

Effects of Learning Infrastructures on Businesses in Service Industries

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Abstract--As it is said that 2012 was the year of The MOOC (Massive Open Online Course) Revolution, learning infrastructures are rapidly changing in the world. In addition, mobile technologies are rapidly spread to the world and utilizing internet infrastructure and mobile technologies are becoming more critical to educate human resources in various organizations. In this research, the effects of learning infrastructures on businesses in service industries were analyzed and essences to build successful learning infrastructures were extracted. Learning infrastructure should be designed based on business strategy and a person who has capabilities of CLO (Chief Learning Officer) should take a lead. CLO is the person who can understand not only learning but also corporate management and business. The learning methods should be blended by real (face-to-face) and online (PC-based and mobile-based) methods and how to blend the methods becomes know-hows or competitiveness of the organizations.

I. INTRODUCTION

After the Lehman Shock, the electronics industry collapsed and the industry structure needs to be changed in Japan. Especially, service industries should grow more instead of manufacturing industries and values of “Omotenashi” should be increased more. The key to create higher values of “Omotenashi” is to increase higher values of “people” and education of human resources would be important. There is a word called “People Business” and in the People Business, the business is leveraged largely by people.

A variety of learning methods have been developed due to improvement of ICT (Information and Communication Technology) and how to utilize these methods is important to effectively increase the values of people in the firms.

II. RESEARCH APPROACH

The research approach is shown in Fig. 1. In this research, examples of the firms which grew rapidly by implementing learning infrastructures successfully were analyzed and the essences for successes were extracted.

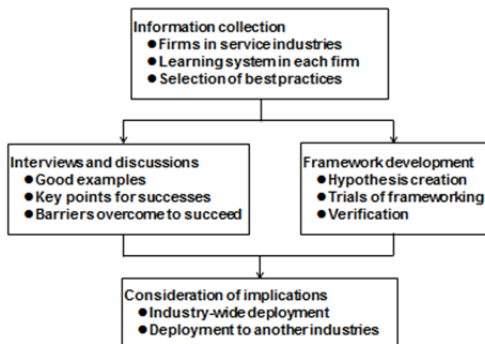


Fig. 1. Research approach

III. PEOPLE BUSINESS

There are various factors of leveraging to produce return as shown in Fig. 2. People management is the factor to affect return most in people business and the concept of people business is becoming more important in service industries. Fig. 3 shows the relationship among business operation, people management and learning infrastructure. To maximize return, learning infrastructure should support people management most effectively and people management should be leveraged most.

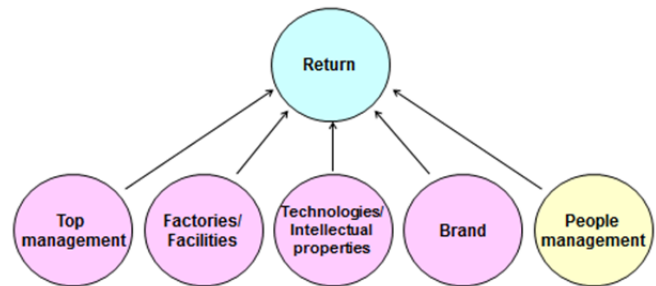


Fig. 2. Factors of leveraging to produce return

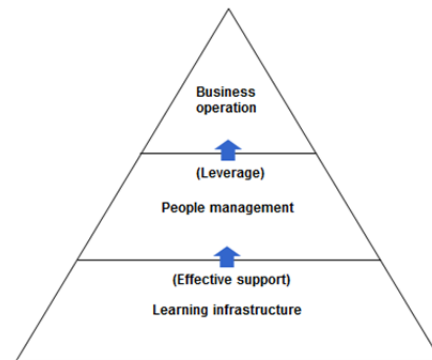


Fig. 3. Relationship among business operation, people management and learning infrastructure

IV. LEARNING INFRASTRUCTURES IN JAPAN

As internet technologies were spread, e-learning started to be utilized in various fields. To promote e-learning in Japan, e-Learning Consortium Japan (eLC) (<http://www.elc.or.jp/>) was established in April, 2001 [1] and the organizations which join eLC has been increasing until now. In recent years, smart phones have been rapidly spread and learning contents for smart phones have been rapidly developed. In order to promote mobile learning, mobile Learning Consortium (mLC) (<http://www.mobilelearning.jp/>) was established in June, 2012 and both eLC and mLC are now

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promoting e-learning and mobile learning activities in Japan.

In the learning industries, several firms to provide e-learning infrastructures were established and are doing businesses. Also, education firms started to utilize e-learning and the business has been growing little by little. The most successful education firm in Japan is Business Breakthrough. The business performance of Business Breakthrough is shown in Table 1.

