investment in equipment. It was not only able to identify and develop this core competence but was also able to provide high-precision engineering and cost effective high-speed lathes as a value proposition to its customers.

So it is possible to identify core competencies from core products. While gears were one of MKL's core products, what and how the company did better than its competitors to provide better value to customers was its core competence. If Honda's core products are combustion engines and transmissions, its core competence lies in figuring out what and how it does better than its competitors. From once being a component and assembly supplier to Toyota, Honda has leveraged its core competencies and core products to build automobiles and executive jets to create its own market space. Hamel and Prahalad's theory provides some guidance in identifying core competence, but knowledge of customers, competitors, industry and how competition and markets have evolved will help.

Organising businesses around core competencies and core products, or around end-products, will also depend on factors such as product volumes, capacity utilisation, process optimisation, the advantages that can be leveraged from rationalisation, response time to customers, investments and payback. Where volumes are low, it is better to build multiple end-products in the same factory leveraging common core competence and core products. In case of very high volumes it can be the other way around as well.

Many years later, MKL collaborated with a Japanese firm to manufacture textile machines, automobiles and auto components. Its competence level in its core product was one of the factors (there were others, too) in favour of a successful entry into new products, new markets and diversifications. A key core product thus successfully provided access to several end-products from a manual lathe to an automobile. The company, however, competed in the market space for its end-products more than its core products.

If the company had taken the route to develop core products first, the story may have been different. They went about it by competing for the competency and building it by using market opportunities. The leadership should have a vision for the industry, a vision that will chart the most likely course of the industry. Using well thought out strategies, the ability to envision future trends,



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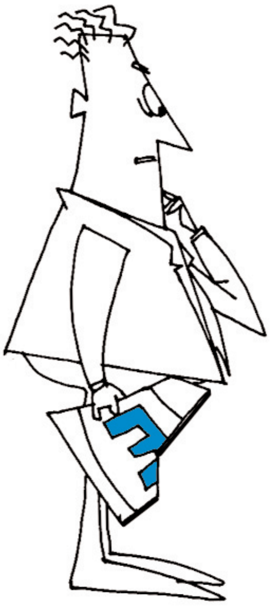

knowing customers' future requirements, knowledge of competitors' R&D activities, environmental changes, innovations and ideas, good market research and gut-feel are some tools one can use to predict what core products will succeed.

As stated earlier, MKL's core competencies lay in its ability to produce high-precision, high-speed geared head lathes as one of their end-products. A lathe frame was one of their core products. The company eyed the CNC lathe segment with this core product. With its knowledge of the industry, markets and competitors, and given the management's vision and intent to create a new segment, they launched into the market with a new CNC lathe, offering higher productivity and lower cost of investment as the value proposition.

True to expectations, MKL opened up an all-new segment for low-cost CNC lathes that attracted customers from the upper and lowers segments. The end-product was a raving success throughout its life-cycle. The product was also meant to erect a barrier to minimise the threat of overseas competition and give protection to the business unit for at least the next seven to eight years.

A theory is a guided path, but we will have to pave the way. It may not necessarily produce an universal solution, but can guide the pathfinder to solutions

The other core competencies that were identified and used in the process were: lean manufacturing, concurrent engineering, precision manufacturing, rapid prototyping and rationalisation (See 'The Lean Mindset,' *Indian Management,* November 2004). Is the core product in itself a profitable proposition? Sometimes yes, as it was in this case. MKL successfully exported the frames to product builders in Europe and America. But the answer to this question really lies in the nature of the core product and volumes with relation to market consumption. And it can be different for different types of industry and products.

In another company (call it BMT), although the joint venture partner had given products, designs, manufacturing processes and training to the workforce apart from supplying the manufacturing machinery, the project failed to start even after five years of trying (See 'Ethics in business is about who you are,' *Indian Management,* July, 2004). Here again was a case where the end-product was in place, but the competencies and core products were missing. Developing core products and competence would have involved a lot of time. The competence to be developed here quickly was to put up in place the right supply chain that would (cost-wise) enable the company to offer customers its value proposition as a low-cost manufacturer of high-end products. The concurrent development of core products would have taken second place only because they could not be leveraged into new product extensions.

The drivers

So we have seen core products giving access to end-products, the theory worked as well as it was implemented, businesses got organised around core competence and the development of competencies was driven by market opportunities. At MKL, its multiple core competencies drove many end-products. But in the then emerging Indian market, market opportunities too drove the development of competencies. Where market opportunities drove end-product development, the core competencies developed came to the fore to provide a competitive advantage. One cannot always predict that a core product will succeed, but if the core product is a competitive advantage lent to an end-product then the competence can be leveraged to gain access to market spaces.

