

LONGITUDINAL CASE STUDY OF FIXED REVENUE ACCOUNTING AT A JAPANESE SEMICONDUCTOR DISTRIBUTOR

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ABSTRACT

Fixed revenue accounting (FRA) is a management control system for relationship marketing strategy. Although FRA has been investigated among some Japanese companies since it was proposed in 2005, there has not been any study examining the effects of FRA has on employees' awareness and behavior based on longitudinal investigation. In this paper, we state a longitudinal case study about FRA at a Japanese semiconductor distributor during 2006–2013. At Company A, only the CEO used FRA to evaluate the effectiveness of its strategy until 2012. After he became convinced FRA could guide the relationship marketing strategy, he started using FRA as a management control system in 2013 by binding it with its strategic plan and annual budgets. Our interview with twelve core employees in 2014 clarified that FRA motivated employees to accept the relationship marketing strategy, deepened common understanding among departments, and facilitated an understanding of how to achieve goals.

Keywords: fixed revenue accounting (FRA), relationship marketing strategy, strength of relationship with each customer (STREC), customer segments, management control system

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INTRODUCTION

Fixed revenue accounting (FRA) is a management control system that assists customer relationship marketing by measuring fixed revenues¹. *Fixed revenues are revenues from fixed customers* that firms expect to retain in the future. Since Suzuki (2005) proposed the concept, FRA has been investigated at a retail store (Suzuki, 2007), a hotel chain (Matsuoka & Suzuki, 2008, 2009), and a semiconductor trading company (Ishii, 2014, 2015). These studies develop analytical methods for FRA that are well supported by evidence from practice; however, they insufficiently describe what relationship marketing strategies were adopted, why FRA was introduced, and how it influenced employees and managers as a management control system.

This paper describes a longitudinal case study that examines the adoption of FRA at a Japanese semiconductor trading company during 2006–2013 when the firm was implementing relationship marketing strategy. The case company (Company A) introduced FRA after adopting relationship marketing strategy in a rapidly changing environment. Japan's semiconductor industry has been turbulent and troubled since the 1990s when low-cost semiconductors from Chinese and Korean manufacturers began to eat into its market share. To maintain profits, Japanese semiconductor distributors had to adapt to the rapidly changing environment by rebuilding relationships with customers.

Company A decided to introduce FRA in 2006 because it thought FRA could identify how successful its strategy was in developing fixed customers, and consequently, fixed revenues. According to its CEO, until 2012, Company A had used FRA as an information system to apprise top management on the progress of its relationship marketing strategy. In other words, FRA had no role as a management control system through which managers influence subordinates to act in accordance with the strategy. After the top management became convinced of FRA's effectiveness, however, Company A decided in 2013 to update the system so that FRA could be used

1 Although relationship marketing is defined by the American Marketing Association as “marketing with the conscious aim to develop and manage long-term and/or trusting relationships with customers, distributors, suppliers, or other parties in the marketing environment,” the focus is mainly placed on the relationship with customers in this study. This is because, as its name suggests, FRA puts emphasis on *the revenues from fixed customers*.

in preparing a three-year strategic plan and annual budgets. From then on, FRA has been working as a management control system.

We clarify how FRA as a management control system influences employees' awareness and behaviors. We interviewed 12 of Company A's core employees in July 2014. The interview revealed that FRA prompts employees to accept the relationship marketing strategy, deepens shared understanding among departments, and facilitates an understanding of how to achieve goals. In sum, FRA helps Company A to ensure greater goal congruence.

This study successively establishes FRA's basic concepts, reviews historical changes in the environment surrounding Japanese semiconductor trading companies, and describes their strategic responses. It describes the introduction and operation of FRA and its effects. It concludes by summarizing implications for its findings.

FRA'S BASIC CONCEPTS

Background

FRA is a management accounting framework based on customer segments to evaluate the impacts of relationships with customers on the company financials.

Global competition enables customers to have greater choices in products and services. When customers feel an even little dissatisfaction with a company, they can easily change to another company. As customers gain the business initiative, a company must concentrate on keeping good relationships with customers. Recognizing these realities, Levitt (1983) noticed the importance of the relationship with customers. In the 1990s, relationship marketing as a new concept of marketing was established. In other fields of marketing, it stimulated the development of new concepts for managing the relationship with customers. In strategic policy, Treacy and Wiersema (1993) developed the concept of customer intimacy, and in service management, Heskett Sasser, and Schlesinger (1997) established the framework for management based on the concept of customer loyalty.