TABLE 1. BUSINESS PERFORMANCE OF BUSINESS BREAKTHROUGH

	Mar-10	Mar-11	Mar-12	Mar-13
Revenue (100MYen)	19.26	20.98	24.62	27.06
Ordinary Profit (100MYen)	2.79	2.69	3.38	3.43
Ordinary margin (%)	14.5	12.8	13.7	12.7

In the USA, Massive Open Online Courses (MOOCs) started to be spread and it was said that 2012 was the year of MOOC revolution [1]. Japan also started to promote

MOOCs and Open Online Education Promotion Council (JMOOC) (<http://www.jmooc.jp/>) was established in 2013. Education contents are to be opened to the public more and more and big learning infrastructure is to be built for both PC-based and mobile-based learning.

V. SERVICE INDUSTRIES IN JAPAN

Table 2 shows the list of major firms in service industries in Japan. The top firms in each segment have their own learning methods and the author started benchmarking those top firms. Among examples of top firms, most unique and successful cases were selected and investigated. One example was Autobacs Seven which is in the automobile parts store segment and the other was JIN in the eyeglasses store segment.

TABLE 2. LIST OF MAJOR FIRMS IN SERVICE INDUSTRIES IN JAPAN.

Supermarket / Convenience store					
1	Aeon	56,853	2,129	3.7	Feb-13
2	Seven & i Holdings	49,916	2,958	5.9	Feb-13
3	UNY Group Holdings	10,303	334	3.2	Mar-13
4	Lawson	4,874	659	13.5	Feb-13
5	Family Mart	3,341	454	13.6	Feb-13
Electronics supermarket					
1	Yamada Denki	17,015	479	2.8	Mar-13
2	Bic Camera	8,054	153	1.9	Aug-13
3	EDION	6,851	15	0.2	Mar-13
4	K's Holdings	6,375	294	4.6	Mar-13
5	Yodobashi Camera	6,371	469	7.4	Mar-13
Department store					
1	Isetan Mitsukoshi Holdings	12,363	342	2.8	Mar-13
2	J. Front Retailing	10,928	322	2.9	Feb-13
3	Takashimaya	8,703	299	3.4	Feb-13
4	H2O Retailing	5,252	113	2.2	Mar-13
Apparel store					
1	Fast Retailing	11,430	1,490	13.0	Aug-13
2	Shimamura	4,921	476	9.7	Feb-13
3	Aoyama Trading	2,124	246	11.6	Mar-13
4	AOKI Holdings	1,606	176	11.0	Mar-13
5	POINT	1,217	100	8.2	Feb-13
6	UNITED ARROWS	1,150	126	11.0	Mar-13
Home Center / Discount store					
1	Don Quijote Holdings	5,684	332	5.8	Jun-13
2	DCM Holdings	4,342	189	4.4	Feb-13
3	DAISO INDUSTRIES	3,519			Aug-13
Drug store					
1	Matsumotokiyoshi Holdings	4,563	217	4.8	Mar-13
2	Sundrug	4,074	253	6.2	Feb-13
3	Sugi Holdings	3,436	227	6.6	Feb-13
4	Tsuruha Holdings	3,430	238	6.9	May-13
5	Cocokara Fine	3,359	139	4.1	Mar-13
6	Cosmos Pharmaceutical	3,293	168	5.1	May-13

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Food service					
1	Zensho Holdings	4,176	139	3.3	Mar-13
2	SKYLARK	3,295	89	2.7	Dec-12
3	McDonald's Holdings Japan	2,947	238	8.1	Dec-12
4	Yoshinoya Holdings	1,656	25	1.5	Feb-13
5	Watami	1,578	80	5.1	Mar-13
6	Starbucks Coffee Japan	1,165	97	8.3	Mar-13
7	Akindo Sushiro	1,113	66	5.9	Sep-12
8	Saizeriya	1,104	85	7.7	Aug-13
Furniture store					
1	Nitori Holdings	3,488	622	17.8	Feb-13
2	Komeri	3,192	186	5.8	Mar-13
3	Ryohin Keikaku	1,884	198	10.5	Feb-13
4	Shimachu	1,597	153	9.6	Aug-13
Automobile parts store					
1	Autobacs Seven	2,302	145	6.3	Mar-13
2	Yellow Hat	1,175	81	6.9	Mar-13
Sporting goods shop					
1	Alpen	2,037	134	6.6	Jun-13
2	Xebio	1,926	124	6.4	Feb-13
Shoes store					
1	ABC-MART	1,594	307	19.3	Feb-13
2	Chiyoda	1,503	131	8.7	Feb-13
Eyeglasses store					
1	MEGANE TOP	677	96	14.2	Mar-13
2	PARIS MIKI HOLDINGS	554	11	2.0	Mar-13
3	JIN	366	59	16.1	Aug-13

VI. CASE STUDY I: AUTOBACS SEVEN

Autobacs Seven started to introduce learning infrastructure in 1998 using satellite communication system and the learning infrastructure started to work in June 1999 [2-3]. Since that time, the No. 1 position in the automobile parts store market has been kept and the point worthy of special mention is that the revenue per store space has been bigger than that of the competitor, Yellow Hat. The comparison of business performances between Autobacs Seven and Yellow Hat is shown in Table 3.

