

Potential Barriers to HRIS Implementation

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ABSTRACT

This paper reports the results of a survey on barriers and benefits of human resource information systems (HRIS) implementation in Hong Kong. An empirical study was conducted that focused on exploring the benefits and potential barriers to HRIS implementation considered by human resources practitioners in their organizations. Based on the survey results, the greatest benefits to HRIS implementation perceived by most Hong Kong industries were: (i) quick response and access to information; (ii) improve data control; and (iii) reducing manpower, the greatest barriers were (i) insufficient financial support; (ii) lack of expertise (s) in information technology.

Introduction

In order to examine the status and extent to which Hong Kong industry has adopted HRIS, as well as to enable HR practitioners to have a better understanding of the barriers to HRIS implementation in Hong Kong, a postal survey of local HR practitioners was conducted.

The two main objectives of the survey were to:

- i) examine the status and extent to which Hong Kong industry has adopted HRIS;
- ii) investigate empirically the HR professional's perception of barriers to HRIS implementation in Hong Kong.

Literature Review

Tang et al. (1987) stated that the key to the effective planning of manpower and improvement of people productivity is an effective HRIS. It is required to provide the necessary information for decision making and policy formulation. The application areas of this research were the current and desired applications of computer in HRIS. The research examined the impact of computer technology on personnel record system including cost, accuracy, fragmentation, duplication and difficulty of analysis.

Lee and Cheung (1991) conducted a study "Human Resource Information System (HRIS) in Hong Kong: Some Preliminary Findings" with 202 organizations in Hong Kong. The study has found out the organization size was a significant variable which correlated positively with sophistication. The result showed that few firms utilized the systems for long-term planning and strategic purposes.

Research Methodology

Data Collection

As we did not know how many companies in Hong Kong has implemented HRIS nor did we have a complete sampling frame for the population of all organizations in Hong Kong, a random sample of 500 company addresses was drawn from the following sources:

- Public companies quoted in the Hong Kong Stock Exchange and other selected companies listed in Business Directory of Hong Kong (1998);
- Selected hotels from the Hong Kong Hotels Directory (1998).

Results and Analysis of Survey

Summary of respondents' profile

The returned sample characteristics are illustrated in Table 1 and Table 2 provides a profile of the respondents. Table 2 indicates that most of the respondents were well-educated. About 96% of the respondents had three and more years of working experience in or with the HR management.

Insert Table 1 and Table 2 about here

HRIS Implementation in Hong Kong Manufacturing and Service Organizations

This section highlights the "current HRIS status" in Hong Kong manufacturing and service organizations survey. Table 3 shows that 83% of the respondents indicated that their organizations had a separate HR department/group/unit/.

Table 4 gives the approximate HR budget per year of the organizations. About 30% of the respondents indicated they had less than HK\$ 30,0695 for the HRIS budget per year in their organizations.

Insert Table 3 to Table 4 about here

The above figures collectively reflect the current status of the HRIS adoption in Hong Kong. The next sections present descriptive analysis of the data collected in this study on perception of barriers to implementation of HRIS.

Analysis of Respondents' Perception of Barriers and Benefits to Implementation of HRIS

The perception of barriers to implementation of HRIS was investigated by asking respondents to rate each of the ten potential barriers shown in Table 5.

Table 5 shows the mean ratings of potential barriers and their ranking. The measure of the relative degree of perception as a barrier was set on a five-point rating scale with 5 being "the greatest barrier", 3 being "a barrier" and 1 being "not a barrier". Therefore, an average score of 3 or above can be taken as perceived barrier to implementation of HRIS in their organizations by the respondents. Based on the responses, we find that barriers with a mean rating greater than 3 on a five-point scale in descending order of their magnitude are as follows:

- Insufficient financial support
- Lack of expertise (s) in information technology

Table 6 shows the mean ratings of the greatest benefits achievable through adoption of HRIS in the organization. The measure of the relative degree of perception as a benefits was set on a five-point rating scale with 5 begin "the greatest benefit", 3 being "a benefit" and 1 being "not a benefit".

