DEVELOPING THE VALUE CHAIN TO GET SUSTAINABLE COMPETITIVE ADVANTAGE IN THE COMPUTER INDUSTRY: A CASE STUDY AT “IBM CORPORATION”

Nung Harjanto
Akademi Akuntansi YKPN
e-mail: nungharjanto@hotmail.com

ABSTRAKSI

BACKGROUND

Competition is at the core of the success or failure of a firm. Competition determines the appropriateness of a firm’s activities that can contribute to its performance, such as innovations, a cohesive culture, or good implementation. Competitive strategy is the search for a favourable competitive position in an industry, the fundamental arena in which competitive strategy aims to establish a profitable and sustainable position against the forces that determine industry competition (Porter, 1985).

According to Faye and Harold (1993), the current competitive environment has forced many companies to reconsider their goals and strategic plans. Instead of trying to compete solely on the basis of cost, many companies now consider quality and responsiveness key components of competitiveness. Although quality and responsiveness have typically been approached separately, improving one usually has an effect on the other. Fortunately, the effects are often complementary.

Management accounting today often adopts a focus that is largely internal to the firm—its purchases, its processes, its functions, its products, and its customers. Another way of saying that management accounting takes a value-added perspective. From a strategic perspective, the value
added concept has two big problems: *it starts too late* which it misses all of the opportunities for exploiting linkages with the firm’s suppliers and *it stops too soon* which it misses all of the opportunities for exploiting linkages with the firm’s customers (Shank and Govindarajan, 1993).

To get competitive advantage, manager requires a broad focus, external to the firm (Shank and Govindarajan, 1993). Porter (1985) has called this focus the *value chain* the linked set of value-creating activities all the way from basic raw material (input) sources for component suppliers through to the ultimate end-user product (output) delivered into the final customers’ hands. This focus is external to the firm, seeing each firm in the context of the overall chain of value-creating activities of which it is only a part, from basic raw material (input) components to end-use customers.

**PROBLEM DEFINITION**

For several decades, the computers industries have been growing very fast. Many computers industries have been emerging. They are galloping to become the biggest, the best, and the fastest. In the recent years, some computers industries become the giant of computers industries. One of them is IBM Company.

In the recent, many computers industries’ net sales and net earnings at least at the same percentage rate as net sales did not increase over the last two years at a pace substantially above the inflation rate. That is the bad sign for computers industries. The other not good sign is the increase in expenses, though as it was said the amount of net earnings decreased. Why this earning decrease can be explained by the price decrease because of severe competition in the industry among IBM, DELL, HP, and the others. As a consequence of competition the number of sales also went down. According to Porter (1985), competitive advantage is at the heart of a firm’s performance in competitive markets. After several decades of vigorous expansion and prosperity, however, many firm lost sight of competitive advantage in their scramble for growth and pursuit diversification. Today the importance of competitive advantage could hardly be greater. Firms throughout the world faced slower growth as well as domestic and global competitors that are no longer acting as if the expanding pie were big enough for all.

This article aims to get an understanding about the value chain implemented by IBM, one of the biggest computer manufacturing, will support its current strategies to try to survive and get its sustainable competitive advantage in the future.

**RESEARCH MANAGEMENT AND METHOD**

Research Questions

This research will be conducted to answer the following primary and secondary questions:

**Primary questions:**
What is the value chain implemented by IBM Corporation to support its current strategies?

**Secondary questions:**
1. What is the value chain?
2. What are the current strategies implemented IBM?
3. What is the current value chain implemented by IBM?
4. What are the impacts of the value chain implemented by IBM to support its current strategies?

RESEARCH OBJECTIVES

These research objectives are:
1. To gain understanding about what the value chain is.
2. To identify the current value chain implemented by IBM.
3. To examine the impacts of the current value chain implemented by IBM to support its current strategies.

RESEARCH METHOD

This Research will use the following method:
1. Conduct a review of the literatures and journals on strategies and value chain to answer and gain better understanding of the question “What is the value chain?”
2. A deductive approach will be used to carry out the primary research in IBM USA to assess the examination of the current value chain implemented by IBM and its impacts to support its strategies performance.

RESEARCH STRATEGY

The case study strategy will be used for this research. By this case study strategy, an empirical investigation of a particular contemporary phenomenon within real case using multiple sources of evidences can be done. The case study strategy also has considerable ability to general answers to the question “why?” as well as “what?” and “how?” questions (Mark Saunders et al., 2003:93). In this case study, data were collected from IBM’s Annual Report 2003. The data also were collected organization’s web site, guidance books, and journal. The documentary analysis will be carried out to answer the following questions:
1. What is the current strategy implemented by IBM?
2. What is the current value chain implemented IBM?
3. What are the impacts of the value chain implemented by IBM to support its current strategies and the impacts on its performance?

