CHAPTER 2 THE ROLE OF INFORMATION IN ORGANISATIONS' SALES AND MARKETING STRATEGIES

"Bringing together the right information with the right people will dramatically improve a company's ability to develop and act on strategic business opportunities"

– Bill Gates, Business @ The Speed of Thought: Succeeding in the Digital Economy

An understanding of the importance of the sales and marketing function and the role of management information therein is required prior to commencing an investigation into management information delivery mechanisms for sales and marketing purposes. The aims of this chapter are to provide material to aid this understanding by:

- To indicate the increasing significance of the role of customers and their data in organisations.
- To indicate the need for a single/integrated view of the customer;
- To indicate the vital role of sales and marketing strategies in organisations given the increasing significance of customers;
- To provide an overview of generic sales and marketing processes related to the development of sales and marketing strategies within an organisation;
- To explore generic management information requirements within the context of the organisational sales and marketing processes;
- To indicate the importance of external data sources to an organisation in meeting these management information requirements;
- To determine sources of data required given generic management information requirements within sales and marketing; and
- To explain the role of customer-facing firms with regard to gathering of customer data and the importance of forming channel partnerships as a method to assure organisations' access to data gathered by customer-facing firms.

2.1. The Focus is on the Customer

Marketing has become as a key component of an organisation's strategy, particularly because of the explosion of customer choice and the constant expansion of customer's expectations for service. The main objective is to cultivate customer loyalty by enabling an organisation to establish a relationship with each customer as an individual and differentiate in its service and/or product based on personal data gathered from the customers. Customer loyalty is partly a result of the effort expended by the customer in providing

data regarding, for example, his/her preferences, and as a result locks the customer into a relationship with the organisation. Some of the reasons for this shift are:

- Changing nature of knowledge gathered about the customer;
- Customer-organisation relationship is a form of intellectual capital; and
- Move from mass production to mass customisation.

Each of these is explored in further detail below. This section is based on a research reported by Ponelis and Britz (2002).

2.1.1. Changing Nature of Knowledge Gathered About the Customer

The source of organisations' knowledge about their customers has changed: years ago a shopkeeper knew his/her customers through personal contact. This model of tacit knowledge through personal contact has become infeasible since it cannot scale beyond a local level. For a regional, national or global organisation, this tacit knowledge must be substituted by explicit knowledge obtained through the capture of the customer's transactional and personal data in an integrated manner allowing for analysis. This is depicted schematically in Figure 3.

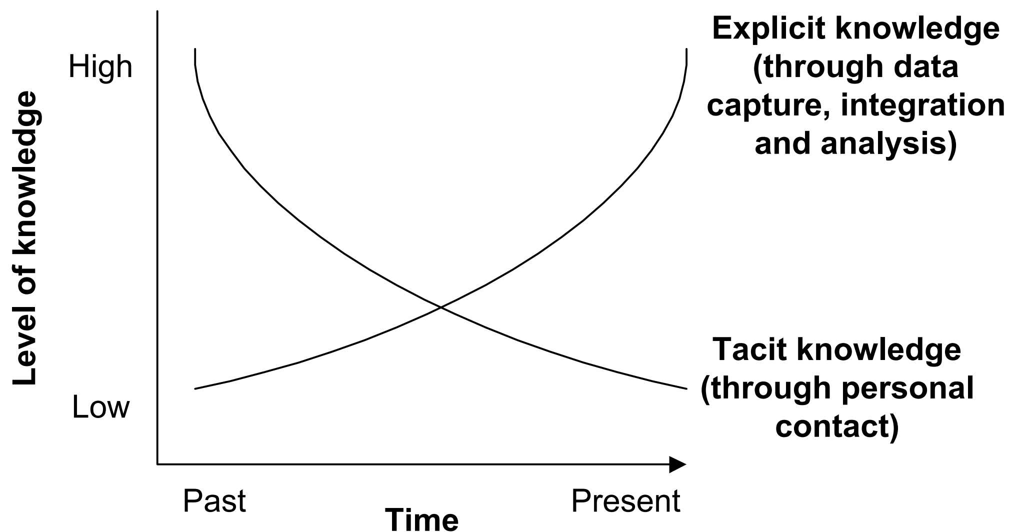

Figure 3: Change in source of an organisation's knowledge of customers over time

According to some, however, "capturing large quantities of sales receipt data is inexpensive, but is rarely helpful in building useful knowledge" (Lesser *et al*, 2000:35). Thus "any serious effort to manage customer knowledge must go beyond transaction-data analysis" (Davenport *et al*, 2001:70) to include customer comments, sales and service reports, a salesperson's interpretation of a customer interaction. This is confirmed by the Fournier *et al* (1998:44) who asks how organisations "follow through on the assertion that

we value one-on-one relationships with our customers?" Organisations' lack of appropriate response is demonstrated in the following customer anecdote:

> *"One woman told us of her frustration at being asked to disclose personal information each time she patronizes a certain hotel chain. "I volunteer vital statistics every time," she explained. "Name, address, method of payment, travel for business or pleasure, number of hotel visits per year. The use to which this information is put remains a mystery to me. ... Are the product offerings improved? Not to my knowledge. Do I get a special discount? Certainly not. Am I greeted in some special way each time I return? No"* (Fournier et al, 1998:44).