TABLE 3. COMPARISON OF BUSINESS PERFORMANCES BETWEEN AUTOBACS SEVEN AND YELLOW HAT

	Autobacs Seven	Yellow Hat
Revenue (100MYen)	2301.68	1174.82
Ordinary Profit (100MYen)	144.72	81.48
Ordinary margin (%)	6.3	6.9
Accounting period	Mar-13	Mar-13
Market capitalization (100MYen) (end of 2013)	1,523	468

The reason why Autobacs Seven started to build learning infrastructure was because Autobacs Seven had been rapidly growing and had to educate rapidly increasing employees effectively. Autobacs utilized ICT for the following various purposes.

- e-Learning contents
- LMS (Learning Management System)
- HRMS (Human Resources Management System)

When e-Learning contents were developed, the important things were the followings.

- to clarify what training contents are effective as e-Learning contents
- to make trainees learn whenever they want
- to make trainees enjoy the e-Learning training, e.g. using animation etc.
- to make trainees utilize what they learn on the job

LMS had effects on the following various aspects and could be improved to HRMS which is utilized for all aspects regarding human resource management.

- Learning results were recorded for all the employees and the management members were able to know easily who had what kind of skillset.
- LMS was able to be utilized for HRD (Human Resource Development) planning and execution.
- The learning data could be used even when the employees moved to the other places.

Another important point was “blended learning”. As shown in Fig. 4 Autobacs Seven blended both e-Learning and face-to-face training to maximize the effectiveness and efficiency of learning.

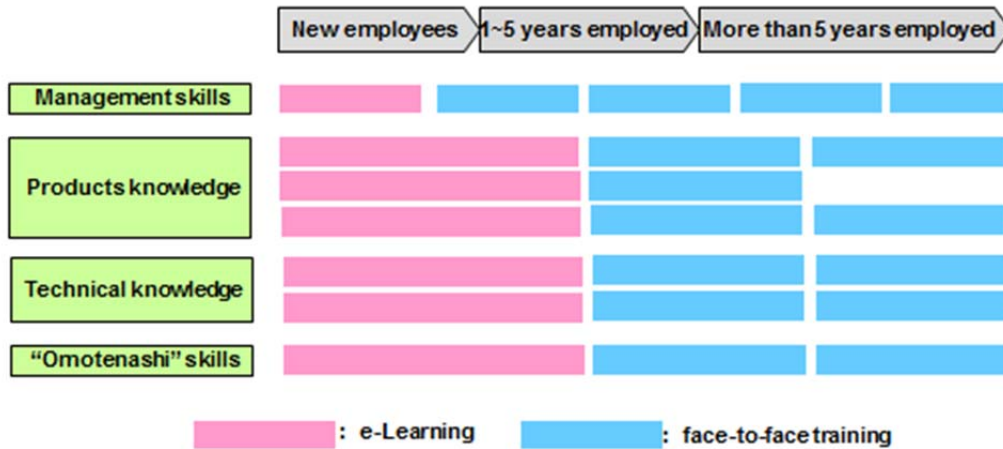


Figure 4. Blended learning program of Autobacs Seven

VII. CASE STUDY 2: JIN

Fig. 5 shows JIN’s business performance over the last twelve year. After IPO (Initial Public Offering) in 2006, JIN had a severe time in 2009 when the ordinary profit decreased close to zero. JIN invented eyeglasses for PC (Personal Computer), by the name of “JINS PC”, in 2010 and started to sell them in 2011. This invention became JIN’s business innovation and JIN’s business re-grew rapidly. In the growing period, JIN opened new shops speedily and the

number of employees also increased speedily.

In these years, mobile technologies have been improved and JIN introduced mobile learning infrastructure to achieve JIN’s rapid growth. The person who experienced both new business leader and a HR (Human Resource) group leader took a lead to develop the system and created the learning development group with voluntary members who were eager to use the system. The group organization is shown in Fig. 6.