To manage the relationships with customers, a company must measure and evaluate the impacts of the relationships with customers on its financials. However, that kind of management accounting does not exist. What does exist is studies on management accounting that can be grouped into two categories: the effectiveness of non-financial measurements from the customer perspective and the analyses of customer profitability. Kaplan and Norton (1996) stated the necessity of non-financial measurements from the customer perspective. To examine the effectiveness for the non-financial measurement, Ittner and Larcker (1998), Banker, Potter and Srinivasan (2000), Smith and Wright (2004) and Said, Hui, Othman and Taylor (2010) tested the correlation between the customer satisfaction index and companies' financials, and Hemmer (1996) and Smith (2002) investigated the usefulness of the index based on mathematical models. These studies indicate positive Impacts of Relationships with Customers on a Company's Financials (IRCCF) but had no intention of making a framework for evaluating the IRCCF based on accounting figures. On the other hand, Foster and Gupta (1994), Foster, Gupta and Sjoblon (1996) and Foster and Young (1997) discussed the framework for analyzing customer profitability by financial figures. Their framework presented valuable aspects such as the usefulness of transaction data based on each customer and profit estimations for an extended period of time to understand the customer profitability, but did not focus on evaluating the IRCCF. Because of the absence of studies aiming to develop the framework for evaluating the IRCCF, this study can be regarded as an attempt to fill that gap for a company that wants to manage its relationships with customers.

The framework for evaluating the IRCCF is called FRA. FRA began with two questions that the first author asked himself in 2001. From the concepts of variable and fixed costs as identified in relation to sales, this question occurred: "Why isn't revenue classified into variable and fixed categories based on relationships with customers?" The other question arose out of relationship marketing which was established in the 1990s. Relationship marketing insists that corporate value increases when a company improves the long-term and/or trusting relationships with customers. This principle led naturally to the question: "How are the impacts of the relationships with customers on financials measured?"

In response to these questions, the original concept of FRA was developed and stated thus: Based on transaction data such as the total

amount, the total number or consecutive period of transactions for each customer, the Strength of Transactional Relationship with Each Customer (STREC) can be measured. The STREC reflects each customer's satisfaction with a firm or its products. In addition, the STREC can demonstrate the transactional momentum of each customer that comes from other factors such as a purchase of convenience or a lack of choice. Using the STREC, customers are segmented into sustainable and non-sustainable customers. Based on these customer segments, the revenues are measured and by matching these revenues to costs, two types of profits are calculated. Then, by analyzing these profits, the company can evaluate the impacts of relationships with customers on its profitability and the sustainability of its profit.

Three Requirements for FRA

FRA can be undertaken when the three requirements are met: (1) customer segments categorized by the STREC, (2) the STREC measured by the transaction data, and (3) the transaction data recorded for each customer.

Customer Segments Categorized By the Strength of Each Customer Relationship

FRA is accounting based on customer segments categorized by the STREC. Generally, to evaluate the impact of a driving factor on a company's financials, management accounting segments its financial results according to the driving factor. For example, to evaluate the impact of the customer's region on the financials, the financial results are divided by the regions. Then, by comparing the results, the regional impact is identified. This basic approach of management accounting is applied to FRA in order to evaluate the impact of the STREC on the company financials and the financial results are split into customer segments categorized by the STREC.

Based on the STREC, customers can be segmented into four Transactional Customer Segments (TCSs): (1) New Customers, who have started having a relationship. After a certain period, new customers are categorized into (2) Non-Fixed Customers, with a low STREC and (3) Fixed Customers, with a high STREC. In this definition, the words, Non-fixed and Fixed, are used to denote the difficulty of keeping customers. If customers no longer have any relationship, they are seen as (4) Defectors.

The Strength of Each Customer Relationship Measured by Transaction Data

The STREC is measured by the transaction data. As a basic measurement for the STREC, the total amount, the total number, or consecutive period of transactions is listed. When a company chooses the measurement from its transaction data, it must consider the relation of the measurement for the STREC to its corporate value. The corporate value is regarded as the sum of discounted cash flows to be gained from customers during the years that they will continue to make transactions. The total amount of transactions becomes a measurement for the STREC because it affects each year's cash flow. Another measurement, the consecutive period of transactions is selected because it influences the total value of the discounted cash flow. Finally, the total number of transactions is a powerful measurement because it can reflect to the transactional momentum on the transactional amount and period.