Furthermore, Hagel and Rayport (1997:55) remarked that customers:

> *"have become aware that the ability of companies to collect information far outstrips their ability – or inclination – to deliver meaningful value in return. And the gap is widening as vendors amass huge databases of detailed information about their customers and wrestle with the challenge of mining the data for value."*

Some organisations, however, have been collecting electronic customer data for years but found it cumbersome to integrate the data to form an integrated view of the customer: "… a large Japanese consumer electronics company found that the consumer data it collects are never used because the company doesn't have the software installed to engage in an ongoing dialogue with its customers" (Prahalad and Krishnan, 1999:111). A pharmaceutical organisation realised that their problem was not to gather the data but rather that "[t]he problem lay in turning this data into information to better assess market patterns, direct selling energies, and optimize inventory levels" (Gaskin, 1994). According to Schultz, integrated marketing communications professor at the Medill School of Journalism at the Northwestern University in the United States, "the key to the future will not be to get more data, but to try to understand what we have" (Palmquist and Ketola, 1999:30).

2.1.2. Customer-Organisation Relationship is a Form of Intellectual Capital

According to Skandia, a Swedish insurance that company developed a model for accounting for the intangible asset, intellectual capital, customer capital forms part of structural capital, which together with human capital, constitutes intellectual capital (Edvinsson, 1997:369). Wiig (1997:401) states that customer capital is "the value of the enterprise's relationships with its customers." Roos and Roos (1997:416), however, categorised intellectual capital as human capital, organisational capital, and customer and relationship capital. In their study of intellectual capital in Scandinavia, they found that "relationship capital was the most important necessary factor for success" (Roos and Roos, 1997:417). Whichever way,

intellectual capital is subdivided, it is clear that customers and the organisation's relationship with them form an integral part of it.

2.1.3. Move from Mass Production to Mass Customisation

The move from mass production to mass customisation has also led to changes in the nature of the relationship between the organisation and its customers. Mass customisation is defined as "the use of flexibility and responsiveness to deliver affordable goods and services with enough variety that comes close to satisfying different needs" (Samarajiva, 1998:278).

An important implication of this shift is that there is "an enormous demand for detailed data on the behavior of consumers" (Samarajiva, 1998:277) in order to customise products and services on such a large scale. Due to this demand even "hitherto discrete anonymous transactions are converted to information-yielding relationships, exemplified by frequent-shopper programs" (Samarajiva, 1998:279). This results in large volumes of customer data that needs to be stored and analysed.

It is clear that customer data has become a valuable organisational asset and resource: "in order to work more effectively with customers a supplier [to the customer] has to bring a considerable amount of information to bear" (Randall, 1994:74). As Zuboff (1996:73) accurately states, in "an information economy, information is the core resource that firms exploit in order to create the value their customers seek." The aim is to grow revenue by leveraging the data at the organisation's disposal but the success depends heavily on customer data at the desired level of detail being available and accessible. At the same time, organisations have the responsibility to collect data and use it appropriately.

Capturing customer data, however, is not enough. In many organisations the data gathered each time a customer makes an inquiry or a purchase, or pays a bill, is never assimilated. Organisations have been collecting customer data electronically for years, but it was cumbersome to integrate the data to form an integrated view of the customer (Prahalad and Krishnan 1999:111). Hagel and Rayport (1997:55) remarked that customers have become aware of the ability of companies to collect information but that it far outstrips their ability, or inclination, to deliver meaningful value in return. Thus, while companies have access to large volumes of transactional data about their customers, that data typically resides in separate databases.

Organisations that create a single, integrated "view" of each of their customers do so by integrating the information from a number of databases using information technology, thereby creating a single, holistic view of each customer, rather than storing unconnected data from each transaction. Organisations then use this information to nurture long-lasting relationships with existing customers, recognising that acquiring a new customer costs an estimated five times as much as retaining an existing customer.

It is clear that sales and marketing depends crucially on information and that this dependence is increasing. The organisation's ability to utilise information in relating with customers offers opportunities for real strategic advantage (Randall, 1994:74).

2.2. Sales and Marketing in Organisations

According to Ballou (1987:32), an organisation's sales and marketing effort has two main purposes:

- Obtaining demand, i.e. sales in the form of orders from customers; and
- Servicing demand, i.e. fulfilment of the orders.

Obtaining demand is "the result of the promotional efforts of marketing, as well as the price and product mix offered to consumers" (Ballou, 1987:32). Once the demand has been created, it must be fulfilled or serviced. Servicing demand involves putting "the right product in the right place at the right time to meet the demand requirements" (Ballou, 1987:32). Product availability, prompt delivery, and accurate order filling are just a few of the services an organisation offers that can satisfy a customer. It is the organisation's service level that binds the promotional and distribution efforts together. This relationship is depicted schematically in Figure 4.

