

# **Synchronizing Business Evolution and Human Resource Management Strategies**

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## **Abstract**

The authors discuss a framework for business evolution that analyzes the output of a business (goods or service) and the process by which that output is produced. The authors also propose that a company must dynamically synchronize its human resource management (HRM) strategies to the stages of its business evolution.

## **1. Creating New Businesses**

### **(1) New Businesses**

Advances in technology have led to the exponential increase in the exchange of information and resources among business partners, suppliers and customers, and in the acceleration of change in the global marketplace. Boundaries between these market players have become blurred, bringing about dynamic innovation in their interaction and promoting the creation of new businesses. The definition of new business used in this paper is any new business model based on new technology, organization, markets or strategies, whether it is a venture established by independent individuals or one established within or by an existing corporation.

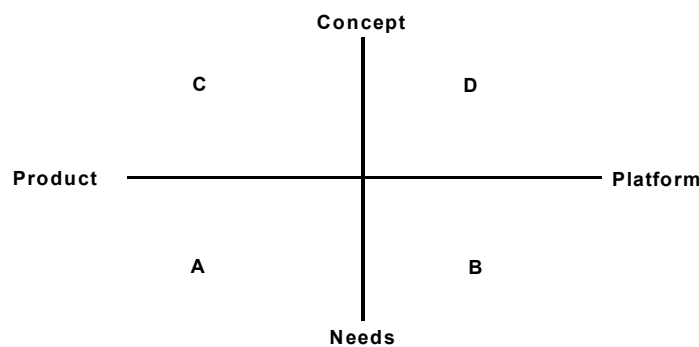
Individually-established ventures have been relatively uncommon in Japan after the high growth period following World War II. One of the main reasons for this is that major Japanese corporations and government bureaucracies have routinely swept up the most talented young graduates, who have tended to prefer the security of life-time employment at a respected company and conformity to social norms over risky entrepreneurship. This is still true today despite the fact that the Ministry of International Trade and Industry has been trying to support young entrepreneurs and activate new businesses.

### **(2) Analyzing Business Creation**

The operation of businesses can be divided into three phases – input, process and output. It follows then that a business can be categorized by a two-axis matrix representing the characteristics of its output (goods and services) and the process by which these are produced (Nadler, 1963).

The two extremes of the output axis are “goods and services that are positioned as a single product” and “goods and services that are positioned as a general platform for other products.” The two extremes of the process axis are “suggesting new concepts for customers” and “meeting customer needs.” With these two axes, the following matrix can be drawn.

**Figure 1: Axes for Business Creation**



Businesses that are categorized in the A cell are those that meet customer needs and provide a more or less independent product or service. Matsushita Electric is a corporation with typical A cell businesses; most of its products are developed through incremental improvements to meet the demands of consumers rather than through breakthrough innovations. Kellogg's, Nabisco and other such manufacturers of packaged goods that meet demand for ready-to-eat food are also examples of A cell businesses.

Businesses that are categorized in the B cell are those that meet existing customer needs while providing a platform for other products and services. Before the launch of Windows, Microsoft's MS-DOS business was in the B cell stage as the corporation incrementally developed upgrades by reviewing the existing demands of third parties and users. In other words, it provided a product that was made to be used with other software, but did not represent an innovative concept. Other examples of such B cell businesses are department stores that provide space for brand name tenants that are venues for in-park dining establishments and character goods shops. These businesses provide a platform for other products that satisfy and meet the existing needs of customers.

In contrast, C cell businesses are those that suggest new concepts to customers that are more or less independent goods/services. Sony is an example of a corporation with such businesses; many of its products were developed out of the ideas, interests and visions of its product development staff and were launched with an emphasis on making new markets rather than on meeting current consumer demand. For example, Sony's Aibo dog robot, which was launched last year as the world's first home-use entertainment robot, is a new concept that is building and targeting a new market as an independent stand alone product. Despite its high price, Sony sold out of the robot shortly after product launch.

