

ORIGINAL ARTICLE

# A Study on the Method of Product Development Management at Vocational Aid Centers

– An Analysis of Exemplary Cases of Original Product Development  
and of Local Government Support –

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**Abstract:** In this study, we focused on exemplary cases of product development at type B vocational aid centers (VACs) that aim to enable persons with disabilities, who have difficulty obtaining regular employment, to participate in society and earn an income. We surveyed seven VACs and three prefectural governments to analyze successful methods of product development and design management as well as the effect of support provided by each prefecture. As a result, four common items were identified as factors for success: 1) development of original products that are competitive; 2) ingenious human resource management; 3) ingenious sales and marketing; and 4) strategic incorporation of regional strengths into the business. In addition, we found that even though the government support provided to the VACs generally had an effect to increase the wages, it was not an essential factor for success.

**Keywords:** *Design management, Persons with disabilities, Vocational aid center (VAC)*

## 1. BACKGROUND AND PURPOSE OF THE STUDY

We believe that the objective of “universal design” is to enable everyone, including those with disabilities, to participate in society or to build a “universal society.” To do so, support through intangible infrastructure, that is, by creating an economic system to maintain social participation, will become essential in addition to designing tangible infrastructure. The enactment of the Services and Supports for Persons with Disabilities Act in 2006 set forth a policy to encourage persons with disabilities to proactively participate in society and strive for economic independence based on the idea of “shifting from being protected to self-reliance.” There are cases of vocational aid centers (VACs) aiming to be highly profitable businesses [1]; however, for many individuals with disabilities, obtaining ordinary employment is still difficult, and economic independence continues to be a challenge when they only get a disability pension and a small wage [2, 3].

The role of VACs in supporting the economic independence of facility users with disabilities (hereinafter referred to as “users”) while focusing on the standpoint of business management is becoming increasingly important. Under such circumstances, in 2007, the Ministry of Health, Labour and Welfare (MHLW) developed a five-year business plan to double the wages. It asks all prefectures to implement projects to raise the wages for disabled individuals who work at a VAC (type B VACs, live-out/in vocational

facilities, small live-out vocational facilities, etc.) and support them to live independently in the community [4]. The type of support provided by local governments through this project ranges widely from teaching management know-how to welfare businesses, analyzing businesses, to assisting new product development and sales [5]. In a previous study, Takayama and Kose looked at exemplary cases of excellent food product development. They analyzed the effectiveness of support provided by the Niigata and Miyagi Prefectures to two VACs as well as the initiatives carried out by those VACs and presented the details of effective government support such as assistance by professional staff [6]. In addition, Ikeda, Takayama, and Kose analyzed the process of business management in three cases of non-food product development, the area in which only few in the nation have succeeded, and presented nine common factors for success [7].

In this study, we further added three VACs that developed new food products and successfully raised the wages, and one exemplary case of a VAC that developed non-food products. We looked at seven VACs along with the cases of support provided to them by three prefectural governments.

Through the analysis of these exemplary cases, this study aims to determine whether there are success factors common to both food and non-food product sectors in terms of product development management methods for developing an excellent original and profitable product, and to ascertain the effectiveness of the support provided to VACs by the local governments.

## 2. STUDY METHOD

The subject VACs in this study were chosen from among the 94 VACs that participated in the “Shifuku no Otodoke” Purojekuto (“Delivering Happiness” Project) sponsored

by the MHLW in 2010 to showcase excellent VAC-produced products and their development [8]. We selected seven type B VACs in Okinawa, Shimane, Kumamoto, and Kanagawa Prefectures mainly from the exemplary cases that had won awards of excellence [9] (Table 1).

