

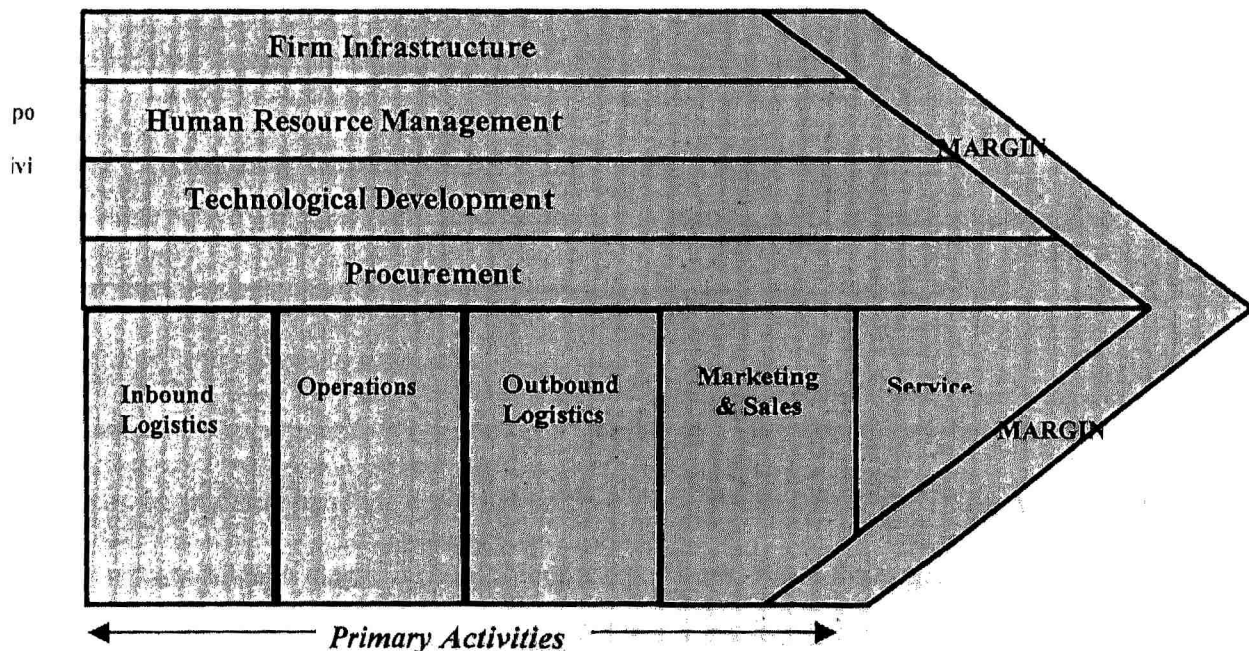
5. Value Chain Analysis

A value chain is a template that a firm uses to understand its cost position and to identify the multiple means that might be used to facilitate the implementation (Hitt).

Competitive advantage cannot be understood by looking at a firm as a whole. It stems from the many discrete activities a firm performs in designing, producing, marketing, delivering, and supporting its product. Each of these activities can contribute to a firm's relative cost position and create a basis for differentiation. The value chain disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing and potential sources of differentiation (Porter 1985).

Every firm's value chain is composed of nine generic categories of activities which are linked together in characteristic ways, as shown in Figure 3.

Figure 3: The Generic Value Chain



The internal environment of a wireless operator will be analysed in the following subsections to identify its strengths and weaknesses using value chain analysis.

DiGi.com, a public company (with majority shares hold by a foreign operator) was chosen due to the ease of getting data.

DiGi's vision statement is "Enhancing communications to improve customers' quality of life...at home, work, and play", and its missions are a) to provide customers specific solutions to meet individual needs for communications, connectivity, access to information and security; b) to provide an environment where our employees can grow and be fulfilled; c) to provide superior returns to shareholders; and d) to contribute to improving life in Malaysia (www.digi.com.my).

6.1 Primary Activities

There are five generic categories of primary activities involved in competing an any industry, as shown in Figure 3. Each category is divisible into a number of distinct activities that depend on the particular industry and firm strategy.