Because many other measurements for the STREC will be developed in future business practices, let's look at the responses to the question: "How your company identifies customers with whom your company wants to establish strong relationships, what is the most desirable measurement?" In 2006, the first author asked this question to seven MBA students who were working for companies. 'Measurement for identifying important customer relationship' in Table 1 shows how widely companies define the measurements for the STREC. However, these varied measurements for six companies can be identified as one of the three basic measurements described in the prior paragraph, the total amount, the total number or consecutive period of transactions. See 'Categories of measurements' in Table 1 and remember this result cannot be generalized because the samples were not selected at random.

Table 1: The Measurements for Identifying the Important Customer Relationship

| Types of Business | Sales Volume (Million USD) | Major Customers | Measurement for Identifying Important Customer Relationship | Categories of Measurements | | | |
|---|----------------------------|-------------------------|---|----------------------------|--------|--------|--------|
| | | | | Amount | Period | Number | Others |
| Consumable items wholesale | 17 | Hotels | More than continual 10 thousands USD sales per month from major 5 items for 5 consecutive years | ○ | ○ | | |
| Foods wholesale | 15 | Retailers | Credit selling approval based on the number, the value and the consecutive period of sales | ○ | ○ | ○ | |
| Temporary employment agency | 2 | Small companies | Decision by president | | | | ○ |
| Business application software developer | 83 | Accounting departments | Continual sales years | | ○ | | |
| Apparel manufacturer | 333 | Retailers | Decision by regional sales manager | | | | ○ |
| Treatment device manufacturer | 42 | Parts manufacturer | More than 9 times transaction per year | | | ○ | |
| Auto parts manufacturer | 600 | Auto parts manufacturer | More than 83 million USD sales for 3 consecutive years | ○ | ○ | | |
| Pharmaceutical manufacturer | 1,667 | Hospitals | More than 5 consecutive years' sales | | ○ | | |

Source: Suzuki (2008)

The Transaction Data Recorded for Each Customer

To measure the STREC, the transaction data must be recorded for each customer. Moreover, transactions should be recorded with each customer’s identification such as the name enabling a company to identify to which customer segment each customer belongs.

Consider the possibility of recording the customer identification with each transaction in two types of the commerce: business to business and business to consumers. In business to business commerce, the customer identification is usually attached to each transaction record, while in business to consumer commerce, it depends on the industry. Many industries such as airlines, hotels, hospitals, communications, and mail-order, require the customer to register and thus store the transaction records by name. The

other industries such as retail and restaurants don't customarily ask for any customer registration and have anonymous transaction records; but they can collect the transactions of important customers as named records, by using frequency or loyalty programs. Additionally, in Japan, the spread of electronic settlements on a company credit card or the wallet-cell phone is making it easier for the company to introduce frequency or loyalty programs.

Profit and Loss Statement of FRA

By matching costs with the revenues calculated according to the four customer segments, a basic form of profit and loss statements for the customer relationship evaluation can be produced (as shown in Figure 1). Note that this statement supposes that costs are categorized into traceable and untraceable costs to the customer segment and into variable and fixed costs based on a cost driver, the sales amount.

| | | Total | New Customers | Non-fixed Customers | Fixed Customers | Defectors |
|----------------------------|--------------------|-------|---------------|---------------------|-----------------|-----------|
| Sales | Product A | | | | | |
| | Product B | | | | | |
| | Product C | | | | | |
| | Sub total | | | | | |
| Trace able variable cost | Cost of goods sold | | | | | |
| | Operation expense | | | | | |
| | Sub total | | | | | |
| Marginal profit | | | | | | |
| Trace able fixed cost | Cost of goods sold | | | | | |
| | Operation expense | | | | | |
| | Sub total | (b) | | | | |
| Contribution Margin | | | | | | |
| Untrace able fixed cost | Cost of goods sold | | | | | |
| | Operation expense | | | | | |
| | Sub total | (c) | | | | |
| Operation profit | | | | | | |

Figure 1: The Basic Form of Profit And Loss Statement

Source: Based on Suzuki (2007)

OVERVIEW OF JAPANESE SEMICONDUCTOR DISTRIBUTORS

Applicability of FRA

Semiconductor distributors engage in a typical business to business commerce—purchasing semiconductors from manufacturers and selling them to users, such as consumer electrical appliances or industrial equipment makers. Thus, semiconductor distributors deal with relatively smaller number of customers than companies engaging in business to consumer commerce. In general, semiconductor distributors can collect transaction data recorded for each customer, measure the STREC, and segment its customers based on the STREC.