Marketing

When two companies have the same level of competence in any given area, why does one sell more than the other? One wins the marketing war and the other loses. The level of competence in marketing the value proposition to the customer then makes the difference. The key could lie with techniques that research things that people can't tell you, because they don't know them. Attitudes aren't a reliable predictor of behaviour. Customers tend to talk one way and behave another. In some way, customers buy what others buy – one could call it herd mentality or sheep-like behaviour. This could also be due to lack of choice or other reasons.

When MKL did their market research before launching the CNC 500, they also used gut-feel to minimise chances of failure. They took their captivating, intriguing and challenging slogan to both the upper and lower segments of the market. With their value proposition of higher productivity at lower costs, they created an all-new market segment where customers came in to settle from both the upper and lower market segments.

Take the machine tool industry as an example; it uses programmable controllers, prime movers, drives, motion carriers, electricals, hydraulics, etc. MKL was also dominant in grinding technology. The hydraulic grinders used hydraulic elements. These are core products to building a good hydraulic grinding machine. But MKL never could sell these profitably as it did the end-product, volumes being the restraining factor. It was cheaper to buy them from suppliers, because the end-products were cheaper. So a core product may not always be profitable, especially if by nature it has to be produced in less than advantageous volumes.

Electronic components have emerged as a high volume business. A breakthrough invention may fetch a higher price until competition catches up. But elsewhere a core product will be profitable. Texmaco produces textiles and garments. It also produces yarn. Yarn is its core product, which is further woven into cloth. But it is the yarn business that is profitable. Siemens provides automation solutions. It uses motion controllers, prime movers and drives, which are also its core products. Its automation division sells these core products to product integrators. And it's a profitable business by itself. Therefore, one has to view core competence differently, and this could include outsourcing core products for cost competitiveness.

Companies like Philips and others have jointly developed core products with the Japanese for the same reasons. One must not lose sight of competitiveness. That is, what are you selling as end-products? Whatever you sell as the end-product has to take you through the marketplace. We have seen companies that make what are, or were, core products for someone else as their end-products. Manufacturers of refrigerators seldom produce the compressor in the same division. So, in certain products, costs and volume will have to be considered while looking at profitability criteria.

Outsourced core?

Companies that produced engines also used to manufacture core products such as crankshafts, engine blocks, camshafts and cylinder heads, among other things. Today many buy some of these as outsourced products. This means an end-product producer today can buy a core product from sources that have developed competencies to produce them more cost effectively. Or the core product has moved on to be something else. This is more seen in slow-speed engine categories like tractors and slow-speed diesel engine applications. Transmission is a core product for an automobile manufacturer, but today it is bought from companies that have the competence to build this core product as their end-product.

I have cited the example of MKL. The company has exited the machine tools business. But it has been able to take its core competence in gears into two of its new collaborations in textile machines and automobile components. This suggests that even if companies exit existing businesses they can do so without losing their core competence (or at least some of them).

In the world outside, there are many types and varieties of businesses. It is difficult to expect one universal worksheet or textbook solution for all. There is no universal solution; you have to figure out yours. The path to success is paved by processes. Hamel and Prahalad's theory serves as a guide and gives a direction besides providing the terrain on which you can carve out your path. One needs to understand the concept of core competence well to be able to figure out how to apply it in one's business. It's all about processes.

There is no panacea. One can apply Dr Robert Schuller's possibility thinking principles if one has to, but it's you who have to figure it out for your business. The theory or concept is something one can take as a guided path, but we will still have to pave the way. This means a theory may not produce a universal solution, but can guide the pathfinder to solutions. In my experience, one can get good at operationalising the core competence theory by actually using it in his business, and working at correcting courses to hone processes for deriving benefits.

> When two companies have the same level of competence, why does one sell more than the other? It could be due to competence in marketing the value proposition

Sometimes tomorrow's end-products are identified first even before the core products. This happens through very good market research or innovative ideas (the Walkman, mobile telephone, hand-held PCs). Core products and competencies are identified subsequently and developed. Maini did not set up a battery plant before producing the electric-powered car. Yet its success with energy storage and generation will determine the success of its car. Sometimes, companies ride on the delicate balance of borrowed competence through alliances and partnerships. So, core competence is a theory that has relevance. If you know the 'why' you'll find the 'how' to apply it. Although there is no panacea or universally simplified answers – which is what one may like – yet the theory is workable. And those who figure it out come out winners! ■

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