Businesses that are categorized in the D cell are those that suggest a new concept to customers while also providing a platform for other goods and services. Walt Disney and Disneyland are such businesses as they offer new concepts in entertainment but also act as a stage for other products and services. When first launched, Apple's Macintosh was a D cell product as it represented a new concept in graphical user interface and personal computing, while being a platform for application software such as word processors, desk top publishing tools and CAD systems. Many Internet businesses such as eBay, an on-line auction forum when viewers can post their own items for sale, and Streamline, an

on-line retailer that offers home delivery of a wide range of goods including fresh and packaged food products, home and health products, and video and game titles.

**Table 1: Characteristics of Businesses by Cell Type**

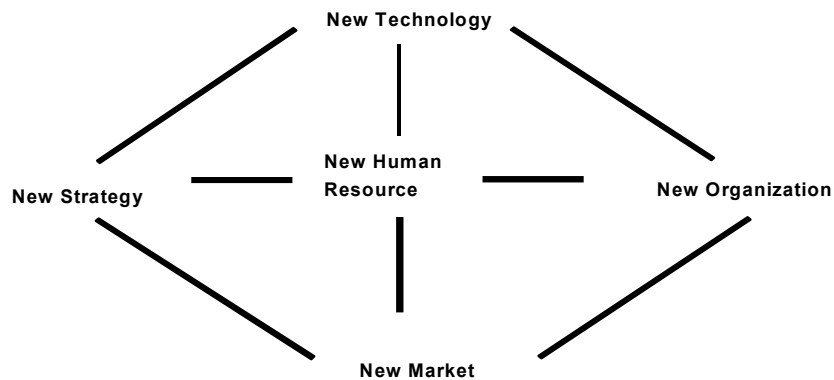
| Type   | Characteristics  |
|--------|--|
| Cell A | Develops products according to customer needs                        |
| Cell B | Develops a platform for other businesses according to customer needs |
| Cell C | Suggests a concept for customers with a product                      |
| Cell D | Provides a platform for other businesses with a new concept          |

## 2. Synchronizing Business Evolution and Human Resource Management (HRM)

### 2.1 Important Human Resources for Business Evolution

The elements by which new businesses can be created are new technology, new organization, new markets or new strategies. These elements are supported and linked by human resources. This makes designing and implementing an appropriate human resource management strategy one of the most important factors for successful business creation and evolution.

**Figure2: Elements of Business Creation**



The definition of human resources used in this paper includes internal and external personnel (outsourced or those of business partners). It also includes executive management and functional specialists. This paper also defines two types of job functions that are needed for business creation – business producers and technical and professionals experts.

Business producers are persons – in many cases from management – who supervise and orchestrate the business creation. A producer must have a good theme for the new business and must be able to edit the knowledge and value

base of the persons involved. In many cases the producer will come from inside the company, but he/she can be recruited from external sources for business creation.

Technical and professional experts are the functional specialists, such as technical and marketing professionals, who are involved in the operation of the business. The experts must have professional and technical knowledge and can be internal or external human resources. In the past, the usage of external staff has not been as common in Japan as it has been in other industrialized markets, due to the country's group oriented culture.

## **2.2 HRM Strategies for Business Evolution**

The authors propose that a successful human resource management strategy must be synchronized with the path of business evolution. Companies must acquire the appropriate type of producers and experts (both internal and external) for the particular stage of business evolution.

The benefits of using internal human resources are continuity, loyalty and shared value and knowledge base. The usage of external human resources, on the other hand, allows for flexibility, response to market uncertainty, professional expertise and fresh knowledge. Also a company can lower fixed costs by using external human resources based on need. Cisco Systems, which provides networking solutions that connect computing devices and computer networks, for example, has been able to lower its sales costs by actively recruiting resellers, distributors and partners globally through its home page, and by widely outsourcing production. The usage of the human resources of business partners also allows for access to new channels and connections, as well as risk sharing.

As discussed in preceding sections, businesses can be categorized based on their output. When moving along the output axis from a product-based to a platform-based business, businesses become more oriented toward a broad-based system. Accordingly, businesses that are platforms require producers and experts that can manage and operate a broad-based system encompassing the external environment of business partners and customers. This also means that the usage of and coordination with the human resources of business partners becomes important for platform businesses.