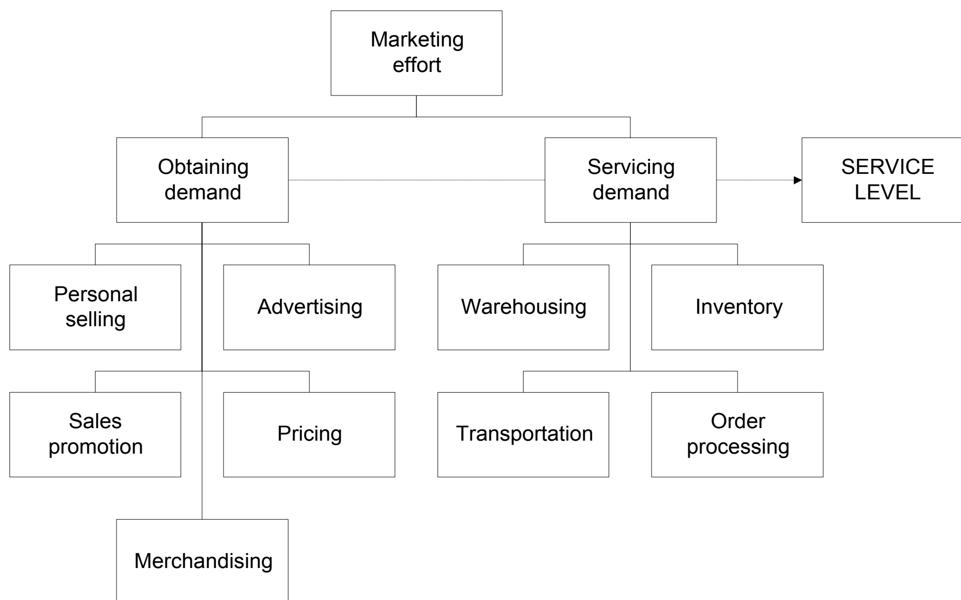

Figure 4: Structure of an Organisation's Marketing Effort (based on Ballou (1987:33))

The relationship between the creation of demand and the fulfilment of demand can also be linked as schematically as shown in Figure 5 which clearly shows the link between the customer-facing sales and marketing effort and production.

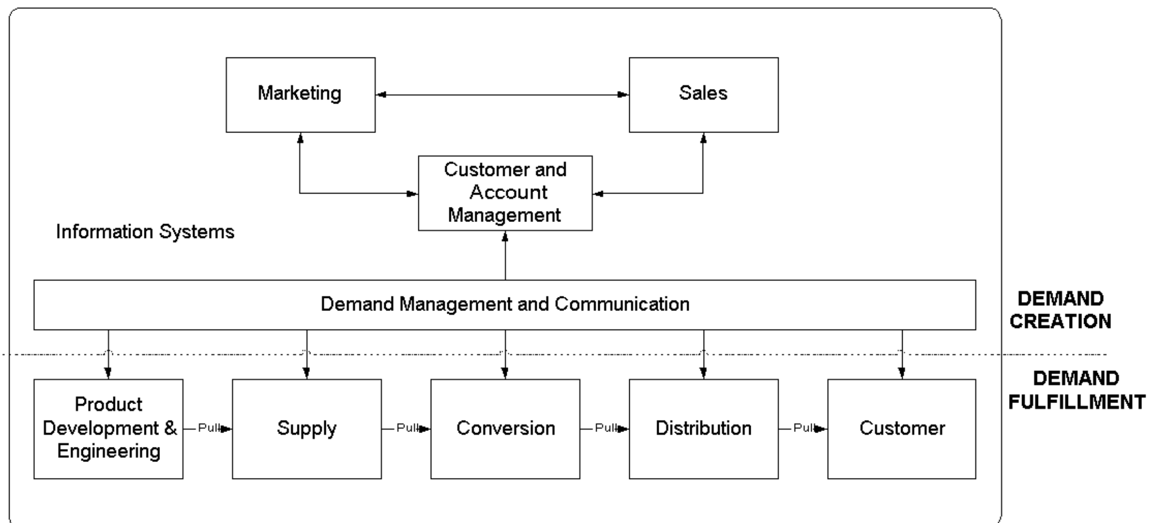

Figure 5: Link between Demand Creation and Fulfilment

The sales and marketing functions are mutually dependent. Sales is primarily about reporting the past for performance purposes of, for example, sales representatives, and forecasting future sales as an input to operations processes, for example, production planning. Any marketing initiatives such as trade promotions, and new product development, will impact on the sales forecasted.

In order to create value organisations need to incorporate customer knowledge into its planning and operating activities. As Lesser *et al* (2000:36) states: "[c]ustomer knowledge provides guidance and direction to these processes by improving the enterprise's understanding of the factors that influence customer decision making, leading to more effective marketing and sales strategies."

An organisation's sales and marketing strategies play a significant role in its success or failure. Sales and marketing strategies drive the organisation's revenues, to a large extent its profitability, and critical issues such as customer satisfaction, retention, and loyalty. An organisation's sales and marketing function must seek to keep up with changes in the marketplace and customers' constantly evolving needs and wants.

Sales and marketing strategies define the priorities and the key objectives for a number of fundamental business activities, including:

- Studying customers needs and wants;
- Satisfying, retaining, and building a base of loyal customers;
- Defining products, services, and markets;
- Developing new products and services on an ongoing basis;

- Partnering with appropriate channels of distribution;
- Pricing products and services;
- Researching what affects the organisation in its external environment;
- Managing advertising, direct marketing, public relations, publicity, sales promotion, special events, and Internet-related activities;
- Leading the sales force; and
- Controlling and measuring the financial performance of sales and marketing activities.

The following generic processes form an integral part of an organisation's sales and marketing function:

1. Identify market segments;
2. Develop a pricing strategy;
3. Select channels of distribution; and
4. Develop sales forecast(s).