**Table 1:** Overview and Characteristic Initiatives of Welfare Businesses in the Study

	Asunaro Gakuen	Workshop Yatsushiro (Yatsushiro)	Atorie Shushi	Work Kuwa no Ki Kanagi Dai-ni Jigyōsho (Kuwa no Ki)	Vocational Aid Center Yotsuba (Yotsuba)	Aso Kunwa no Sato (Kunwa no Sato)	Dream Work Sotetsu no Mori (Sotetsu no Mori)
Location	Yokosuka City, Kanagawa	Yatsushiro City, Kumamoto	Naha City, Okinawa	Hamada City, Shimane	Matsue City, Shimane	Aso City, Kumamoto	Naha City, Okinawa
# of type B VAC users	33	20	25	30	40	36	30
Exemplary product	Food product, Figures 1 and 2	Food product, Figure 3	Food product, Figure 4	Non-food product, Figure 5	Non-food product, Figure 6	Non-food product, Figure 7	Non-food product, Figure 8
Exemplary products	Bread, pastries, chili oil, etc.	Raw noodles, operation of an udon noodle restaurant	Bread, cookies, and pastries	<i>Kagura</i> (Shinto theatrical dance) costumes, masks, etc.	<i>Hariko</i> (papier mache) products	Horse oil moisturizing skincare products	DLOPS (doming leal on paintings) 3D stickers
Shifuku no Otodoke	Won the award of excellence	Won the award of excellence		Won the award of excellence		Won the award of excellence	Won the award of excellence
Product characteristics	Based on advice from a professional pastry chef, used selected ingredients and developed delicious pastries that are competitive in the general market.	Sought guidance from a professional and used selected flour to produce delicious raw noodles. Operates a wholly-owned restaurant to offer authentic udon noodles.	Used selected ingredients and developed bread with interesting design. Developed pastries that contain Okinawan vegetables and medicinal herbs.	Provides customer services essential for long-established <i>kagura</i> stores (one-stop shop for all <i>kagura</i> gears, speedy delivery, and customized design).	Capable of developing original <i>hariko</i> design ( <i>Yasugi-bushi</i> loach-scooping dance, the boatman of Horikawa sightseeing boat, etc.)	Pure, purified, odorless horse oil vacuum extracted without heat or water. (Other manufacturers either add fragrance or heat-treat the oil)	Beautiful original 3D stickers created by carefully placing transparent resin onto complex shapes. Jointly developed with local creators.
Product development	Staff members are professional welfare workers who are also professional product developers. Conducts technical training and recipe research. Selects beautiful packaging.	Staff members extensively experimented with the recipe and developed delicious udon noodles. Has a full-fledged restaurant where they cook udon noodles in a stone oven and firewood.	Staff members received a thorough guidance of a professional, and regularly underwent technical training to continuously plan new products.	Research conducted by staff members, technical guidance provided by established artisans, employment of Japanese paper experts, and unique design.	The presence of users proficient in traditional crafts.	Through a patent technology cooperation with Tottori University, developed odorless, high-grade horse oil products.	Patent technology cooperation with a company (YOSHIDA). Presence of users with autism who are good at detail-oriented tasks.
User involvement	Users choose own tasks on the premise of self-determination and self-responsibility and develop skills.	Users choose the task they want to perform and become fully responsible. A guaranteed wage of 500 yen per hour.	Users also attended the technical training. They even calculated sales and prepared sales reports.	Users can become proficient through hard work. Stable production by hiring local part-time staff members. Gained confidence through the events held by the VAC.	Users are allowed to perform the task of their choice. They can develop advanced skills.	Operated by breaking down the process so that the products can be finished by combining tasks that are easy for anyone to perform.	Users are allowed to take up a task suitable for them. They can further develop their skills. The characteristic of disability is used as their strength.
Sales and marketing	Sells at local specialty shops and department stores, and operates a Rakuten online shop. Won awards in various contests.	Door-to-door sales, local Chamber of Commerce and Industry Fair, sells at department stores, sends direct mails, launched an online shop.	Wholly-owned store and door-to-door sales. Effort to increase the number of repeat customers. The challenge is to expand the sales channel to souvenir shops.	Visited and interviewed Kagura Shachū to identify their needs. Opened a direct retail store and an online store.	Sells at souvenir shops and online shops, takes orders for commemorative items.	Sells by making routine visits to customer stores. An online shop. Winning awards led to public attention and public relations effect.	Thoroughly observed the needs of customers. Expands the market by making sales proposals to customers.
Involvement in the local community	Won the silver award at the Yokosuka Omiyage Contest, was featured in Yokosuka Walkers, etc. Conducts community-based public relations activities.	Steady sales at the store through the local community's word-of-mouth.	There is a stable cooperation and relationship with the local community. However, although original Okinawan pastries were developed, they did not sell locally because they are not uncommon.	Plays a role in passing down the local traditional crafts. Located near the Japanese paper locality.	Sells souvenirs at tourist destinations such as Izumo Taisha. Creates original design for local attractions.	High-quality raw material for horse oil is available at a low cost in Aso. Takes advantage of the fact that the region is well known for strong horse oil.	Analyzed customer preferences in tourist destinations. Developed original characters, including sea creatures, typical in Okinawa.
Use of support through the five-year business plan to double the wages	n/a	Inviting a consultant prompted a process for staff members to share the principles.	Invited a consultant; however, it was not effective as it only resulted in more work.	n/a	n/a	The package design assistance led to great results. No benefit gained from the consultant.	Invited a consultant. It had practical benefits such as learning how to analyze customers.
Change in the wages Year: yen/month	2008: 10,724 2011: 14,996	2007: 8,639 2011: 31,442	2007: 4,187 2011: 11,541	2007: 29,920 2011: 35,074	2007: 15,000 2011: 31,045	2007: 8,000 2011: 17,091	2007: 8,761 2011: 20,036
Future plan	Expand the market in other prefectures.	Increase the raw noodle sales. Operate at full capacity.	Develop medicinal herb crackers with a long shelf life.	Maintain the production level. Research the festival markets in other prefectures.	Pass down sophisticated, mastery techniques.	Obtain permits for manufacturing and selling skincare products and expand the business nationally.	Increase the production capacity and the number of agent stores. Expand the market.