6.1.1 Inbound Logistics

This value activity includes activities in receiving, storing, and disseminating inputs to the product, such as material handling, warehousing, inventory control, vehicle scheduling, and returns to suppliers.

This activity is important as it supports the Operations. Each functional department controls the material handling activities of their own. For instance, the IS department has its own procedures to handle its equipment and software, while the engineering department has its own way to handle switching equipments, antennas, cables, test equipment, etc.

6.1.2 Operations

Activities associated with transforming inputs into the final product form, such as machining, packaging, assembly, equipment maintenance, testing, printing, and facility operations.

As the first mover that offers prepaid service, DiGi is able to maintain its strong position in the prepaid market. As the main growth driver for the company, this product has a substantial growth of 73% in DiGi's financial year 2001. Apart from the first mover advantage, the result is also contributed by the aggressive and focused advertising strategy of the company that focuses on the youth and trendy segment.

In terms of International Roaming, DiGi expanded its services to offer its customers greater coverage when they travel abroad on business or pleasure. In 2001, the number of DiGi's roaming partners increased to 99 operators in 70 countries. The number is expected to grow as more global roaming partners are signed up.

DiGi's mobile Internet service, djuice, allows users the flexibility of customising their mobile phones to access their WAP content of choice. This service delivers information relevance to customers conveniently. It also has an open concept that enables users on all mobile service platforms to access the service even when they are from other networks, e.g. from Maxis. The difference of the service from usual WAP services is that it is

accessible via WAP, STK and SMS platforms and it is the first in Malaysia to make WAP service available to mobile subscribers who do not own WAP phones.

One of the services of djuice is DiGi's Mobile Movie Booking Service. Customers can make actual movie ticket bookings at selected Golden Screen Cinemas through this service. The company plan to use djuice to launch other high value-added mobile-centric services, including future m-commerce initiatives.

6.1.3 Outbound Logistics

Activities associated with collecting, storing, and physically distributing the product to buyers such as finished goods warehousing, material handling, delivery vehicle operation, order processing, and scheduling.

DiGi is actively looking out for opportunities to provide products and services that translate into convenience for customers, particularly through exploring non-traditional distribution channels. In addition to the existing e-pay terminals set up at easily-accessible outlets such as petrol kiosks, retail stores and shopping malls, they established strategic alliances with local financial institutions. For instance, DiGi initiated a tie-up with the Maybank Group in March 2001 to offer DiGi Prepaid Plus customers the convenient option of purchasing their reload coupons through Maybank's Automated Teller Machine (ATM) network. An exclusive arrangement is also in progress with the 7-Eleven chain of stores that will enable customers nationwide to obtain their DiGi Prepaid Plus and chatz cards at the 24-hour outlets by the end of August 2001. Yahoo! Asia is the

strategic alliance of DiGi, that deliver tailor-made content for DiGi's data-driven mobile Internet service, djuice. MTV Asia is another DiGi's partnership in the entertainment services.

Through identifying and forging partnerships such as this, DiGi has been able to target niche market segments and introduce its value-added services to corporate and business customers, which has subsequently led to an increase in its Average Revenue Per User (ARPU) and correspondingly reduced churn (DiGi AR2001).

6.1.4 Marketing & Sales

Activities associated with providing a means by which buyers can purchase the product and inducing them to do so, such as advertising, promotion, sales force, quoting, channel selection, channel relations, and pricing. Marketing one of the most important value activities for service provider as it is the most direct way to attract customers to sign up services and gain revenue.

DiGi's overall marketing strategy is to focus on strengthening its market share through elevating its brand perception, developing relevant and innovative products and services as well as identifying and harnessing non-traditional distribution channels.