Functions of Semiconductor Trading Companies

Semiconductor trading companies have three business functions: Sales and marketing (S&M), inventory and distribution (I&D), and finance (Takajo, 2011).² S&M includes acquiring and retaining customers (i.e. users of semiconductors) and supporting them technically. I&D procures products from manufactures, sells them, and distributes them to customers. The finance function is responsible for customer lending and credit.

Relationship with Manufacturers

Although the FRA's main focus is customer relationship, for distributors, supplier or manufacturer relationship is an important factor. This is because the strength of relationships with manufacturers affect how distributors develop the three functions—S&M, I&D, and finance—to build relationships with customers or users of products the manufacturers produce.

Keiretsu Trading Companies

Based on relationship with manufacturers, Japanese semiconductor trading companies are divided into two types: Keiretsu trading companies

² There are other functional divisions for semiconductor trading companies. For example, Murayama and Osada (2006) categorize them as sales, finance, inventory, goods storage, distribution, marketing, and circuit design and software development. Taji and Kai (2009) group them into exchange (purchasing and selling), inventory and storage, finance, and information gathering.

and independent trading companies. The former deal almost exclusively with a major Japanese semiconductor manufacturer, and the latter distribute semiconductors of foreign manufacturers and small and medium-sized Japanese manufacturers.

During the 1980s, Japanese semiconductor distributors dealt almost exclusively with a major domestic manufacturer, because manufacturers preferred decreasing the number of distributors. If manufacturers dealt with many distributors, the competition between distributors would become fierce, and then they would start discounting prices of semiconductors in order to obtain more customers (i.e. semiconductor users). The price competition would also deteriorate profitability of manufacturers, because trading companies would try to purchase semiconductors at a lower price. To avoid price collapse, Japanese semiconductor manufacturers dealt with only several Keiretsu trading companies. At that time, integrated distribution benefitted rapidly growing semiconductor manufacturers because Keiretsu alleviated price competition between distributors, suppressed product price fluctuations, and reliably supplied products to customers. Keiretsu trading companies also used these advantages to expand their business during an era of vigorous growth (Ishii, 2014, 2015).

Independent Trading Companies

These business practices changed after the 1986 US–Japan semiconductor agreement. This agreement was concluded because trade conflict between Japan and the US over the trade in semiconductors were deteriorated after the share of Japanese semiconductors overtook the share of the US. The agreement prescribed to raise the share of imported semiconductors in the Japanese domestic market to 20%. Sellers of imported semiconductors —called independent trading companies— considerably benefitted (Takajo, 2011) and today they sell not only imported goods but also goods made by medium-sized Japanese semiconductor manufacturers (Taji & Kai, 2009).

Relationships with Manufacturers and the Three Functions

Keiretsu trading companies have fixed relationship with its manufacturer, while independent trading companies have flexible

relationships with many manufacturers. This difference influences semiconductor distributors' three functions, which in turn impacts financial performance. According to Ishii (2003), most Japanese semiconductor distributors founded during the growth era of Japanese semiconductor industry belonged to Keiretsu trading companies, and had only I&D and finance functions. They lacked S&M functions because semiconductor manufacturers performed them for trading partners. Therefore, Keiretsu trading companies' strengths were close relationships with the manufacturer and steady commercial access to customers. However, after Japan's semiconductor industry declined in the 1990s, Keiretsu companies had to find their own customers; that is, they had to develop independent S&M functions.

That task proved difficult because the environment for its customers was changing. As figure 2 shows, Japanese electric machine makers, semiconductor users, transferred their factory overseas. Japan's major purchasers of semiconductors made mass-market products such as TVs, air conditioners, and copiers and were shifting production to China or Southeast Asia for cheaper labor. Japan's remaining semiconductor purchasers primarily manufactured small-lot products such as industrial equipment, large LED illumination, and medical equipment. Small-lot manufacturers needed more complex and therefore customized semiconductors.

FRA AT COMPANY A

In this section, we describe the detail of the introduction and operation of FRA at Company A. We used archival data provided by the CEO of Company A. In addition, there is a published case study of FRA at Company A in some journals (Ishii 2014, 2015; Suzuki & Ishii, 2015).

Overview of Company A

Company A was founded in 1979 as a Keiretsu partner of Company B, a major semiconductor manufacturer. The parent company of Company A is a holdings company and has seven consolidated subsidiaries. Company A is the largest of the seven. Its 2013 annual sales of ¥5 billion (¥7 billion consolidated) qualify it as a small and medium-sized enterprise.