RESERCH RESULTS

Competitive Advantage and Value Chain

A competitive advantage ultimately derives from providing better customer value for equivalent cost or equivalent customer value. As customer value depends on the goods and services deliver to the customer, the value and the cost depend on the firm’s activities to create these goods and services (Urbig, 2003). Michael Porter’s value chain is a framework for considering key activities within an organization and how well they add value as products and services move from conception to delivery to customer.

The value chain disaggregates the firm’s into its distinct activities (Porter, 1985). It is the linked
set of a firm’s or a group of customers (Urbig 2003). Within a single firm’s the value chain addresses activities that either directly contribute to the production of the goods or services (primary activities) or indirectly influence this (support activities). Instead of analysing a single firm one can also embed a firm’s activities in a large stream of activities, which Porter terms the value system. It includes activities of all firms involved in the production of a good or service, from basic raw material sources for component suppliers to the ultimate end-use product or service delivered into the final consumers’ hands (Porter, 1985). The Porter traditional view that firm’s value chain represents the collection of activities that the firm performs in different functional areas and diagrammatically represented by Porter (1985) with the following diagram:

A firm’s value chain is embedded in a larger system that includes suppliers’ and customers’ value chains. A firm can enhance its profitability not only by understanding its own value chain—from design to distribution—but also by understanding how the firm’s activities fit into suppliers’ and customers’ value chains.

Value Chain Versus Value Added
The value chain concept can be contrasted with the internal focus that typically adopted in management accounting (Shank and Govindarajan, 1993). Management accounting usually takes a value-added perspective. From a strategic perspective, unlike the value-added concept, the value chain concept highlights four improvement areas:

1. Linkage with suppliers.
2. Linkage with customers.
3. Process linkages within the value chain of a business unit.
4. Linkage across business unit value chains within a firm.

Linkage with Suppliers
The value-added concept starts too late. That is, beginning cost analysis with purchases misses all the opportunities for exploiting linkages with the firm’s suppliers. This word exploit does not imply that the relationship with the supplier is a zero-sum game. The link should be managed so that both firm and its supplier can benefit (Shank and Govindarajan, 1993). The following diagram depicts that linkage:
Linkage with Customers

In addition to starting too late, Shank and Govindarajan (1993) stated that value-added analysis has another major flaw: it stops too soon. Stopping cost analysis at sales misses all the opportunities for exploiting linkage with firm’s customers. Customer linkage can be just as important as supplier linkage. The relationship with the customer need not be a zero-sum game, but one in which both parties can gain. The linkage between a firm and its customer is designed to be mutually beneficial and in which relationship with the customer is viewed not as a zero-sum game but as a mutually beneficial one. The following diagram depicts that linkage:

Process Linkages within Value Chain of a Business Unit

Unlike the value-added concept, value chain analysis explicitly recognizes the fact that individual value activities within a firm are interdependent rather than independent (Shank and Govindarajan, 1993). The following diagram depicts that linkage:

Conventional management accounting approaches tend to emphasize across-the-board cost reductions. However, by recognizing inter-linkages, the value chain analysis admits to the possibility that deliberately increasing costs in one value activity can bring about a reduction in total costs (Shank and Govindarajan, 1993).

Linkages across Business Unit Value Chains within the Firm

In sharp contrast to the value-added notion, the value chain analysis also recognizes the profit potential accruing from exploiting linkages among value activities across business units (Shank and Govindarajan, 1993). The following diagram depicts that linkage:
Value Chain and Production Network Differences

Analysis that takes the entire chain of productive activities into account has been variously referred to as value chain, commodity chain, activities chain, production network, value network, and input-output analysis. While these terms have a great deal in common, an important distinction can be made by contrasting the various “chains” to the various “networks,” where a “chain” maps the vertical sequence of events leading to the delivery, consumption, and maintenance of goods and services—recognizing that various value chains often share common economic actors and are dynamic in that they are reused and reconfigured on an ongoing basis—while a “network” highlights the nature and extent of the inter-firm relationships that bind sets of firms into larger economic groups (Sturgeon, 2001).

IBM’s Current Strategies

IBM commitment to leadership in the high-value spaces and in innovation is not a mission statement. It’s a business model. It commits IBM to continual reinvention of IBM itself (IBM, 2003). Over the past several years, IBM has taken aggressive steps to remix IBM business so that IBM is positioned for long-term leadership and new opportunities in the high-value enterprise space. IBM has changed, since 1997 (IBM, 2003) as the following:

-Exited or reduced IBM presence in such areas as application software, hard disk drives, networking hardware, low-end printers and retail PCs—which IBM estimate have declined from 31 percent to 25 percent of IT industry revenue;
-Entered or increased IBM presence in distributed middleware, non-hardware maintenance services, Intel-based servers and mobile PCs—which have grown from 40 percent of industry revenue to 46 percent, and are expected to continue outperforming the overall IT market;
-Increased IBM revenue in business and technology consulting services, infrastructure services and infrastructure software—which generate superior long-term revenue growth, profit, cash and return on invested capital—from 48 percent to 64 percent of IBM total, with expectations of increasing that going forward;
-Grown aggressively in emerging markets; in China, India, Russia and Brazil, IBM generated revenue of $3 billion last year and saw double-digit growth;
-Upped IBM rate of new account growth, giving us a total of 730,000 large, medium and small enterprise clients—with IBM’s small-and-medium business segment alone growing 14 percent to outperform the market in 2003, adding $2.4 billion in revenue; and
-Incubated successful new high-growth businesses such as life sciences, digital media, application management services, e-business hosting services, Linux and pervasive computing—each of which has already business IBM, IBM have made big strides in product cycle time, new product introduction, sales productivity and simplification of IBM processes. IBM inventories are at their lowest level in more than 20 years, and IBM continuing progress in integrating IBM supply chain took $7 billion of cost out of the business in 2003, surpassing what IBM achieved in 2002.

IBM’s Value Chain

IBM has implemented Integrating advanced mining and forecasting techniques enable enterprises to sense trends for longer-term capability networks planning, and to sense events for short-term response optimisation. And, most importantly, utilizing analytic techniques for risk management,
dynamic pricing, strategic sourcing, inventory management, etc., enables intelligent decision-making and prediction of future value chain performance (IBM, 2003).

Just as IBM works to transform its clients’ value chains for greater efficiencies and responsiveness to market conditions, IBM has undertaken a large-scale initiative to recast IBM’s own supply chain as an on demand business operation, thereby turning what had previously been a cost/expense to be managed, into a strategic advantage for the company and, ultimately, for its clients. IBM spends nearly $39 billion annually in its value chain, procuring materials and services around the world. Prior to 2002, the company’s supply, manufacturing and distribution operations were spread across its product brands and service offerings (IBM, 2003).

The Impacts of the Value Chain Implemented by IBM to Support its Current Strategies

By the end of 2003, the work of transforming and integrating the value chain resulted in the lowest inventory levels for IBM in more than 20 years. IBM’s value chain transformation efforts have reduced the amount of time the sales force spends on activities like checking on order status, proposal generation and contracts by 20 percent. By speeding inventory turns and improving client collections and supplier payment terms, IBM’s supply chain efforts generated more than $700 million in cash in 2003 (IBM, 2003).

These are now integrated in one operating unit that can:

- Understand and respond to marketplace opportunities and external risks, as well as the needs of clients, employees and partners
- Convert fixed costs to variable costs
- Simplify and streamline internal operations to improve sales force productivity and processes and thereby, continuing to improve the experiences of the company’s clients when working with IBM
- Reduce inventories
The cost savings this unit generates provide two opportunities for the company: directly improve financial results, mostly through improved gross profit margins, or improve competitiveness and market share by passing some or all of the cost savings to clients. Accordingly, the cost savings generated by this unit will not always result in a dollar-for-dollar apparent gross margin improvement in the company’s Consolidated Statement of Earnings (IBM, 2003).

While these efforts are largely concerned with product manufacturing and delivery, IBM is also applying value chain principles to service delivery across its solutions and services lines of business. By the end of 2003, the work of transforming and integrating its value chain resulted in the lowest inventory levels for IBM in more than 20 years (IBM, 2003).

In addition to its own manufacturing operations, the company uses a number of contract manufacturing (CM) companies around the world to manufacture IBM-designed products. The use of CM companies is intended to generate cost efficiencies and reduce time-to-market for certain IBM products. Some of the company’s relationships with CM companies are exclusive. The company has key relationships with Sanmina-SCI for the manufacture of many Intel-based products and with Solectron for a significant portion of the manufacturing operations of Global Asset Recovery Services—an operation of Global Finance that restores end-of-lease personal computers and other IT equipment for resale. Further, some IBM-branded products are manufactured by third-party OEMs and then purchased by IBM and resold under the IBM brand (IBM, 2003).

CONCLUSION

An analysis of activities’ contributions to cost and value in the value chain concept can help the firm to identify sources of competitive advantage. According to Porter (1985), the analysis should also exploit the linkage between activities. A link implies that a change in an activity influences the costs and value caused by other activities. Interdependency can concern either activities within the same firm or activities located in two different firms or even the customer or supplier.

In the case of IBM value chain, IBM implemented its value chain mostly for procuring materials and services around the world. The work of transforming and integrating the value chain resulted in the lowest inventory levels for IBM in more than 20 years. IBM’s value chain transformation efforts have reduced the amount of time the sales force spends on activities like checking on order status, proposal generation and contracts by 20 percent. By speeding inventory turns and improving client collections and supplier payment terms, IBM’s supply chain efforts generated more than $700 million in cash in 2003 (IBM, 2003).

BIBLIOGRAPHY


