

Investigating The Link Between Human Resource Information Systems And Strategic Human Resources Planning

Field Study In The Jordanian Mobile Companies

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Human resource information systems (HRIS) have the potential to be the mechanism through which organizations can monitor and deploy their personnel in order to obtain and sustain a competitive advantage. This research investigates the extent of using human resource information systems (HRIS) in strategic human resources planning (SHRP) at Jordanian mobile companies. The Study has presented an analysis of the application and implementation of human resource information systems in Jordanian Mobile Companies and their link with strategic human resources planning and also determined the importance of using HRIS in strategic human resource planning. The results of the study (152) respondents at the four Jordanian Mobile Companies revealed that HRIS are largely used in strategic human resources planning at these companies. Also strategic human resources planners recognize the importance of using human resource information systems in their strategic human resources planning. At the same time the respondents at the four mobile companies believe that there are several benefits of using HRIS in strategic human resources planning. They also identified several perceived obstacles limiting the use of HRIS more effectively in strategic human resources planning at their companies. At the same time there are significant relationships between some personal, company variables (educational levels, working experience & HRIS budget) and the utilization of human resource information systems at these companies. Finally, there is significant impact of Human resource information systems (HRIS) on strategic human resources planning at Jordanian mobile companies especially in the recruitment process and career planning.

Introduction:

Organizations understandably place considerable value on achieving the optimum use of their resources in order to accomplish their program objectives. To do other-wise would mean that resources would be wasted or that objectives might not be achieved. Given the fact that human resources constitute such an important part of any organization's resource base, the department of information systems which provides an ongoing assessment of the utilization of these resources is a natural reaction to an essential managerial need. Any human resources information system is logically an inventory of the positions and skills extant in a given organization (Narasimha, 2000).

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Also, organizations become more complex and as the amount of information they need increases the need for automated information systems increase dramatically. The organization must determine what kind of information it will need by deciding what kind of decision it will be making based on the HRIS information and which will be the decision maker. Because these needs are likely to change over time, it is also necessary to build a certain amount of flexibility (Ng, Sktmove and Sharman, 2001).

However, human resources information systems (HRIS) is more than a simple aggregation mechanism for inventory control and accounting ; it is the foundation for a set of management tools enabling managers to establish objectives for the use of their organization's human resources and to measure the extent to which those objectives have been achieved. As managers come to recognize both the essentiality and feasibility of sophisticated management information systems for monitoring human resources, more and more computerized personnel management information systems such as HRIS will be installed (Orlando and Johnson, 2004).

Questions Of The Study

The following key questions can help in clarifying the general problem of the study:

1. To what extent is there a link between human resource information systems (HRIS) and strategic human resources planning at Jordanian mobile companies?
2. To what extent do strategic human resource planners at Jordanian mobile companies recognize the importance of using HRIS in their decisions?
3. What is the level of perception of some human resource staff variables toward the utilization of human resource information systems at Jordanian mobile companies?
4. What is the most significant impact of Human resource information systems (HRIS) on strategic human resources planning at Jordanian mobile companies?

Statement of the Research Objectives

- 1- Determining the extent of link between human resource information systems (HRIS) and strategic human resources planning (SHRP) at Jordanian mobile companies.
- 2- Measuring the level of recognition the importance of using HRIS by strategic human resource planners at the Jordanian mobile companies.
- 3- Measuring the level of perception of some human resource staff variables toward the utilization of human resource information systems at Jordanian mobile companies.

- 4- Determining the most significant impact of Human resource information systems (HRIS) on strategic human resources planning at Jordanian mobile companies

Hypotheses:

The researcher has set six major hypotheses:

(H01) There is no link between Human resource information systems and strategic human resources planning at the Jordanian mobile companies.

In order to test this main hypothesis, there are sub-hypotheses. These sub-hypotheses are:

(H0₁₋₁) There is no significant relationship between staffing and strategic human resources planning at the Jordanian mobile companies.

(H0₁₋₂) There is no significant relationship between human resource development and strategic human resources planning at the Jordanian mobile companies.

(H0₁₋₃) There is no significant relationship between compensation/ benefits and strategic human resources planning at the Jordanian mobile companies.

(H0₁₋₄) There is no significant relationship between safety/health and strategic human resources planning at the Jordanian mobile companies.

(H0₁₋₅) There is no significant relationship between employee/ labor relations and strategic human resources planning at the Jordanian mobile companies.

(H0₁₋₆) There is no significant relationship between human resource research and strategic human resources planning at the Jordanian mobile companies.

(H02) Strategic human resource planners at the Jordanian mobile companies do not recognize the importance of using Human resources information systems in their strategic human resources planning.