They include a few exemplary cases of success achieved by developing non-food products and some exemplary cases of success achieved by developing characteristic and superior food products, the market for which is generally considered easy for the VACs to enter [10]. To investigate the effect each local government support had under the five-year business plan on doubling the wages, we concurrently visited the sites and interviewed stakeholders about the support initiatives implemented by the local governments (Okinawa Prefectural Government, Shimane Prefectural Government, and Kumamoto Prefectural Government) under the wage-doubling plan.

Prior to the visits, we watched the video presentations delivered by each VAC representative at the “Shifuku no Otodoke presentation of exemplary cases” to understand the overview of the VAC initiatives. In addition, prior to the interviews conducted in June 2012, we had mailed the interview questionnaire to each personnel in charge of preparing welfare business documents and the officials in charge of the project at each prefecture. This was done to obtain their participation agreement and to allow them to make necessary preparations for the interviews. The questionnaire items covered the history of the facility, changes to the contents of the business, product development process, human resource management, sales and marketing techniques, involvement in the local community, details of the government support they used, the change in the wages, future plans, and so on. During the site visit, we spent two to three hours conducting the interview; going over the description of specific technologies in each production process, the products, and the production line; and verifying the work environment and work description. Afterward, we conducted additional interviews via email with three VACs in January 2013 regarding the subsequent changes in business, results from new initiatives, and so on.

### 3. SURVEY RESULTS

#### 3.1 Cases of Product Development at the VACs

Each of the seven VACs we interviewed had 20–40 users. There were three cases of food product development and four cases of non-food product development. Of those, five VACs had won the award of excellence at the Shifuku no Otodoke contest.

All the seven VACs employed mainly persons with intellectual and/or mental disabilities of various degrees, and succeeded to increase their average wages per month.

Four of seven VACs had used the support through the five-year plan to double the wages, but three of them did not. However, all of them had developed their own attractive products and had made efforts in sales and marketing activities.

The overview of each VAC and their characteristic initiatives, the changes in the wages, etc., are summarized in Table 1.