Company A grew with Company B as Japan's semiconductor industry prospered. During that time, Company B's sales products in Company A's sales was approximately 100%. However, by 2002, Company A recognized it excessively depended on Company B as the industry collapsed. It needed to acquire new customers and convert them into fixed customers itself. In short, Company A knew it had to develop an S&M function.

As a Keiretsu trading company, that task turned out challenging to Company A. In the changing environment of Japanese semiconductor industry from mass production to small lot production, Company A needed new capabilities to meet the needs of semiconductor users without support from Company B. However, Company A did not have flexibility to adapt itself to the changing environment. This was because Company A had been dependent on Company B since it was founded, and because the culture of Company A was not customer-oriented, but supplier-oriented. In sum, at that time, employees of Company A put emphasis on I&D and finance functions to support Company B rather than S&M function to support their customers.

Nevertheless, the CEO of Company A decided to embark on acquiring technical support skills and on developing its own products to gain a strong S&M function. This was because the CEO confirmed that having in-house products enabled Company A to acquire and keep customers in segments outside those chosen by Company B. After all, Company A successfully launched its original product in 2007. Furthermore, two of Company A's recent acquisitions had begun to get on track. Taking advantage of the S&M function for its own products, Company A was able to acquire and retain users without Company B. It transformed from a simple trading company into a trader-manufacturer.

Company A initiated FRA in 2006, just before launching the in-house product, and since then has gradually ingrained it into the organization. FRA's introduction and operation can be divided into four periods: defining customer segments during 2006–2007; FRA reporting by the CEO during 2008–2010; FRA analysis by a middle manager during 2011–2012; and redefining customer segments and FRA-based strategic planning and budgeting in 2013.

2006–2007: Defining Customer Segments

Company A introduced FRA to determine how successfully it had escaped dependence on Company B through its new S&M function. Its CEO required managers to attend FRA training from November to December 2006. As stated in the second section of this paper, FRA segments customers based on the STREC, and the most important segment is fixed customer. Then training entailed defining their departments' fixed customers and estimating profit and loss statements (P&L) by customer segments.

However, some managers defined fixed customers based on existing sales, and that was problematic in projecting sales generated by the new S&M function. At that time, Company A had just begun to introduce products into the market, and they were 1%–2% of sales. Thus, sales-based definitions would categorize customers generated by Company B as fixed customers.

After heated discussions, managers decided upon the customer segmentation demonstrated in Table 2. The identity of the customer's S&M agent was the first criterion. If customers were acquired through Company A's S&M function, they would be perceived as acquired independently from Company B. This criterion was established irrespective of Company A acquiring customers under its new strategy. However, even customers acquired by Company A would not necessarily contribute to its financial performance. Therefore, managers adopted sales for the past six months and frequency of transactions as criteria to segment customers created by their S&M into fixed, semi-fixed, and non-fixed. Customers not acquired through Company A's S&M function were not segmented as fixed or semi-fixed.

Table 2: Customer Segments at Company A

| Sales and marketing agent | Sales for the past 6 months | Frequency of transactions | Customer segments |
|---------------------------|-----------------------------|---------------------------|----------------------|
| Company A | 6 million yen | Every month | Fixed customers |
| | | Not every month | Semi-fixed customers |
| | 2 million – 6 million yen | Every month | |
| | | Not every month | Non-fixed customers |
| | 1 – 200 million yen | Every month | |
| | | Not every month | |
| Others | More than 1 yen | Every month | |
| | | Not every month | |

2008–2010: FRA Reporting by the CEO

After segmenting customers, the CEO tasked the chief financial officer (CFO) and the chief sales officer (CSO) to collect and analyze data for FRA. Thereafter, the CEO annually explained to all employees how their strategy was working. However, the CEO did not realize that merely explaining results did not influence employees’ behavior. In other words, FRA was not being used as a management control system.

Even so, FRA was a useful accounting tool, even at that time. The CEO could easily understand the financial effects of the new strategy—i.e., acquiring new customers and converting them into fixed customers by selling Company B’s products and its own. For example, the P&L based on FRA in 2009 is presented in Table 3. Although Company A lost ¥65 million during the global financial crisis, the CEO saw positive signs in the P&L. First, the operating loss was only 1.4% of sales. The CEO covered that loss by cancelling his key executive insurance (omitted in Table 3). Second, the sales ratio of in-house products rose from 1%–2% (calculation omitted in Table 3) in 2006 to 17% (¥743 million divided by ¥4,557 million) in 2009. Finally, fixed customers accounted for 87% of the sales of Company A’s products (¥650 million divided by ¥743 million). Company A was steadily acquiring fixed customers for its products. These results convinced the

CEO that the new strategy was effective and that FRA described its effects on performance.