To increase awareness of the DiGi brand and its product offerings, the following methods were used:

- increasing the presence of corporate billboards at strategic locations nationwide

- forming alliances with exciting brands such as partnership with ntv7 to bring the highly-publicised 'Who Wants to be a Millionaire' television game show to the supporters
- A "Better-than-Ever" campaign was launched to build brand awareness and credibility that DiGi will keep expanding its network

DiGi Mobile One is an innovative product with carefully-planned call plans, namely One Premier, One Power and One Friends, specially-tailored to meet the lifestyle needs and demands of heavy, medium and light users respectively. The product was successfully after its launched in the second quarter of 2001 as it departs boldly from the traditional market mentality of "one size fits all". Instead of using call rates that are determined by zone regardless of usage patterns, DiGi Mobile One features one rate, irrespective of zones, which gives customers the flexibility to enjoy their plan of choice, in the same time having access to value-added services such as International Direct Dialing (IDD), International Roaming, Interactive Messaging, Mobile Banking as well as Mobile Internet services.

In addition to these, there was a Pilot Proactive Retention Campaigns which targets the highest churn risk customers to reduce churn and increase customer lifetime value in terms of tenure and Average Revenue Per User (ARPU).

6.1.5 Service

Activities associated with providing service to enhance or maintain the value of the product, such as installation, repair, training, parts supply, and product adjustment.

DiGi's customer service team comprising Centre Operations, Customer Care Unit, Customer Relationship Management (CRM) and Quality Procedures and Training (QPT).

DiGi's customer service faced several challenges, chief among these being high call volume and rapid launches of new products.

Several programmes were implemented to provide consistent, personalised service and constantly upgrade the level of service across all touch points. By November 2000, QMS 300, a queuing system to measure levels of service quality, was implemented at DiGi Centres nationwide.

To further increase customer convenience, the operating hours at the KL Plaza DiGi Centre were extended to 9pm every day, 7 days a week. An Internet kiosk was also set up at the same location as an additional value-added customer amenity.

DiGi has invested in the upgrading of Call Centre operations through the launch of the Interactive Voice Response (IVR) system in October 2001 to front all incoming calls and lend support to Call Centre agents. In addition to this was the implementation of the Call Centre's Intranet system in 2001 as a means of enhancing the internal communication process.

In order to identify, attract, retain and develop profitable customer relationships, an enterprise-wide Customer Relationship Management (CRM) unit was established in August 2001, with key representatives from IT, Sales, Marketing, Customer Service and Finance. The unit has to identify customer trends, implement Datamart, which acts as a central repository of customer information, develop a Business Intelligence System to support end user information access, and establish a predictive CRM system to profile, model and predict customer behaviour.

6.2 Support Activities

Support value activities involved in competing in any industry can be divided into four generic categories, also shown in Figure 3. As with primary activities, each category of support activities is divisible into a number of distinct value activities that are specific to a given industry.

6.2.1 Firm Infrastructure

Firm infrastructure consists of a number of activities including general management, planning, finance, accounting, legal, government affairs, and quality management.

DiGi maintains and increases its service levels through a quality control measures enforced by its Quality Procedures and Training (QPT) Unit. The unit ensures high standards in the development, documentation and implementation of operational procedures. Through conducting regular service audits on procedural compliance and measuring service performance against agreed standards, the QPT team has been

successful in identifying performance gaps with a view to implementing the necessary corrective action.

A firm's infrastructure is sometimes viewed only as "overhead". Nonetheless, it can be a powerful source of competitive advantage. In the telecommunications industry, negotiating and maintaining ongoing relations with regulatory bodies is among the most important activities for competitive advantage, for instance, good relationship with the regulators may help the company in the bidding of the future 3G licences. If DiGi wants to get a 3G licence, it would have to work harder to lobby and convince the regulator with its current resources and performance.

6.2.2 Human Resource Management (HRM)

HRM consists of activities involved in the recruiting, hiring, training, development, and compensation of all types of personnel. HRM supports both individual primary and support activities and the entire value chain.

DiGi believes that in order to differentiate its services, it has to promote an environment of staff empowerment to ensure best-in-class customer service at all times. It tries to cultivate an innovative culture and it likes to be the first in the industry, e.g. the first telco in Malaysia to launch and operate a fully digital cellular network on 24/5/1995, the first in Malaysia to launch the highly popular prepaid mobile phone service on 1/1/1998, etc (DiGi AR2001).