#### 3.2 Cases of Support Provided by the Local Government

##### 1) Okinawa Prefecture

A total of 44 facilities in Okinawa Prefecture applied for the prefectural government support plan and requested for a management consultant during fiscal years 2007 to 2011. The effect was apparent in the increased wages: the average monthly wage for 37 facilities that received support between 2007 and 2010 was 2,771 yen lower than the average for all facilities in the prefecture as of 2007 when they began receiving the support. However, it increased by 2,784 yen—270 yen higher than the overall average wage in the prefecture—after the support in 2010. The fact that many of these facilities were small with little physical capacity and their wages were considerably lower than the average indicates that the facilities that applied were not necessarily exemplary ones. Therefore, we believe that a facility can produce results when it aggressively takes initiatives with a sense of urgency even if they are small in scale. In addition to continuing sending management consultants and holding training sessions in the future, the prefecture plans to launch a new support project for promoting VAC-produced products in order to raise the overall standard of welfare facilities and strengthening sales capacity. It will organize booths at events such as the regional industry festival, assess the needs of businesses, and match private businesses with VACs by placing business matching coordinators in the Support for Employment, Living and Participation (SELP) center. It will also strive to increase the number of business partners. Although Sotetsu no Mori found a business partner without government assistance, it would be very effective if matching could be done in an organized manner.

##### 2) Shimane Prefecture

The Prefecture of Shimane dispatched management consultants and held various training sessions for the VACs that applied for support under the plan to double the wages. As a result, whereas the overall wage increase over five years was 22.8%, the average wage for the VACs that

took up the subsidized project dramatically increased by 81.2%. The ranking for the overall average wage in the prefecture, which was 22nd in the nation in 2006, also rose to 7th in 2010. The prefecture believes that the VACs that had applied for aid showed results that reflected their hard work regardless of their scale, because the staff members and individuals in charge of those VACs were aspiring and highly motivated to make improvements. However, the prefecture cannot provide assistance to VACs that do not apply. Going forward, they plan to utilize the Handicapped Person Work Business Center to interview all VACs in Shimane to fully understand their needs.

### 3) Kumamoto Prefecture

As a model project to increase the wages, the Prefecture of Kumamoto selected six facilities in fiscal year 2007 and four in 2008, and dispatched management consultants. The burden on the facility side was great; however, the VACs indicate that activities such as individual interviews conducted with all employees have given them an opportunity to consciously think about business management. In fact, the wages have increased at the participating VACs. However, while it is necessary to raise the standard among many small and new VACs given their increasing numbers in Kumamoto, the project to dispatch management consultants requires the VAC side to have the willingness and extra human resources to perform the analysis so that the required assistance is limited.

For many VACs, increasing the sales capacity is a particularly important task. Although the prefecture had launched a mail-order website called “Magokoro Ippin Net” with a collection of VAC-produced products, it has not been very effective as it lacks the ability to attract customers. Going forward, Kumamoto plans to cooperate with the online store of the Federation of Societies of Commerce and Industry. In addition, it has just opened a brick-and-mortar store in cooperation with a private business and begun selling VAC-produced products from various facilities. The prefecture is hoping to grow this business over time. Another project that turned out to be effective was the emergency employment measure project in which nine facilities hired new employees for a fixed term of six months. Hired as either marketing support personnel (sales) or new product development personnel, they have already produced some results. Going forward, the prefecture plans to put more effort into training and marketing support projects for a larger audience rather than sending individual management consultants.

## 4. DISCUSSIONS

### 4.1 Shared Key Factors in Managing Product Development

All the VACs studied in this paper mentioned that it was essential to change their way of thinking and design management methods from “welfare” to “business” and from “developing producible products” to “developing marketable products”, in order to gain profits.

The following are the four common factors for success and specific details that fall under each factor identified among all seven exemplary cases of VACs studied in this paper:

#### 1) Development of Original Products that are Competitive

As a means to develop original products, the following three points were identified:

(1) Staff members learn technical skills: Staff members at Asunaro Gakuen proactively learned the art of bread and pastry making from a professional, experimented with various recipes, developed pastries that were delicious enough to be marketed in the Kanagawa area, and successfully launched their brand (bon Nanan) (Figures 1 and 2).



Figure 1: Additive-free jam (Asunaro Gakuen)



Figure 2: Brown sugar and ginger gugelhupf (Asunaro Gakuen)

The same was true for Yatsushiro, which developed raw noodles and now runs an udon restaurant (Figure 3) and for Atorie Shushi, which successfully developed breads and pastries delicious enough to turn new customers into regular customers (Figure 4).