The second axis, the process axis, categorizes businesses by whether they meet present customer needs or suggest a new concept for customers. Moving along the axis from left to right, a business becomes more conceptual. For businesses that are categorized as new concepts, the influence and power of the producer is great. He/she must be visionary and have an innovative and unique theme to offer. Famous visionary producers include Sony's Masaru Ibuka, who created various breakthroughs in technology such as the transistor radio, and Netscape's Marc Andreessen, who developed the Mosaic browser prototype as an undergraduate student. In contrast, for businesses that meet customer needs with incremental improvements, practical experts that can accurately define customer and market needs are essential; although a good producer with an in-depth understanding of the market is also necessary, he/she alone cannot shift through and analyze all the market/customer information to clarify needs.

## (1) Cell A Businesses

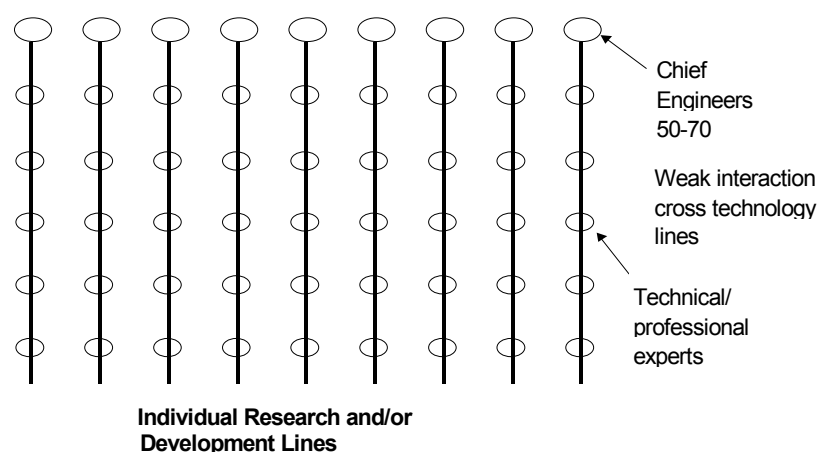
The producer of an A cell business is faced with the least complex task, and must be focussed on producing an independent product that meets customer needs. His/her business theme is not visionary or necessarily unique, and is developed in cooperation with experts. An example of a producer of an A cell business is Konosuke Matsushita, founder of Matsushita Electric. He developed products that were based on incremental improvements to meet customer needs. His two-slot electric attachment plug is an example of one such a product.

The experts of A cell businesses need to be focussed on market and customer needs and must strive for incremental improvements in products and services. Emphasis is mainly on internal experts, but external experts such as temporary staff can be utilized when necessary.

Toshiba and Hitachi, both comprehensive manufacturers of electronic and electrical products, have important experts to develop their businesses, which mainly offer independent products/services that are based on incremental improvements<sup>1</sup>. These important experts are the 50 to 70 chief engineers who are in charge of individual technology lines at each of these corporations extensive R&D and product development operations. As each of these technology and research lines are vertically aligned with weak horizontal interaction across business lines, the chief engineers do not interact frequently with engineers of other lines. Thus, they do not combine their knowledge to develop innovations based on fusing different technologies.

Toshiba's Corporate R&D Center is comprised of 19 research groups based on product area. Hitachi's R&D operation is made up of 35 laboratories engaged in a wide range of studies in the fields of electronics, software, energy, and new materials.

**Figure 3: Vertically Structured Technology Lines**



## (2) Cell B Businesses

<sup>1</sup> There are, however, some exceptions such as Toshiba's Dynabook business and front end processor that made it possible for users to input Japanese characters using a QWERTY keyboard.

Producers of a B cell business are faced with slightly more complex tasks as he/she must build and manage a network of business partners that supply goods and services to the platform. In other words, the producer must be focussed on motivating and developing synergy with business partners as well as on the market, and must have inter-organizational and systemic skills. As with A cell producers, a B cell producer does not promote his/her theme. Rather, he/she develops a product/service in cooperation with experts and business partners based on incremental improvements and customer needs.

An example of a B cell producer is Masao Ogura, former chairman of the courier service Yamato Unyu, a business that met customer needs for an over-night, home- delivery courier service. By enlisting partnerships from a large network of retail outlets, such as convenience stores and other small mom and pop stores that act as pick up centers for packages, he was able to make his service widely available and accessible to consumers.