6.2.3 Technological Development

Every value activity embodies technology, be it know-how, procedures, or technology embodied in process equipment. The array of technologies employed in most firms is very broad, ranging from those technologies used in preparing documents and transporting goods to those technologies embodied in the product itself. Moreover, most value activities use a technology that combines a number of different subtechnologies involving different scientific disciplines.

Technology development consists of a range of activities that can be broadly grouped into efforts to improve the product and the process. It takes many forms, from basic research and product design to media research, process equipment design, and servicing procedures.

DiGi has implemented a lot of information systems to support the primary activities of the value chain, e.g. the Interactive Voice Response (IVR) system for its call centres, an intranet system in the call centres to enhance the internal communication process, a Customer Relationship Management system (CRM) for its newly established enterprise-wide (a cross-functional team comprising key representatives from IT, Sales, Marketing, Customer Service and Finance) CRM unit to profile, identify, predict, attract, retain and develop profitable customer relationships, implementation of Datamart, a central repository of customer information; development of a Business Intelligence System to support end user information access.

6.2.4 Procurement

Procurement refers to the function of purchasing inputs used in the firm's value chain, not to the purchased inputs themselves.

DiGi has a procurement department specialised in purchasing. This enhances the efficiency of purchasing by reducing the time and effort to find or evaluate suppliers. It reduces cost by aggregating buying requests and buy in bulk.

6.3 Summary of Value Chain Analysis

Figure 4 below (next page) provides a summary of the above discussions.

DiGi has strong presence in the prepaid market. They also have a few strong brand names that are well recognised by the mobile community, e.g. DiGi Mobile One, DiGi Prepaid Plus and djuice.

Apart from their core mobile businesses, DiGi has a vast variety of products and services, including metropolitan fixed line services, international calling card, DiGi Access (equal access), and Internet services. The diversity reduces the risk of the company, though it may well reduce the focus of the company.

DiGi seems to be able to focus on its targeted market effectively. The profit of the company in its financial year 2000 was 23.2 millions, and in 2001 was 190.0 millions. It is doing well in the core and non-core business since the group start getting its maiden profits in financial year 2000 (DiGi AR2001).