(2) Efforts of staff members and improvement of users' advanced technical skills: Kuwa no Ki, which develops products for Iwami Kagura (a type of *kagura* originated in Iwami) (Figure 5) and Yotsuba, which



Figure 3: Raw udon noodles and restaurant management (Yatsushiro)



Figure 4: Okinawan medicinal herb pastries (Atorie Shushi)



Figure 5: Gorgeous *kagura* costume (Kuwa no Ki)

develops traditional crafts *hariko* (Figure 6) fall under this category. In both cases, the advanced craft work became possible because the staff members initiated product development by doing research and the users became proficient.

(3) Technical partnership with companies and universities: Kunwa no Sato, which developed pure, odorless, high-grade horse oil skincare products (Figure 7) (partnered with Tottori University) and Sotetsu no Mori, which developed beautiful 3D stickers (Figure 8) using the DLOPS technology (partnered with YOSHIDA), are protected by patents, preventing other companies from entering the market.



Figure 6: *Hariko* tiger (Yotsuba)



Figure 7: Horse oil skincare products (Kunwa no Sato)



Figure 8: DLOPS art stickers (Sotetsu no Mori)

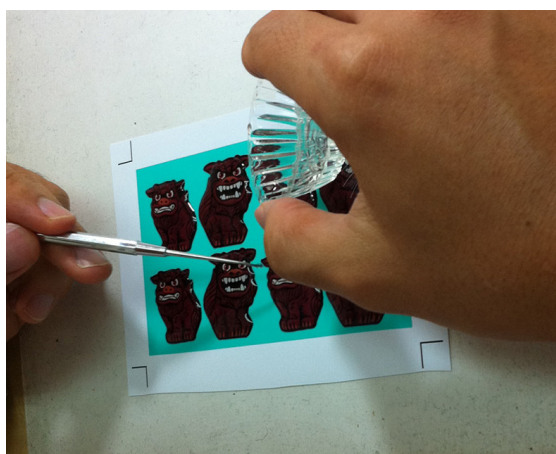
As described above, all these VACs incorporated unique and superior technology, developed truly competitive products that people purchase because they are excellent—not because of a welfare-supporting reason that they are VAC-produced—and became successful. In particular, they are characterized by the fact that they had the perspective of business management and strategically adopted the necessary “skills” in order to develop a competitive product.

These exemplary cases were not successful from the beginning. For example, Asunaro Gakuen had failed in the past when the users produced ceramic goods as a producible product. It made staff members realize that they need to be product development professionals besides being welfare professionals and led them to aim to develop a product that people buy because it's delicious, work hard to establish their brand, and become successful. It seems that a shift in the idea about product development created competitiveness.

## 2) Ingenious Human Resource Management

Unlike regular companies, VACs operate under special circumstances where they have to accept individuals with limited capability due to disabilities without qualifying them. We found that all VACs have devised their own methods for managing human resources—fully utilizing the limited ability of the users, establishing a method for supplementing unstable workforce, striving to maintain motivation in accordance with the characteristics of the user, etc.—to make products that are competitive in the market even under those circumstances.

A. Tasks that take advantage of users' characteristics: Tasks that take advantage of the tenacity of users with autism, such as the detail-oriented task of placing resin in making DLOPS stickers (Sotetsu no Mori) (Figure 9), and a painting job that requires skills and concentration (Kuwana Ki and Yotsuba).



**Figure 9:** Detail-oriented task of placing resin (Sotetsu no Mori)

B. Employment of local part-time staff members: By working with the users, they made it possible to stabilize the workload and pass down the skills (Kuwa no Ki).

C. A broad range of tasks to suit each user's interest and skills: A system in which the user chooses the section he/she wants to work on (all VACs), a combination of agricultural work and craft work that allows even the users with severe intellectual disability to participate without becoming bored (Kuwa no Ki), service tasks such as cooking and serving customers made available through running a full-scale restaurant (Yatsushiro), and increased confidence by entering external competitions and winning awards (Asunaro Gakuen).