Processes 1 and 2 are primarily focused on customers whilst processes 3 and 4 are implicitly focused on customers but with a more direct focus on demand and distribution. It is important to note that sales and marketing processes are not limited to the processes mentioned above. Rather, these processes form a foundation, which in turn supports other processes, both in the sales and marketing function and other organisational functions. In order to examine the management information requirements of within these generic sales and marketing processes, it is necessary to examine these processes in more detail.

2.2.1. Perform Market Segmentation

Market segmentation helps organisations identify distinct differences and preferences among customers and develop targeted sales and marketing programs to address their unique needs by identifying groups of customers who are similar enough in their motivations and buying behaviour to respond alike to marketing programs and strategies. Recognising that the most valuable customers command a higher level of attention, organisations analyse data gathered from customers to determine which customers represent the most value to them. Customers are then divided into two or more segments.

By segmenting customers into segments, organisations can develop and implement marketing programs, channel strategies, product packaging and development, customer service criteria, and sales programs tailored to the needs of specific segments and ultimately leverage technology to develop one-to-one relationships with customers. This information can then be used to provide the products and services that customers seek. By cultivating enduring customer relationships over the long term, organisations not only build brand loyalty, but the organisation also makes profit more easily than it would with a steady stream of high-turnover, new customers.

Market segmentation involves analysing secondary data sources such as census data, and independent market research, in combination with primary research, such as surveys and focus groups, together with demographics, lifestyle choices, and customer profitability data. Because of this dependency on data, which includes sales transactions, it must be reliable, relevant, and manageable, and readily accessible to internal decision-makers.

The success of market segmentation is measured by improved market performance, i.e. profitability. Other indicators of performance that can measure market segmentation success include:

- Increased sales:
    - Overall;
    - By segment;
    - By customer or account;
    - By product;
- Reduced expenses:
    - Costs of marketing programs (resulting from targeted marketing versus mass marketing);
    - Promotional expenditures or trade marketing;
- Market share;
- Customer acquisition rate; and
- Customer retention rate.

2.2.2. Develop a Pricing Strategy

An organisation's pricing strategy reflects value perceptions, market position, and quality of its products or services. For this reason, the pricing strategy should be consistent with all other aspects of an organisation's strategy, i.e. encompass from marketing and distribution plans to the organisation's overall vision.

An optimal pricing strategy relies on an understanding of how price-sensitive an organisation's product or service is in the market. It integrates these external considerations of costs and customers with internal financial constraints to find a point at which customers receive good value and an organisation maximises profits. Thus organisations need a broad understanding of both internal and external factors to be able to price effectively:

- Internal factors:
    - True costs of products or services;

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- External factors:
  - Customers—Customers are key in determining a product's value. Not only must products deliver value to customers, but customers must also recognise that value and perceive it in the same way as the organisation that sells the product. When organisations understand how customers perceive value, they can price in a way that maximises this value perception.

    When an organisation truly understands its customers—their buying patterns, their product usage habits, how they feel about various products and services—the organisation increases its intangible value to customers and, by extension, the value of its products. The ability to price in a way that reflects the value perceptions of both the organisation and the customer leads to greater price stability and customer satisfaction; and

  - Competitors—Organisations also have to heed marketplace dictates in setting pricing. The price of competitors' products and overall industry trends impact the pricing decision. Therefore, in order to determine a realistic price for products, as dictated by the marketplace, organisations determine the target price and then work backward to align costs.

In summary, customer values and competitive realities impact the final pricing decision, but costs frame the decision-making process. A full understanding of the costs of producing goods or services is required to price in a manner that delivers both value to the customer and profits to the organisation.

Pricing policies usually take one of three forms:

- Fixed pricing, where all similar buyers pay the same amount for a specific product or service offering;
- Variable pricing, where products are sold to similar buyers at different prices; and
- Hybrid pricing, which reflects elements of both pricing forms.

Monitoring the actual price at which products sell helps organisations understand pricing patterns and improve profitability. Organisations that discount too much inevitably experience price erosion, as discounts slowly eat into list prices. Factors that contribute to price erosion include discounts for prompt payment or volume buying, rebate or bonus offers, and cooperative advertising allowances. When these discounts are subtracted from the invoice price, the net price emerges.

By tracking this final price on a case-by-case basis, organisations can get a graphic profile of the price ranges at which their products sell and to whom. The information gleaned can then be used to develop strategies for dealing with the best and worst transactions and accounts. For example, profitable accounts—ones that consistently buy products at full price—can be targeted for increased volume, and customers who are not as profitable as desired can be targeted for improved price levels or possibly dropped.

Performance measures for developing pricing strategy may encompass a variety of financial measures. An organisation should decide what performance indicators to measure, based on what goals it is trying to achieve with a pricing strategy. Measures may include some of the following:

- Improved overall profitability;
- Improved contribution margins;
- Unit volume increase;
- Cost reductions;
- Operating profit improvement; and
- Market share gains.

2.2.3. Select Channels of Distribution

Distribution or marketing channels are the routes organisations use to reach customers with products and services. Specifically, channels refer to the different organisations that participate in making products and services available to final consumers. Selecting appropriate channels involves choosing those ones that efficiently meet the manufacturer's needs and effectively serve consumers and increase their satisfaction.