Hiroshi Taguchi, CEO of Misumi Co., is also representative of a B cell producer. The company is a pioneer in the sale and distribution of standard components for press dies, plastic molds and other industrial products. Taguchi has developed a unique business model based on strategically outsourcing parts to lower costs and adapt swiftly to a changing environment. Its business position is to act as a “purchasing agent” for its customers rather than a “sales agent” for manufacturers. The company collects the needs of its over 55,000 industrial customers and outsources production to its network of over 350 manufacturers. According to the company’s home page, this model allows for both specialized service and product standardization. The latter enables “economies of scale for savings that are passed on to its customers.”

For B cell businesses, important experts include a company’s own employees as well as those of its business partners. These experts must have inter-organizational coordination and systemic skills to work together. For Yamato Unyu, its “sales drivers,” who pick up and deliver packages, and the staff of its retail store partners are important for its business success.

### **(3) Cell C Businesses**

A C cell producer needs to be given the freedom to develop the new concept product/service within the boundaries of the company’s corporate mission and policy. An example of a C cell business producer is Hirotaro Higuchi of Asahi Breweries who was the driving force behind the development of Asahi Super Dry, a new concept beer product that changed the once static Japanese beer market and is now the best selling beer in Japan. Acclaimed computer game software creators Shigeru Miyamoto of Nintendo, Hironobu Sakaguchi of Square and Yuji Horii of Enix are also examples of C cell business producers. The games they have created – the Zelda series, the Final Fantasy series and the Dragon Quest series, respectively – represent new concepts in game entertainment and have been hugely successful<sup>2</sup> and long running.

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<sup>2</sup> Square has sold over 17 million copies of Final Fantasy. Enix has sold over 21 million copies of Dragon Quest since its launch in 1985.

Other C cell producers are 1) Aki Maita, the creator of Bandai's tamagochi, a portable and virtual pet that will "die" unless it is cared for (virtually fed, cleaned, etc. by user), and 2) Tomoko Masuda, the person behind NTT's pocket e-mail terminal, the first of its kind in Japan. Masuda states that she had to work hard to convince the predominately male NTT management that a cute and convenient e-mail terminal would be a hit among young girls and women who typically are very interested in new methods of communicating with friends.

Experts of C cell businesses should follow the lead of the producer and must have operational and professional skills. Internal and external (outsourced or those of business partners) personal can be used when necessary.

**Table 2: Characteristics of Producers and Experts**

| Type   | Human Resource | Characteristics   |
|--------|----------------|---|
| Cell A | Producers      | - Oriented toward market/customer needs                       |
|        |                | - Theme developed with experts                                |
|        | Experts        | - Oriented toward market/customer needs                       |
|        |                | - Operational, technical professional skills                  |
| Cell B | Producers      | - Emphasis on internal experts                                |
|        |                | - Oriented toward market/customer needs and business partners |
|        |                | - Theme developed with experts                                |
|        | Experts        | - Interorganizational, systemic skills                        |
|        |                | - Oriented toward market/customer needs                       |
| Cell C | Producers      | - Interorganizational, systemic skills                        |
|        |                | - Emphasis on both internal and external experts              |
|        |                | - Oriented toward market/customer and on own theme            |
|        | Experts        | - Role of producer is great                                   |
|        |                | - Follows lead of producer                                    |
| Cell D | Producers      | - Operational, technical professional skills                  |
|        |                | - Emphasis on internal experts                                |
|        |                | - Oriented toward business partner and own theme              |
|        | Experts        | - Role of producer is great                                   |
|        |                | - Interorganizational, systemic skills                        |
|        |                | - Follows lead of producer                                    |
|        |                | - Interorganizational, systemic skills                        |
|        |                | - Emphasis on both internal and external experts              |

#### (4) Cell D Businesses

As with C cell producers, a producer of a D cell business must have his/her own visionary concept. The producer must manage and coordinate business partners as well.

Ken Kutaragi, president of Sony Computer Entertainment, created Sony's Playstation and is an example of a D cell producer. To develop a digital entertainment business, Kutaragi requested to be transferred to digital information processing research early in his career at Sony (between the years of 1983 to 1988). During this time, he hoped to combine Sony's computer graphic technology (System G) with game software to create an innovative, high tech game entertainment business. In 1990, he worked with Nintendo and several engineers from other divisions of Sony to develop the PlayStation (the collaboration with Nintendo was terminated after two years).