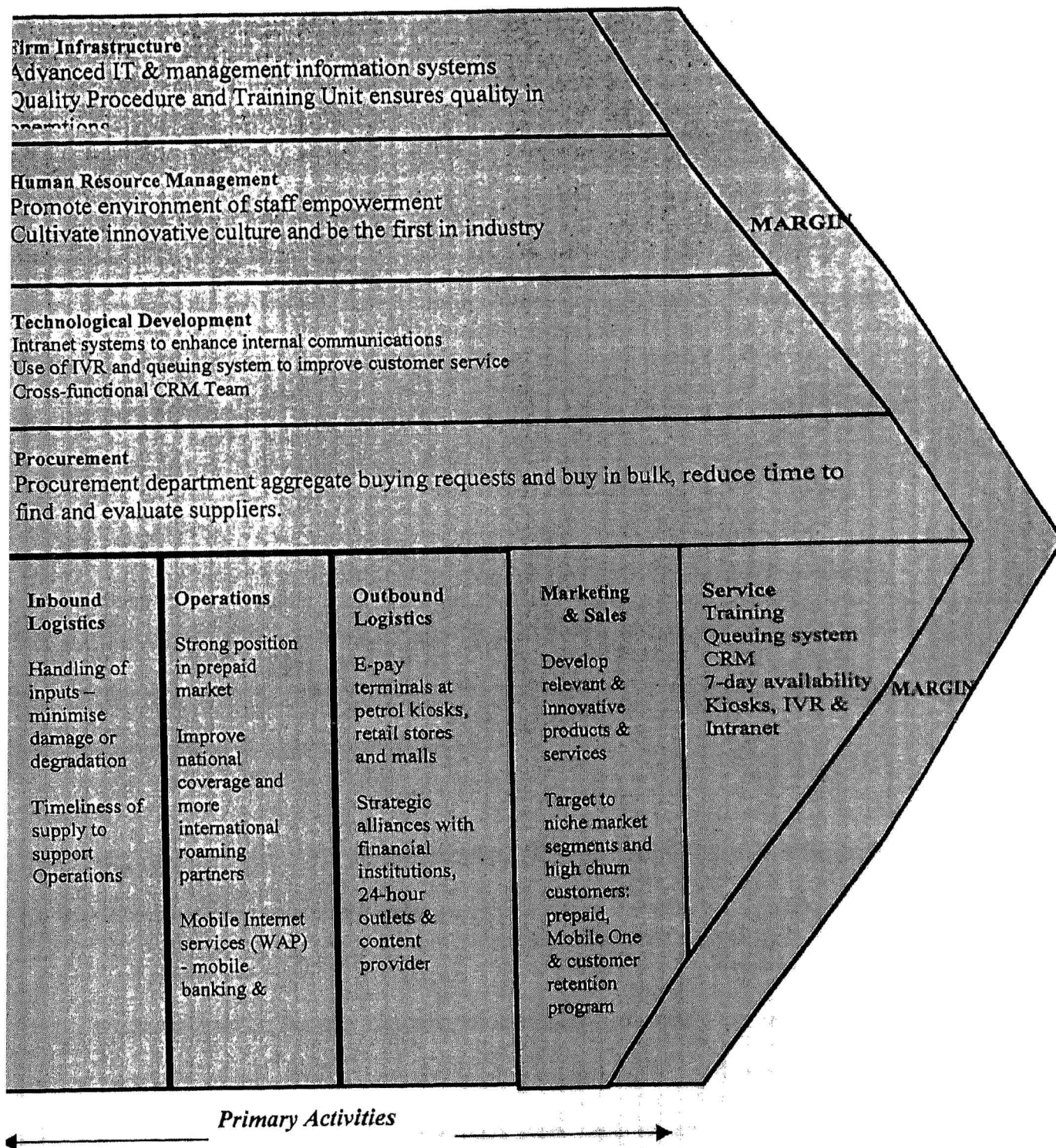


Figure 4: Summary of Value Chain Analysis

Introduction of management information systems such as CRM, IVR and intranet for the customer service can contribute significantly to improving DiGi's customer service.

Investment into their human resource is another key to superior customer service. At the end of the day, human interaction is still the most important element in customer service.

On the other hand, DiGi does not have a strong position in the postpaid market. In total, it only has 1.3 million subscribers compared with 2.5 million of Maxis (Table 6), and it is the operator with the second smallest market share after Maxis, Celcom and TM Cellular. It relies very much on its prepaid market share.

DiGi's total assets was 2.1 billion Ringgit in financial year 2001. Compared to foreign operator, the capital of DiGi is small. It may be good for it to be merged with a larger operator to consolidate its capital, in view of the challenges of a more open market due to Malaysia government's commitments to GATS.

DiGi is also lack of experience in export orientated value-adding business and expertise. All the while it has been operating locally.

DiGi's vision statement is not very visionary or ambitious – enhancing communications to improve quality of life. From its annual report, it seems to be lack of understanding about its major competitors as it seems to be complacent about its market position and marketing programs. Although WAP is considered a failure in mobile communications

due to various limitations (such as slow connection and high charges), DiGi is still putting lots of effort in promoting its djuice mobile Internet portal.

The following table summarises the strengths and weaknesses identified in the above analysis.

Table 19: Summary of DiGi's Strengths and Weaknesses	
Strengths	Weaknesses
Have strong position in prepaid market and a few strong brand names	Does not have strong position in postpaid market
Focus product innovation and marketing efforts on targeted market	Total assets of 2.1 billion Ringgit is small compared to foreign operators. It may not be one of the operators that would get a 3G licence.
Innovative in finding new distribution channels and partnership for convenient access of its subscribers	Not very visionary and lack of understanding on competitors
Experience in local operations	Lack of experience to operate overseas
Invest in infrastructure and information systems to improve customer service. Training of customer service representatives and use of CRM can manage customer service more effectively.	May not provide sufficient training for non customer facing personnel