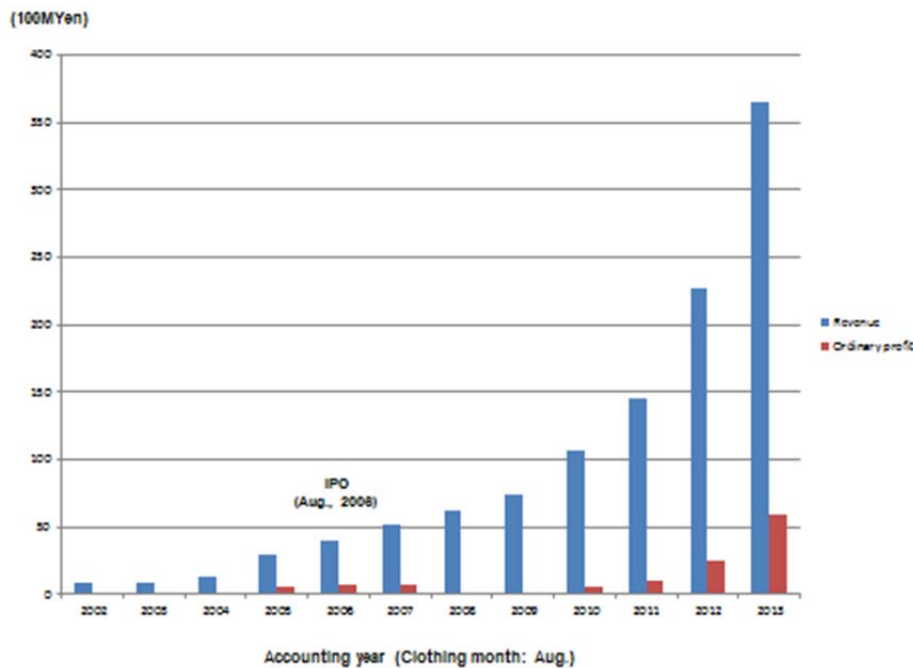


Fig. 5. JIN’s business performance

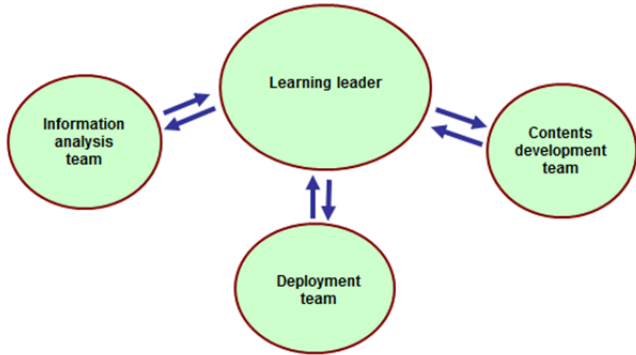


Fig. 6. Learning development group organization

The important points when designing the mobile learning system were the following:

- Each learning content can be learned in 15 minutes.
- 3 teams in the group can be communicated anytime and anywhere under the leadership of the group leader.
- The learning system can be easily modified and updated. This means that the feedback system is implemented in the system.

VIII. ESSENCES FOR SUCCESSES

Benchmarking of Autobacs Seven and JIN implied that 3 points shown in Fig. 7 are the essences for successes.

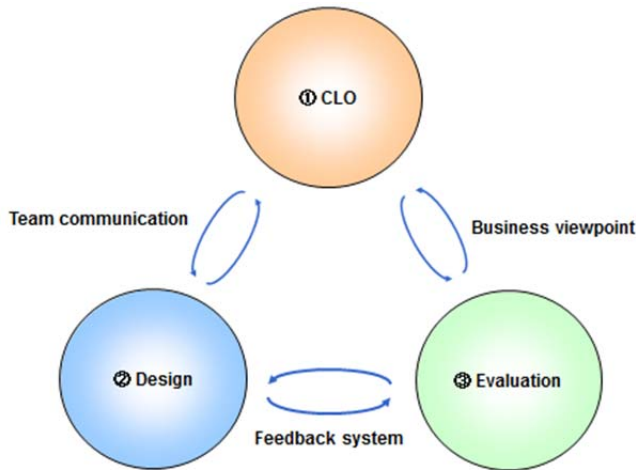


Fig. 7. Key points to lever businesses by learning infrastructures

- ① Assignment of CLO (Chief Learning Officer) who can understand business, learning and advanced ICT technologies
There are not so many firms which have CLO at the moment but it is going to be more important to have CLO in service industries because “people” will be one of key factors for business leverage.
- ② Effective design of learning infrastructure
What technologies are used for what kind of training should be carefully designed and the concept of “blended learning” is the key. Also, design teams should collaborate with each other under the leadership of CLO.
- ③ Evaluation from the businesses viewpoint
Evaluation should be done based on business results and it is important to have a feedback system from evaluation to design.

IX. CONCLUSIONS

Due to the advancement of ICT technologies, learning infrastructure using advanced ICT technologies is going to be more important to leverage people to grow businesses in service industries. In designing learning infrastructures, how to blend learning methods is important. Also, to have CLO is going to be important for each corporation to have successful learning infrastructures.

There are not so many firms in service industries which have all the essences described in this report, but since good examples started to appear, the author expects more firms to follow these firms of good practices.

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