Kutaragi also formed a network of third-party game software manufacturers to provide a wide range of games for

users. (Currently, 67 titles are offered for PlayStation, the majority of which are developed by third parties.) For PlayStation 2, which is to be exhibited in September 1999 at the Tokyo Game Show, Kutaragi joined forces with Toshiba to produce a high performance semiconductor to enhance visual and play quality. (Nihon Keizai Shinbun, July 28 and 30, 1999).

Other examples of a D cell producer are Walt Disney who built a whole market for animation characters with his vision and creativity, and Jun-Ichiro Miyazu (current president) who is promoting NTT's OCN business.

Although their influence is less than that of the producer for a D cell business, experts are also important as no modern day business is run by one person alone. Since a D cell business provides a platform for products, it must emphasize the management of both internal experts and the human resources of its business partners. These experts must have systemic and inter-organizational skills. In the case of SCE, important experts are its own software engineers and those of its third parties.

### **3. Important HRM Issues for Transition between Stages of Business Evolution**

#### **3.1 Issues Regarding Recruitment of Human Resources**

This section of the paper attempts to address important human resource management issues and provide directions for successful transition from one stage of business evolution to another. The authors have proposed that organizations must synchronize their human resource management strategies with the stages of its business evolution. The core to this synchronization is to match the expertise and characteristics of its business producers and technical and professional experts with the requirements of its business stage. A company basically has the following options for securing the appropriate producers and experts.

##### **(1) Options for recruitment**

New recruitment

- 1) Recruiting and training new graduates

Internal recruitment

- 2) Developing the skills/talents of employees within the business unit
- 3) Recruiting from among employees from other business units

External recruitment

- 4) Recruiting mid-career professionals from outside the company (as a full-time, part-time, free-lance, or contacted basis)
- 5) Utilizing the skills/talents of the employees of business partners

For large domestic corporations, recruitment of new graduate and internal employees has been the main strategy for meeting the staffing needs of new business stages, as Japanese culture emphasizes group commitment, loyalty and harmony. By recruiting and training graduates fresh out of school, they are able to mold their employees to fit their corporate culture and achieve harmony. Recently, many Japanese companies are finding it difficult to evolve their business by relying on this recruitment strategy as a result of the following environmental changes.



## **(2) Macro-economic factors affecting HRM strategies**

### **1) Burst of the bubble**

With the burst of the economic bubble in the early 90s, large Japanese corporations are finding it difficult to fulfill their promise of life-time employment and are introducing early retirement and corporate restructuring/downsizing schemes. As a result, the labor market has been forced open and employees can no longer expect life-time employment. This will undoubtedly affect the loyalty of future generations of salaried employees, who will be more likely to change jobs during the course of their career.

### **2) Deregulation of temporary staffing and contracted-employee services**

In June 1999, the Diet passed a law relaxing restrictions on temporary staffing and contracted-employee services. By the end of 1999, temporary staffing services will be allowed to provide temporary staff for nearly all job functions with the exception of a few jobs such as construction and port workers. Currently, temporary staffing agencies can only service 26 different job functions requiring specialized skills, such as office equipment operators and software programmers.

## **(3) Micro-economic factors affecting HRM strategies**

### **1) Merger & Acquisitions**

As a result of the nearly decade-long downturn in the Japanese economy and deregulatory measures, there has been a wave of mergers and acquisitions (in particular, in the finance and telecommunication industries). Japanese companies in many industries have been forced to open their organization to employees from other corporate cultures. As this trend continues, Japanese companies in general will become more used to cultural diversity in their organization and to mid-career recruitment.

### **2) Corporate ventures**

With the emergence of the Internet and other information-based technologies, there has been an increase in corporate ventures. New businesses in areas like software development and multi-media that require highly skilled employees must rely on the recruitment of talented, mid-career professionals. In these fast changing industries, companies do not have the luxury to train and develop new graduates.