In addition to helping manufacturers serve customers, channels allow manufacturers to transfer a portion of their marketing costs to channel partners, such as distributors or retailers. The marketing costs transferred to channel partners usually include the costs of inventory, sales and promotions, order handling, and credit functions. Manufacturers retain a portion of marketing costs to perform distribution-related functions including:

- Deploying a field sales force to handle direct accounts;
- Developing marketing programs to support the channel's sales activities; and
- Carrying a minimal amount of finished goods inventory.

There are two categories of channels, direct and indirect. Each category is described in Table 2.

	Direct	Indirect
Characteristics	• Controlled by manufacturer • Support the manufacturer exclusively	• Carry multiple product brands and lines • Serve more than one manufacturer
Example	• Field sales force	• Distributors • Sales agents or representatives

Table 2: Comparison of Direct and Indirect Distribution Channels

Direct channels provide manufacturers with the greatest control over the channel but are more costly than indirect channels. Indirect channels help manufacturers maximise market coverage and are more cost-effective because they assume many of the costs of doing business from the manufacturer. Indirect channels also offer important value-adding services to consumers, for example, buying convenience, delivery, and credit, which may not be available directly from a manufacturer.

In today's environment, which is characterised by multiple channels and extensive product selection, the consumer wields significant influence over a manufacturer's channel decisions. Making products available when and how customers want them becomes critical to survival. As a result, distribution channels have to be more responsive than ever to keep pace with rapidly changing customer and market demands. Undertaking a customer segmentation analysis helps organisations learn about the buying behaviour of customers and their preferred channels. With this knowledge, organisations are better able to evaluate the degree of compatibility between possible new channels and customers and potential customers.

Once selected, channel partners essentially become an extension of a manufacturer. Many manufacturers today are using third party distribution as channel partners to fulfil demand, i.e. perform inventory management, warehousing of finished goods, transportation, and distribution on behalf of the manufacturing organisation. This is a very important component of their product offering since "logistics adds competitive advantage by adding value to the customer that extends far beyond the simple performance of product transaction activities" (Ross, 1998:27). Manufacturers monitor the selected partners' performance to ensure they continue to perform in a way that delivers value and profits to the manufacturer.

In many cases, channel partners are a manufacturer's only link to customers and/or consumers, not only through the service levels but also the data captured about the customers and/or consumers. According to Lummus and Vokurka (1999:18) "[t]he issue for most partners in the demand chain is determining what information should be shared with all partners and establishing a system to make the information available." Information that typically need to be shared include sales data, inventory levels, and order quantities. Information about promotions, forecasts, and new product information and design can also be shared. Actual information sharing needs to be mutually decided upon and stipulated in the service level

agreement together with the method data will be made available to other channel partners. Each organisation must then decide how this data will "translate into improved business decisions" (Lummus and Vokurka, 1999:19). The ideal situation would be to allow "order and market information to flow upstream continuously from the point of sale, while data on product availability and inventory levels flow downstream " (Poirer and Bauer, 2001:120) as illustrated in Figure 6. This is confirmed by Singh's (1996, 30) view that an integrated supply chain is the sum of goods movement and information flow: "A supply chain is integrated by combining goods movement with the flow of operational and financial information between the relevant (internal and external) parties."

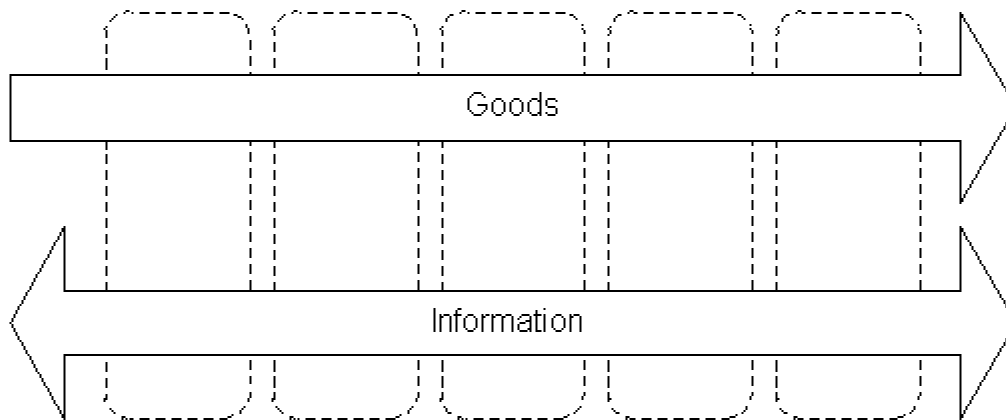

Figure 6: Conceptual view of information and product flow between supply chain channel partners

2.2.4. Develop Sales Forecast(s)

The sales forecast and its derivatives drive planning and decision-making and is used to populate the revenue portion of the budget. An organisation can use a complex, highly sophisticated forecasting tools or an informal, subjective process. However, the more quantified a sales forecast is, the more confidence with which decisions can be made regarding:

- Capital expenditures, investments, and cash flow;
- Production, purchasing, inventory, and facility planning;
- Sales, marketing, logistics, and distribution planning; and
- Human resource planning, including labour requirements and sales force allocation.