Based on the responses, we find that benefit with a mean rating greater than 3 on a five-point scale in descending order of their magnitude are as follows:

- quick response and access to information
- improve data control

- reducing manpower

Insert Table 5 to Table 6 about here

Conclusions

The major findings of the study are listed below which summarize the adoption of HRIS in Hong Kong.

- Eighty three per cent of the respondents indicated that their organizations had a separate HR unit and the majority of the sample organizations had less than five staff employed mainly as HRIS specialists.
- Thirty per cent of the respondents indicated that they had approximately HK\$ 3006,951 for the setup of the HRIS per year in their organizations;
- On average, 86% HRIS being used or developed for payroll service and general information of the company in an organization;

Acknowledgments

This paper was supported in part by The Hong Kong Polytechnic University under grant G-T123.

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Table 1: Profile of the respondent organizations

	Frequency	Percentage
Number of employees		
<50	23	15.6
50-199	38	25.9
200-499	29	19.7
500-999	20	13.6
1000-5000	29	19.7
>5000	7	4.8
Total	146	100%
Organization's entire operation		
Local (H.K.) only	51	34.7
H.K. & China	40	27.2
International	56	38.1
Total	147	100%
Industry Type		
Health services	2	1.4
Manufacturing	39	26.5
Finance, banking & business services	13	8.8
Wholesales, retail, import & export	13	8.8
Government	1	.7
Transport, storage & communication	8	5.4
Hotel, restaurant & tourism	23	15.6
Education & training	10	6.8
Construction	9	6.1
Utilities	2	1.4
Others	27	18.4
Total	147	100%

Table 2: Profile of the respondent

	Frequency	Percentage
Age		
<25	4	2.7
25-30	42	28.6
31-40	79	53.7
>40	19	12.9
Total	144	100%
Education		
Secondary	2	1.4
Post-secondary certificate/diploma	71	48.3
Bachelor's degree	47	32
Master's degree	25	17
Others	1	.7
Total	146	100%
Working experience		
< 3 years	5	3.4
3-6 years	26	17.7
7-10 years	44	29.9
11-14 years	35	23.8
> 14 years	36	24.5
Total	146	100%
Using computer related to HR during office hours		
Daily	113	76.9
No more than several times every week	23	15.6
No more than once every month	4	2.7
Never use	5	3.4
Total	145	100%

Table 3: Company has a separate HR department/group/unit

	Responses (%)
Yes	83
No	17

Table 4: On average, the budget planned to setup of the HRIS

	Responses (%)
Approximately HK\$ 300695	31
Not sure	55
No separate budget	14

Table 5: Mean rating of perceived barriers to HRIS implementation

Potential Barriers	Mean	S.D.	Ranking
Difficulty in changing organization culture	2.5	1.257	7
Lack of top managers' commitment	2.679	1.455	4
Insufficient financial support	3.199	1.360	1
Fear to change the way they do things	2.460	1.138	8
Inadequate knowledge in implementing the system	2.737	1.208	3
Lack of expertise(s) in IT	2.878	1.316	2
Lack of commitment and involvement by all employees	2.399	1.124	10
Not perceived as an advantage at all	2.417	1.239	9
No suitable HRIS or software	2.511	1.276	6
A lot of paper work which is difficult to computerize	2.287	1.122	11

Table 6: Mean rating of perceived benefits through adoption of HRIS

Benefits	Mean	S. D.	Ranking
Reducing paper work	3.412	1.275	7
Allowing for fewer error	3.779	1.100	5
Helping make more informed decision	3.257	1.140	10
Improving data control	4.186	0.892	2
Quick response and access to information	4.377	0.813	1
Improving customer service	3.254	1.225	11
Enhancing competitiveness	3.063	1.149	12
Streamlining HR processes	3.835	0.927	4
Standardizing programs and procedures	3.522	0.983	6
Reducing data re-entry ad data may be used immediately	3.991	1.026	3
Reducing manpower	3.404	1.002	8
Tracking and control of the different HR functions	3.287	1.227	9