Table 3: Profit and Loss Statement in 2009 (million yen)

| | | Total | Non-fixed customers | Semi-fixed customers | Fixed customers |
|--|---------------------|-------|---------------------|----------------------|-----------------|
| Sales | In-house products | 743 | 80 | 13 | 650 |
| | Out-source products | 3,814 | 1,394 | 355 | 2,065 |
| | | 4,557 | 1,474 | 367 | 2,716 |
| Variable costs | Cost of goods sold | 4,075 | 1,357 | 299 | 2,418 |
| | S&G expenses | 81 | 26 | 7 | 48 |
| | | 4,156 | 1,384 | 306 | 2,466 |
| Marginal profit | | 401 | 90 | 61 | 250 |
| Customer segment level fixed costs | | 259 | 84 | 21 | 154 |
| Customer segment level contribution margin | | 142 | 6 | 40 | 95 |
| Company level fixed costs | | 207 | (b) | | (a) |
| Operating profits | | -65 | | | |
| Fixed operating profits* | | -112 | | | |

* Fixed operating profits = (a) – (b)

2011–2012: FRA Analysis by a Middle Manager

Assured of FRA's ability to capture the strategy's financial impact, the CEO directed a middle manager, the Chief Administrative Officer (CAO), to analyze financial performance based on FRA so FRA would penetrate companywide. Table 4 presents the CAO's 2014 P&L. Operating profit reached ¥92 million in 2012 after the ¥65 million loss in 2009. Comparing 2009 and 2012 contribution margins with customer segment convinced the CAO of FRA's usefulness. Sales to fixed customers rose ¥1,246 million (from ¥3,962 million in 2012 to ¥2,716 million in 2009), to non-fixed customers declined ¥675 million (from ¥795 million in 2012 to ¥1,474 million in 2009). These results indicate that S&M for Company A's products drove operating profit. If Company A had continued to depend on Company B and persisted only with I&D and finance, it might have posted an operating loss in 2012.

Table 4: Profit and Loss Statement in 2012 (million yen)

| | | Total | Non-fixed customers | Semi-fixed customers | Fixed customers |
|--|---------------------|-------|---------------------|----------------------|-----------------|
| Sales | In-house products | 1,214 | 212 | 53 | 948 |
| | Out-source products | 3,940 | 583 | 344 | 3,014 |
| | | 5,154 | 795 | 397 | 3,962 |
| Variable costs | Cost of goods sold | 4,488 | 705 | 348 | 3,435 |
| | S&G expenses | 118 | 18 | 9 | 90 |
| | | 4,606 | 724 | 357 | 3,526 |
| Marginal profit | | 549 | 72 | 40 | 437 |
| Customer segment level fixed costs | | 269 | 42 | 21 | 207 |
| Customer segment level contribution margin | | 279 | 30 | 20 | 230 |
| Company level fixed costs | | 188 | (b) | | (a) |
| Operating profits | | 92 | | | |
| Fixed operating profits* | | 42 | | | |

* Fixed operating profits = (a) – (b)

2013: Redefining Customer Segments and FRA-Based Strategic Planning and Budgeting

Convinced of FRA's usefulness in measuring the financial outcome of relationship marketing, Company A introduced a three-year strategic plan and an annual budgets based on FRA. At this stage, FRA began to be used as the company's core management control system.

When preparing a strategic plan and annual budgets based on FRA, the CEO and CAO revised the customer segments (Table 5) to assure that information provided by FRA appropriately reflected their strategy. Redefining fixed customers made FRA information more useful because the fixed customers were acquired through the successful strategy.

Table 5: New Customer Segments

| Frequency | Relationship period | Sales and marketing agent | Customer segment |
|--|---------------------|---------------------------|---------------------|
| 1 transaction or more than 1 transactions for a year | Less than 3 years | Company A | New customers |
| | | Other | |
| | 3 years or more | Company A | Fixed customers |
| | | Other | Non-fixed customers |
| No transaction for a year | | | Defectors |

Source: Based on Ishii (2014, 2015)

The frequency of transactions is the first criterion in Table 5. Customers who did not have any transaction with Company A during the past year are categorized as defectors. The second criterion is the length of relationship (relationship period). Customers who maintained a relationship fewer than three years are classified as new customers because Company A’s strategic plan has a three-year horizon. New customers are those that had no relationship with Company A when its strategic plan was formed.