Preparing a forecast is a planning activity and is an iterative process. As such, sales forecasting helps an organisation shape its goals and strategies as these goals and strategies shape the forecast. A meaningful

sales forecasting process is more than simply looking at past sales records and adding 5, 10, or 15 percent as a growth goal.

The overall benefit of having a rigorous forecasting process is that it reduces the uncertainty of future demand for products and services. This enables an organisation to:

- Minimise its investment in inventory;
- Rid itself of outdated products in order to eliminate carrying costs; and
- Reduce the costs associated with rush supply orders, production schedule revisions, line set-up changes, short production runs, and product back orders.

Forecasting is a process with far-reaching implications beyond the sales and manufacturing functions. Accurate sales forecasting helps organisations better manage all aspects of their business. It improves decision making in critical areas such as production scheduling, personnel deployment, and logistics planning which can increase sales opportunities and optimise the organisation to reduce operational costs to maximise profits (Brooke and MacTavish, 2001). When forecasts are on target, organisations run like well-oiled machines: producing the right amount of product at the right time, keeping inventories moving, and thus avoiding losses associated with overstocked inventories. Additionally, relationships with customers solidify, as customers develop confidence in an organisation's ability to consistently meet their needs. This is confirmed by Moon and Mentzer (1999):

> *"The first step any company needs to take is to convince senior sales managers that excellence in sales forecasting is critical to the health and well-being of their company. Without effective sales forecasting, not only will sales managers be unable to develop realistic sales plans for their territories, but the rest of the company will be unable to develop the financial, marketing, and operational plans necessary to support their sales plans."*

Forecast accuracy should be monitored as new sales data becomes available. This activity provides insights to further shape the model and improve its usefulness. As new data becomes available for a period, the forecast can be compared with actual sales. The remainder of the forecast can then be updated with this new data to reflect any changes in trends or other patterns. The forecast model itself can also be changed to improve the reliability of the forecast.

Lack of or inaccurate forecasts "lead to misguided business plans, errant decisions and a lack of collaboration and consensus, which limits buy-in across the organization" (Brooke and MacTavish, 2001). Furthermore, organisations "may be unable to deliver goods and services to customers in a timely way,

which will affect customer satisfaction levels and jeopardize good relationships that have been established with large customers" (Moon and Mentzer, 1999).

Most organisations producing reliable forecasts begin with objective, statistics-based forecasts and then adjust these based on the judgment of experts within the organisation. Executives are best at providing insights that shape forecasts for entire product lines or markets; salespeople excel at forecasting at the individual product or stock keeping unit or SKU level. Combining bottom-up (from the sales force) and top-down (from executives) forecasts takes advantage of the strengths of each to produce a more reliable forecast. Involving salespeople also ensures that they buy into the forecast, which is especially important when sales quotas are based on forecasts. Most final forecasts are the result of combining several forecasts—generally, calculated forecasts based on data and inferential forecasts based on the insights and experience of experts.

The data used in forecasting is extremely important, and the most readily accessible data is not always the most useable or meaningful. Organisations need to collect both internal and external data and generate their own primary data when it is not available from other sources. It has been shown above that organisations need to obtain external data when dealing with channel partners. For example, in a retail channel setting a statistics-based forecasting process involving multiple partners might use some of the following data sources:

- Manufacturer shipments;
- Wholesaler warehouse shipments and inventories;
- Retailer distribution centre withdrawals and inventories; and
- Retail store point-of-sale (POS) data and inventories (Lapide, 1999/2000:13).

In particular, statistics-based forecasts are based on historical data, which frequently requires large volumes of data, particularly over time in order to increase extrapolation accuracy; as stated by a marketing director in a survey conducted by Ashill and Jobber (2001:57), historical information enables executives to establish what will likely happen in the marketplace.

Measures for forecasting performance can help identify process improvement opportunities. Cost measures, such as total forecasting costs, can be used to track the efficiency of the forecasting process. Quality measures, such as the percentage of forecasts that over or under estimate actual sales (negative skew) can help uncover cultural influences that encourage salespeople or managers to develop inaccurate forecasts. Performance measures include:

- Inventory levels;

- Inventory turnover;
- Out of stock situations;
- Number of backorders;
- Conformance to promised delivery date;
- Percentage of sales force at or above budgeted revenue; and
- Budgeted and/or forecasted to actual income variance.

2.3. Management Information and Data Source Requirements

Based on the above discussion of generic processes forming part of the sales and marketing effort of an organisation, the primary management information requirements can be ascertained. Table 3 below contains the typical management information requirements identified in the previous section.

Generic Sales and Marketing Process	Typical Management Information Requirements
Perform Market Segmentation	• Sales: o Overall; o By segment; o By customer or account; o By product; • Expenses: o Costs of marketing programs (resulting from targeted marketing versus mass marketing); o Promotional expenditures or trade marketing; • Market share; • Customer acquisition and retention rate; and • Profitability.
Develop a Pricing Strategy	• Average selling prices (ASP) and unit forecasts by product and territory; • Contribution margins; • Costs; • Market share; • Operating profit improvement; • Profitability; • Promotions; and • Unit volumes.
Selection Channels of Distribution	• Delivery time; • Conformance to promised delivery date; and • Promotions.
Develop Sales Forecast(s)	• Inventory levels; • Inventory turnover; • Out of stock situations; • Backorders; • Budgeted and/or forecasted to actual income variance; and • Percentage of sales force at or above budgeted revenue.