Devising ways to motivate the users and ensuring a stable and well-distributed workload are common characteristics among all VACs.

## 3) Ingenious Sales and Marketing

All VACs that we interviewed were aware that their abilities to understand the market needs and to develop sales channels were weak because their first priority had been to allow the users with disabilities to work. However, we found that successful VACs were continuously devising their own ways to address these limitations.

(1) Understanding the needs of the customer: Staff members regularly interview customers, and observe souvenir shops and famous tourist attractions in Naha City to study the popular trends and customer preferences (Sotetsu no Mori). Visits are made to the local *kagura* group (Shachū) to capture their preferences and complaints (Kuwa no Ki).

(2) Secure a wide range of sales channels: Participate in an online shop (Sotetsu no Mori, Kuwa no Ki, Kunwa no Sato, Asunaro Gakuen, and Yotsuba), secure contract sales outlets (all VACs), operate a wholly-owned store (Kuwa no Ki and Yatsushiro).

(3) Employ professional sales staff: To increase the effort to sell raw noodles. Even department stores are now carrying the product (Yatsushiro).

(4) Public relations and publicity activities: Participate in the Shifuku no Otodoke project (all VACs), apply for and win awards to create public relations effect (Nikkan Kogyo Shimibun's Mono-zukuri Renkei Award (product development partnership award): Kunwa no Sato, Yokosuka *Omiyage* Contest, and other competitions: Asunaro Gakuen), distribute direct mails to the local community (all VACs), be interviewed by various local media (all VACs), host events (annual *kagura* event: Kuwa no Ki).

The fact that they are all strategically devising ways for market research, marketing, and sales with limited resources is shared by all VACs.

#### 4) Strategic Capitalization of Regional Strengths in the Business

While VACs develop products with limited resources, the ones we studied were all gaining competitiveness by taking full advantage of their regional strengths.

(1) Take advantage of the local specialty product: Developed pastries that contain turmeric, purple yam, and shell ginger (Atorie Shushi)(Figure4); procured local, high-quality raw horse oil at a low cost; and took advantage of the fact that the area is known for horse oil (Kunwa no Sato); close to the area of high-quality Japanese paper production (Kuwa no Ki).

(2) Pass down traditional local crafts: Developed authentic Iwami Kagura stage products (Kuwa no Ki), developed a folk craft of *hariko* for Izu (Yotsuba).

(3) Develop products that capitalize on the characteristics of the region: Developed sticker designs of original characters such as “Churamoe (a dialect word in Okinawa)” and “Umi no Ikimono (sea creature)” as suitable Okinawan souvenirs (Sotetsu no Mori) (Figure10), and created curry-themed products that reflect the history of the navy in Yokohama by anticipating the demand for souvenirs in the tourist destination (Asunaro Gaguken).

#### 4.2 The Effect of and Issues with the Local Government Support

##### 1) Utilization of the Local Government Support in the Study Cases

In their previous studies, Takayama and Kose looked at exemplary cases of food product development to analyze the effectiveness of support provided to the VACs by the prefectural governments of Niigata, Miyagi, and Shizuoka. They concluded that six support factors — professional staffing support, design support, promotional support, support for creating a collaborative organizational structure, support for



Figure 10: Original character; “Churamoe” (Sotetsu no Mori)

marketing channel expansion, and support for universal design management — are effective in terms of the government support for VACs [6]. Of those, the ones relevant to some of the VACs in this study were the following three factors: (1) Professional staffing support: Four VACs received the assistance of a management consultant, and Sotetsu no Mori and Yatsushiro stated that it was useful. Having just started to work on a new business, both VACs appreciated the facts such as their stores could now objectively understand the financial health of the business, and the management philosophy was made clear and shared among the stakeholders. Yatsushiro received consulting service for one year through the Daiwa Securities Foundation Aid prior to Kumamoto Prefecture’s model project and reorganized its business. (2) Design support: Established the brand (Wajunsei) by renewing the package design for the horse oil skincare products and increased sales (Kunwa no Sato). (3) Promotional support: Public relations through the Shifuku no Otodoke project. (4) Support for marketing channel expansion: Received an order of commemorative items from the prefecture (Yotsuba), sold products at a prefectural sporting event (Sotetsu no Mori).