Customers who made at least one transaction per year during the past three years or more were grouped into two segments—fixed and non-fixed—based on the third criterion. Fixed customers were acquired through Company A’s S&M function. Non-fixed customers came from elsewhere, especially Company B.

Unlike Table 3, the new segmentation in Table 4 seemingly includes no criteria involving sales or profits. However, Company A subdivided fixed customers into subcategories A and B. Fixed customers A are those whose gross margins meet or exceed the target. Gross margins of fixed customer B do not. This grouping aided managers in identifying the customers who make transactions without large discounts.

EFFECTS OF FRA ON EMPLOYEES’ AWARENESS AND BEHAVIOR

The use of FRA as a management control system in Company A influenced the employees’ awareness and behavior to achieve goal congruence. In July 2014, we interviewed 12 core employees of Company A (Table 6) to clarify

whether FRA really influenced employees. We conducted six 30-minute interviews with paired subjects. We uncovered three influences of FRA on employees: acceptance of the relationship marketing strategy; a deepened shared understanding among departments; and a greater understanding of how to achieve goals.

Table 6: List of Interviewees

| Pair | Position | Department | Year of Entering Company A |
|------|--|----------------|----------------------------|
| 1 | Chief Administration Officer | Administration | Since before 2004 |
| | Group Leader | Procurement | Since before 2004 |
| 2 | Chief Sales Officer | Sales | Since before 2004 |
| | Team Leader | Sales | Since before 2004 |
| 3 | Corporate Officer | Administration | 2009 |
| | Assistant | Administration | Since before 2004 |
| 4 | Chief Executive Officer of the IT Subsidiary | IT subsidiary | Since before 2004 |
| | Group Manager | IT | Since before 2004 |
| 5 | Corporate Officer | Sales | Since before 2004 |
| | Group Leader | Sales | Since before 2004 |
| 6 | Team Leader | Logistics | 2007 |
| | Team Leader | Accounting | 2007 |

Acceptance of Relationship Marketing Strategy

Company A had only an I&D function and a finance function for 26 years as a Keiretsu partner of Company B. During the period, Company A was a supplier-oriented organization. After the CEO decided to turn around its strategy, it became independent of Company B by selling and marketing its own products. In other words, the CEO made Company A a customer-oriented organization. However, at first this new direction discomfited Company A's employees, who had developed strong ties with Company B. The CAO said:

“We were getting along with Company B. Having a good relationship with it, the CEO, in anticipation of the future, started to say we would do different things from what we did before. It was frankly difficult for us to answer ‘Yes, sir.’ We had 26 years of history with Company B. We believed we would do well if we had continued to do business with only Company B.”

Nonetheless, FRA reports motivated employees to accept the new relationship marketing strategy, because FRA quantitatively showed the financial outcome of the new strategy. The CAO added:

“FRA quantitatively showed that our business made profits as a result of accepting new things. Then employees gradually started thinking “We have found what our CEO says is this sort of thing. To carry it out, we must acquire new customers, introduce new goods, and develop new demand in a new market.” FRA was really an important system in order for us to be able to understand our CEO’s intention.”

Deepened Shared Understanding among Departments

After recognizing the effectiveness of the new strategy, each employee began to understand his/her and other departments’ strategic roles. The departments need a shared language in order to understand their respective roles in achieving a common purpose. The CEO of an IT subsidiary, who is responsible for Company A’s FRA system, pointed out that FRA, together with IT solutions and other management systems, functioned as a shared language. This is what he had to say:

“All employees have come to use a common language. We introduced FRA, IT solutions, and other management control systems. We also introduced management manuals based on ISO 9001. These are the main rules for quality at our corporation. Having explained FRA, IT solutions, and other management control systems to all employees, they have adopted a common language and developed a mutual understanding. As a result, they are able to have discussions easily with each other and share their ideas and the vision provided by the CEO. This is our company’s significant change.”

Another IT person, who built the FRA system with the CEO of the IT subsidiary, said that FRA assists him in distinguishing his work from other departments’ roles. This is what he had to say:

“Applying the concept of FRA to our work, we can understand the meaning of our work... We cannot do whatever we want to do, so we should focus on reducing variable and fixed costs. We start thinking that if we can reduce costs, we will. FRA is our common language. Using its framework, we understand the jobs of the sales and logistics departments and relationships with customers. Then we understand the meaning of our work.”