Table 3: Typical management information requirements by generic sales and marketing processes

In conclusion, sales and marketing management information requirements are (Ashill and Jobber, 2001:57):

- Qualitative in nature, for example, shifts in buyer behaviour and competitive threats;
- Internal facts, for example, costs, profitability;
- External facts, for example, broad environmental changes, industry environment changes;
- Historical; and
- Future-orientated.

Profitability requires further clarification. Using profitability analysis an organisation can determine where money is being made or lost, allowing it to properly align strategies to specific market segments. As such it is a valuable tool for management decision-making. Profitability is derived from revenue, expense and cost data, with expenses and costs subtracted from revenue. Profitability analysis can focus on:

- Customers;
- Products;
- Sales force;
- Territories; or
- Vendors.

Examining the data sources required as listed in Table 4, it is clear data sources to meet the information requirements are both internal and external as mentioned, particularly where third-party distribution is used. The supplier is dependent on the organisation to access to the data collected by the organisation, particularly relating to customers. Another view on management information requirements within the sales and marketing function is given in Table 5.

When a manufacturing organisation uses third party distribution to distribute products to its customers, the third party distributor will produce the invoices, goods delivery notes, etc. Should the third party distributor handle orders on behalf of the manufacturer, the distributor will hold all order-related information. Should the distributor also perform a warehousing function of finished goods, inventory levels and out of stock situations will be monitored by the distributor. It is clear that important data reside outside of the manufacturing organisation's boundaries with customer-facing firms such as a third party distributor as channel partners.

Generic Sales and Marketing Process	Data Sources
Perform Market Segmentation	• Sales transactions, linked to customers • Costs, preferably linked to customers • Demographics, customer surveys and focus groups, lifestyle choices • Expenses, preferably linked to customers • Independent market research, census data
Develop a Pricing Strategy	• Actual price or true product cost • Promotions • Sales transactions, including units sold
Selection Channels of Distribution	• Delivery data • Order data • Promotions
Develop Sales Forecast(s)	• Budget • Inventory levels • Order data • Sales transactions, preferably linked to customers if forecasting by customer • Shipments (manufacturer and/or distributor)

Table 4: Data sources required to meet information requirements by generic sales and marketing processes

	Internal	External
Strategic support	Trends monitoring Effectiveness monitoring Strength / Weakness New product development	Market positioning Competitors mapping Opportunities / Threats Benchmarking Environmental scanning
Operational support	Sales promotion Advertising Product pricing Sales force management	Market research Direct marketing (database, Internet) Contact management Public relations

Table 5: Strategic sales and marketing management information requirements (Xu, 1999:268)

2.4. Data Flow from Customer-Facing Channel Partner Firms

Given that important data reside outside of the organisation, the implication is that data must be managed across the boundaries of an organisation, not only internally across departments or functional areas, for example, marketing, and operations; but also externally across other organisations in the supply chain as depicted in Figure 7.

For customer-facing organisations this is not a problem as they interact directly with the customer but there are a multitude of other role players as Kumar (2001:58) accurately describes:

> *"Customer-facing firms at the retail level, whether large department stores, automobile dealerships, or fast-food franchises, are only the tip of the iceberg. Behind them exist*

entire networks of manufacturers and distributors, transportation and logistics firms, banks, insurance companies, brokers, warehouses and freight-forwarders, all directly or indirectly attempting to make sure the right goods and services are available at the right price, where and when the customers want them."