However, there were three VACs that had not received any local government aid in particular under the five-year business plan to double the wages, indicating that the government support is not necessarily an essential factor for success.

In terms of government assistance, all prefectures commonly provide product packaging redesign, management consultant, business training, etc., generally achieving a certain level of success. However, there was no common support item that was effective in all exemplary cases studied this time. In particular, the field study indicated that there were mixed reactions regarding dispatched management consultant although the prefectures generally regarded it as effective.

##### 2) Discussions on the Typical Support by the Local Government “Dispatched Management Consultant”

In terms of dispatching a management consultant to VACs, which is offered in all prefectures, each prefecture states that it showed an effect to increase the wage when the average wage among the VACs that they sent a consultant to was compared to the average wage among the remaining VACs. The local government officials believe that it is because the management consultants prompted the VACs to review their own activities and take actions to make improvements.

However, although four VACs in this study took in a management consultant and conducted business analysis,

etc., two of them stated that it did not solve their problems. These VACs said, “We won’t ask for a management consultant again because it only made our staff members busy with analysis tasks and was almost useless.” Considering this reason for not being able to obtain satisfactory results even though the support included costly assistance requiring efforts, we will discuss measures to improve the effectiveness of dispatching a consultant below.

A. Eliminate the gap between what the VAC expects and what the management consultant can deliver

In order to shift the attitude of the VAC from welfare to business, the management consultant will first show a method for general management analysis. Through the analysis, the financial health and historical trend of the VAC as well as issues, such as weakness and bias will surface. However, whether the VAC can shift the viewpoint from welfare to business, actually develop an improvement plan, reflect the plan in management, develop a new product, and launch a business depends on the VAC’s willingness and product idea. It is true that there were VACs that felt the analysis results only showed what they already knew and solved nothing. However, the role of the management consultant is to diagnose the issues and problems and provide effective management techniques; it is the VAC side that manages the business. It seems necessary to lay out specific roles of the management consultant and defining his/her purpose to ensure that the expectations of the VAC are in harmony with feasible results.

B. Dispatch a management consultant after thoroughly evaluating his/her capability, attitude, and experience

It was pointed out that some management consultants dispatched to the VACs did not have a good understanding of the issues specific to VACs and the difference in mechanism between VACs and for-profit companies. Unless the consultant is someone who has such an understanding to provide assistance and advice to build a business model that is profitable even for VACs, it is not possible to obtain satisfactory results. While local governments dispatch management consultants by contracting organizations such as the Japan Small and Medium Enterprise Management Consultant Association, it is preferable to choose consultants who are experienced in welfare business or passionate in this field.

C. Schedule it to coincide with the launch of the VAC’s business

The DLOPS art business of Sotetsu no Mori was already off the ground and growing by the time a management consultant was dispatched. Because they received specific advice from the management consultant right when they needed to streamline processes such as accounting,

customer management, risk management, etc., to support rapid expansion, they were able to actually apply the advice to improve business management. Yatsushiro was also able to share the VAC philosophy with all staff members, and move away from the old values and towards reform under the lead of the management consultant because they were considering entering a new field of for-profit business. We believe it is important to offer a business support program to coincide with the launch of the business at each VAC.

## 5. FUTURE TASKS

Work-based welfare services under the Services and Supports for Persons with Disabilities Act are increasing rapidly both in terms of the numbers of VACs and users. Type B VACs, which we looked at in this study, also increased in number approximately by 3.7 times and the number of their users increased approximately by 4.4 times when comparing fiscal year 2007 to fiscal year 2011 [4].

The exemplary cases mentioned in this study are large VACs with years of experience and a particularly solid management foundation even by the national standard. While there are many points to learn from their activities, small and relatively new VACs face difficult situations in which everything, including increasing the wage, is not manageable.

Studies on effective ways for the government to support these VACs and effective methods for managing product development are research tasks in the future.

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