Understanding How to Achieve Goals

Once each department understands its strategic role, goal-setting follows. Company A set the achieving of break-even by generating fixed revenues as the central goal for relationship marketing. There are two effective ways to achieve the goal: increasing fixed revenues and reducing fixed costs. The sales department is responsible for the former; overhead departments such as administration and IT are responsible for the latter.

Increasing Fixed Revenues

The sales department clearly understood the goal of achieving break-even through revenues from fixed customers. Although many salespeople referred to fixed revenues and fixed costs, the Chief Sales Officer’s comment was the most representative:

“The most important thing we do now is cover fixed costs with revenues from fixed customers. The aim of FRA is to make our company’s operation stable even if sales are volatile. The most important mission is to develop fixed customers. As we are in charge of sales, we must consider how to grow new customers into fixed customers.”

The way to increase fixed revenues is well described in FRA. Company A’s new strategy was designed to acquire new customers and transform them into fixed customers by taking advantages of their in-house products. FRA information enabled employees to understand the story. A team leader in Sales commented:

“Assuming there are some defectors among fixed customers, the purpose of our sales activities is acquire new customers,

grow them into fixed customers, and reduce the rate of defectors from fixed customers to zero. With this in mind, we do our sales activities. I think that the means of achieving the purpose is strengthening commercial streams. Thus, basically we sell our key parts, cross-sell other goods, and strengthen commercial streams with our users. This enables us to grow fixed customers and reduce defections.”

It should be noted that Company A acquires fixed customers through its marketing initiatives, not Company B’s. The Chief Sales Officer emphasized that it would not be enough for Company A to sell Company B’s products. This is what he had to say:

“Basically... our main business was route sales (to users of Company B)... but now we must go beyond it. We will have to acquire new customers or grow our in-house electric parts and other new goods into new revenue bases in the next five years.”

Reducing Fixed Costs

Another way of achieving Company A’s strategic goal is to reduce fixed costs. Many overhead staff said that FRA enhanced awareness of reducing fixed costs. An assistant in administration made a representative comment:

“As overhead staff, we cannot direct things such as increasing fixed customers... so we should doubt whether new contracts and orders are valid and reduce fixed costs. I changed my mind about my work. I feel that not only I but the other managers and employees realize that we must reduce fixed costs. Our awareness of cutting costs has been enhanced.”

Cutting fixed costs is expected to reduce the burden on the sales department in two ways. First, reducing fixed costs lowers the revenues they must earn to reach the breakeven point. The CEO of the IT subsidiary said:

“As our operations always strike fixed costs, if we reduce fixed costs drastically, the break-even point will shift downward. Even if the level of sales and the number of customers do not change, our operations can reduce the breakeven point. Reducing fixed costs drastically is our work.”

Second, interestingly, overhead staff believes that reducing fixed costs means more fixed revenue. A team leader responsible for accounting stated:

“We now look to fixed customers as well as fixed costs. For example, support departments invest in a system for the purpose of reducing fixed costs. However, systematically reducing fixed costs also helps our customers. For instance, introducing a new system reduces paperwork for salespeople. While this leads to the reduction of fixed costs, it also enables sales people to make more effort to gain fixed revenues. Furthermore, they can spend more time developing supplier relationships. This enables us to procure more suitable goods for our customers.”

CONCLUSION

This study has examined the introduction of FRA at a Japanese semiconductor trader and considered how it affected the implementation of relationship marketing. At Company A, only senior management used FRA to evaluate strategy during the six years since its introduction. After they became convinced FRA could guide relationship marketing, they redefined customer segments to bind FRA more closely to that strategy by preparing their strategic plan and annual budgets based on FRA. Our interview research clarified that FRA helps Company A toward goal congruence by motivating employees to accept strategic change, deepening shared understanding among departments, and facilitating an understanding of how to achieve goals.

Future research should investigate customer segmentation as an enhancement to FRA. Managers redefined customer segments so that FRA could reveal more about the strategy. Improper segmenting could have forfeited FRA's potential. As the CAO commented:

It is difficult to define customer segments... Different companies use different criteria to define fixed customers and products. If criteria were loosened, there would be too many fixed customers. Therefore, I find it difficult to define customer segments. Fortunately, our company can define product segments easily.

As I said, Company B's products were first, and next came our in-house products. Although products are easily segmented, customers are difficult.

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