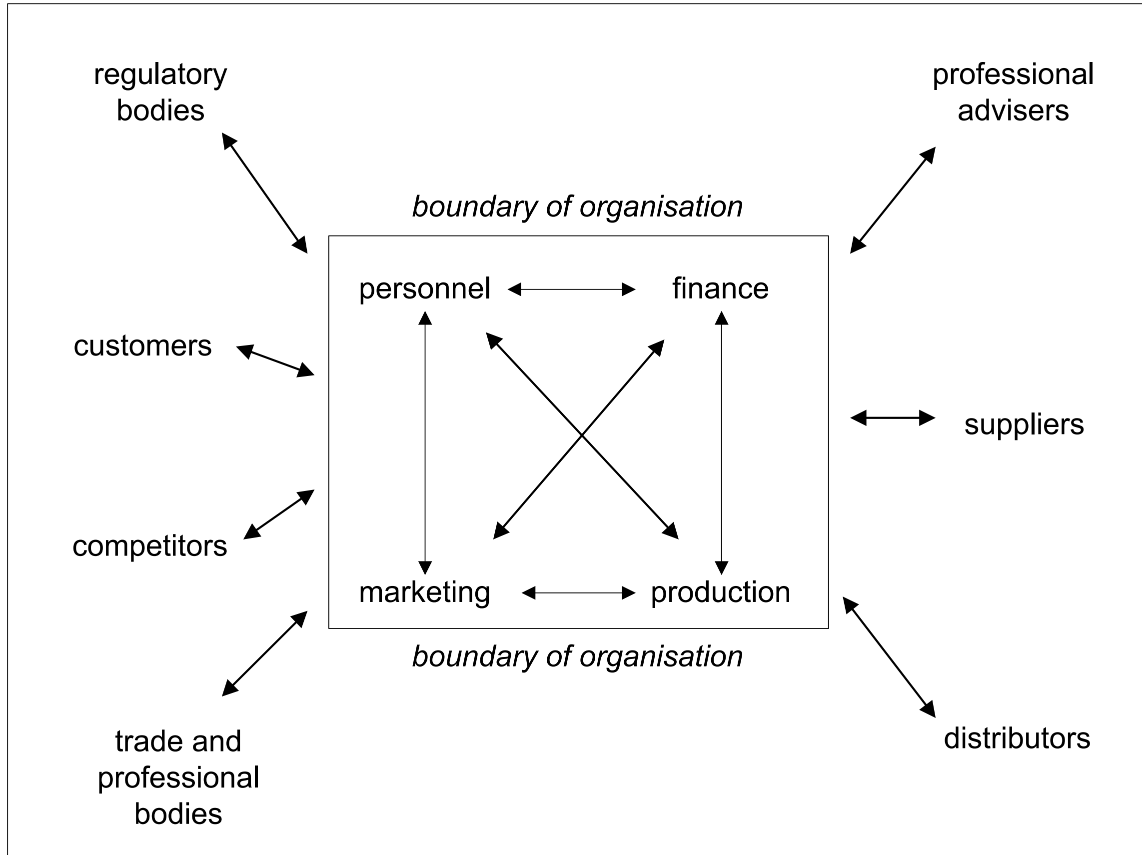

Figure 7: Flow of information within and outside the boundaries of an organisation (Butcher, 1998:7)

Since the organisations beyond the customer-facing organisations are unable to have direct contact or interaction with customers "the role of information becomes even more crucial to creating a customer-oriented organization" (Lummus and Vokurka, 1999:16). Aaker's (1998:281) view on the link between manufacturing and retailer organisations is that it is increasingly being reinforce by information technology. As a result, "[t]he ability to control the information generated by retail scanners can be key to the strategies of manufacturers and retailers" (Aaker, 1998:281). Many organisations, however, experience problems with the obtaining customer data (Prahalad and Krishnan, 1999:113):

"Consider a company's primary supplier relationships and the application software that mediates these interfaces. Supplier relationships used to be fairly stable. But increasingly, the basis for value creation in these relationships is changing dramatically. More and

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more information is being exchanged, and each party is becoming more dependent on the other's information systems. The volume and frequency of interactions with a supplier can affect the nature of company-supplier relationships and the characteristics of software required for managing those interfaces … But in the traditional business system, managers don't have direct access to this information because dealers and distributors act as intermediaries. So it is Wal-Mart, not Procter & Gamble, that manages the interface with customers and collects the information."

This is reaffirmed by Lapide (1999/2000:13) when discussing obtaining data from channel partners:

> *"While at first glance this sounds easy, it is not, since getting it on a routine basis from all trading partners, especially electronically, is unlikely to happen. Not all trading partners are willing to participate and some may not be capable of doing it. For example, POS [point-of-sale] data may only be gotten from a few retailers and obtained in a format that is difficult to interface with one's … system."*

In order to counter this, channel partners form partnerships. According to Corbett *et al* (1999:71) even "… modest partnerships [can] lead to rapid improvements in logistics facilitated by candid information exchange and better coordination." Furthermore, "[f]ailing to collaborate results in the distortion of information as it moves through a supply chain, which in turn, can lead to costly inefficiencies. … Through the more open, frequent, and accurate exchange of information typical of a long term supply-chain partnership, companies can eliminate many of these problems [excess inventories, slow response, and lost profits] and ensure ongoing improvement" (Corbett *et al*, 1999:71). Thus partnerships go a long way to ensure that data is available/accessible to manufacturer's on a continuous basis from third party distributors:

- "… information must flow between people within the organisation, and between the organisation and the external world. Such communication is vital for the successful functioning of the organisation, and most organisations establish formal mechanisms and processes with vertical and horizontal channels of communication to provide for the exchange of such information" (Butcher, 1998:5).
- international research on third-party service providers shows that "partnerships are extremely important to help minimize some of the problems associated with information flow that can easily damage the supplier-customer relationship." (Handfield and Nicols, 1999:47)

It is clear that information flow from the physical distribution process plays an important role in the sales and marketing processes of manufacturing organisations. Finding an effective means to share the data is

vitally important in order to make both tactical and strategic decisions in both marketing and production. For this purpose information systems are used. Talvinen and Saarinen (1995:18) accurately summarises the role of information systems in such organisations:

> *"To handle the increasing external and internal information flow and to improve its quality, companies have to take advantage of the opportunities offered by modern information technology (IT) and information systems (IS). Managing marketing information by means of IT has become one of the most vital elements of effective marketing."*

This view is reinforced by Ross (1998:51-52):

> *"... today's market leaders must view information and communication technologies not only as critical management tools that shorten cycle times and increase productivity of business functions through automation but also as key enablers providing the enterprise with the opportunity to activate highly competitive cultures and structures both within the organization and outside in the supply channel in search for marketplace excellence."*

2.5. Chapter Conclusion

Customer knowledge plays a vital part in organisations today, particularly in several sales and marketing processes. The customers can either be channel partners or the final consumers. Managing data and/or information across business units, departments, and functions is vital but problematic. Frequently, channel partners gather and capture data about customers that the other organisations in the channel require and which must be incorporated/catered to in the receiving organisations' information systems in order to allow for management information delivery to users.