Due to the above changes, the labor market is becoming more flexible and fluid. Domestic companies should use these changes to an advantage by adding flexibility to their HRM strategies. For example, companies should recruit from a wider base (mid-career persons, temp staff, contracted employees, free-lance staff, etc.) to access the best employees with the necessary skills on a need basis. With the increased complexity and sophistication of technology and the business environment, companies should also actively network with business partners, utilizing the talents and skills of their human resources. Japanese financial institutions are actively forming alliances with foreign institutions to access to their employees' leading-edge financial knowledge. Networking can increase also efficiency in resource

utilization, which can lead to decreased costs, lower prices and economies of scale.

In terms of the corporations discussed in this paper, NEC has had the least flexible HRM strategy as its employees are normally recruited straight out of school and tend to stay within a particular business unit. This has limited the corporation's ability to bring in new ideas and expertise. With its recent strategy to recruit employees internally and externally, IBM has been able to take advantage of a wider source of potential candidates for producers and experts. By strengthening its software development, consulting and integration capabilities with active external and mid-career recruitment, it has been able to offer its customers new concepts in software utilization to increase business efficiency. Through recruiting professionals with a wide range of talents and skills, it is hoping to develop further its e-business and propose new concepts in networking technology.

### **3.2 Specific Issues for Recruitment of Producers and Experts**

#### **(1) Producers**

When moving to the A cell, management must ensure that the producer of the business is oriented toward the market and customer, since the business aims to meet existing needs. He/she must have a good understanding of the current market of the product/service and must be able to work closely with the company's experts in order to track customer needs. Accordingly, if the business in question is within the current business field of the company, internal recruitment from within the division is likely to be a priority option, as such internal staff should have a good understanding of the business, corporate philosophy and of the capabilities of expert staff. If the business is new to the company but in relatively the same field, recruitment from other divisions is also likely to be a viable option since current employees are well acquainted to its practices and policies. There is also less risk in recruiting internally as it is easier to judge the capabilities and loyalty of an internal candidate than those of an external candidate. If the business is not within its current industry/field, there will be no advantage to internal recruiting, and the company should also consider experienced external business producers.

For similar reasons, when evolving the business to the B cell, recruitment of a producer internally is also a viable option for the company if the business is within its current industry/field. The producer, however, must have inter-organizational skills and must understand the needs of business partners. Recruitment of persons with these characteristics from other divisions or from outside the company is also an option.

For C and D cell businesses, the producer must have a unique theme. Since such persons are the most rare and difficult to find, internal recruitment will not always be possible. Furthermore, as the business is new to the company (as well as to the market), there is not as much advantage in recruiting internally. Thus, it is likely that companies will need to recruit business producers with vision from a wide source (internally and externally).

#### **(2) Experts**

When evolving a business to the A cell, core experts must have a good understanding of the business and the market for the product or service to meet customer demands and needs. Recruitment from within the division of the

business is a priority option for securing the necessary core experts as internal experts have a good understanding of the business and of the company in general. An important issue for an A cell company then is to develop the skills and capabilities of its experts to the fullest extent by supporting their formal or informal training.

Likewise, for a company that wants to evolve its business to the B cell, the priority option for securing the necessary experts is to recruit and develop the skills of internal employees from within the division. These experts can be recruited also from other divisions and from external sources, but must have inter-organizational skills and understand the needs of business partners. External human resources can bring in knowledge regarding other organizations that can be used to increase the company's inter-organizational and systemic skills. In an alliance or business network, the staffing of business partners should also be utilized to the fullest extent to promote the platform business.

For C cell and D cell businesses, there is no great advantage to recruiting internally as the business is a new concept that requires new knowledge. Employees from other divisions will have an understanding of the company's business practices and policy, while external experts can bring in new knowledge that can be tapped for business evolution. For D cell businesses, experts need inter-organizational skills to build a platform and can be recruited externally from fields similar or peripheral to the target business. The human resources of business partners should be utilized actively to promote the platform business.

#### **4. Conclusion**

Over the last decade, many Japanese companies have been broadening their human resource options as a result of macro and micro-economic changes. As the Japanese labor market becomes increasingly open and flexible with these changes, the synchronization of business evolution with HRM strategies will become even more important.

In order to meet the needs of the dynamic business environment and respond to accelerating technical advances, Japanese companies must actively search for the producers and experts that meet the specific needs of its business stages. They can no longer rely on their own system of human resource training to develop the necessary skills and talents. Companies with platform businesses must also closely coordinate their operations with those of their business partners by working closely with their staff.

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