(H03) There is no significant relationship between some personal and company variables (working experience, working position, employees' number and HRIS budget) and the utilization of human resource information systems at the Jordanian mobile companies.

In order to test this main hypothesis, there are four sub-hypotheses. These sub-hypotheses are:

(H0₃₋₁) There is no significant relationship between work experience and the utilization of human resource information systems at the Jordanian mobile companies.

(H0₃₋₂) There is no significant relationship between work position and the utilization of human resource information systems at the Jordanian mobile companies.

(H0₃₋₃) There is no significant relationship between employees' number and the utilization of human resource information systems at the Jordanian mobile companies.

(H0₃₋₄) There is no significant relationship between HRIS budget and the utilization of human resource information systems at the Jordanian mobile companies.

(H0₄) There is no significant impact of Human resource information systems (HRIS) on strategic human resources planning at Jordanian mobile companies.

In order to test this main hypothesis, there are five minor ones. These hypotheses are:

(H0₄₋₁) There is no significant impact of Human resource information systems (HRIS) on employment security at the Jordanian mobile companies.

(H0₄₋₂) There is no significant impact of Human resource information systems (HRIS) on recruitment process at the Jordanian mobile companies.

(H0₄₋₃) There is no significant impact of Human resource information systems (HRIS) on career planning at the Jordanian mobile companies.

(H0₄₋₄) There is no significant impact of Human resource information systems (HRIS) on human capital management at the Jordanian mobile companies.

(H0₄₋₅) There is no significant impact of Human resource information systems (HRIS) on extensive training at the Jordanian mobile companies.

Literature Review:

Empirical Studies on Human Resource Information Systems (HRIS)

An article by Hosie (1995) mentioned that Smith in 1980 focused on the HRIS design process. A detailed diagram of an integrated HRIS oriented to strategic needs of organizations is provided by Smith in 1980. Categories in the input transformation and output sections could be used as criteria for an HRIS. Various criteria mainly related to technical and database management systems, but informative to HRIS development, are scattered throughout the article:

- Data files should be integrated for easy cross-referencing among various departments and redundancy of data minimized.

- Crucial data should be available on request (i.e. online). Critical information includes: the location of key employees, essential skills data, and promotion and performance information.
- Appropriate variables for measurement are: employee turnover; absenteeism; type of grievances; frequency of accidents; requests for transfers; trends in personnel costs.
- Quantifiable measures can include: attitudinal data correlated with demographics; performance; costs.
- Standard and unplanned reports should be available on a timely basis, including immediate feedback on employee turnover, financial ratios and recruiting results. More sophisticated reporting for career profiles, job applicants' review, etc., is desirable.
- Advanced features, such as matching current personnel to future needs of an organization, succession planning, organizational change models and identification of prospective future managers and facilitation of their growth and development, which would enhance their performance.

A lot of the literature covering the link between human resource management and firm performance is based on the universalistic or “best practices” perspective that “implies a direct relationship between particular approaches to human resources and performance”. Many researchers have empirically supported universalistic predictions. First there are those who focus on a single or several HRM practices and examine their effect on various performance measures. There are also similar studies examining the effect of bundles, or systems, of HRM practices on performance. This stream of research implies that firms should create a high degree of internal consistency among their HR activities.

Although support exists for a universal approach to HR, the literature is inconsistent in two main points. The first concerns HRM, and more specifically, the identification of the practices or combinations of practices that constitute “best practices”. One can find three main categories of variables that describe HRM. Those are HRM practices, HR skills and HR behavior such as Wright and Sherman in 1999 also Wright and Snell in 1991. The second concerns firm performance. Different measures of firm performance have been used in order to examine the results of the link between strategy and HRM. For example Delery and Doty in 1996 suggest two steps when developing universalistic predictions. The first is to identify important HR practices. The second step is to provide arguments relating to performance.

It is noted that the majority of studies have focused on the status of the use of HRIS and on the HR applications/features that have been integrated as part of HRIS. Little research has been done to address the perceived benefits and potential barriers to the implementation of HRIS. This study is a timely and important one in that it examines the current status of HRIS in Jordanian mobile companies

Empirical Studies on Strategic Human Resources Planning (SHRP)

Chang and Huang (2005) mentioned in their article the recent studies which examined strategic human resource management (SHRP) as a means of enhancing organizational competitive advantage. Scholars and practitioners have widely adopted this approach to organization strategic planning. The underlying assumption of SHRP is that firm performance is influenced by a set of HRM practices. However, important questions remain, including whether SHRP guarantees positive firm performance outcome, the effect of different levels of SHRP implementation on firm performance, and the influence of the market environment in moderating the relationship between SHRP and firm performance (Huselid, 1995).

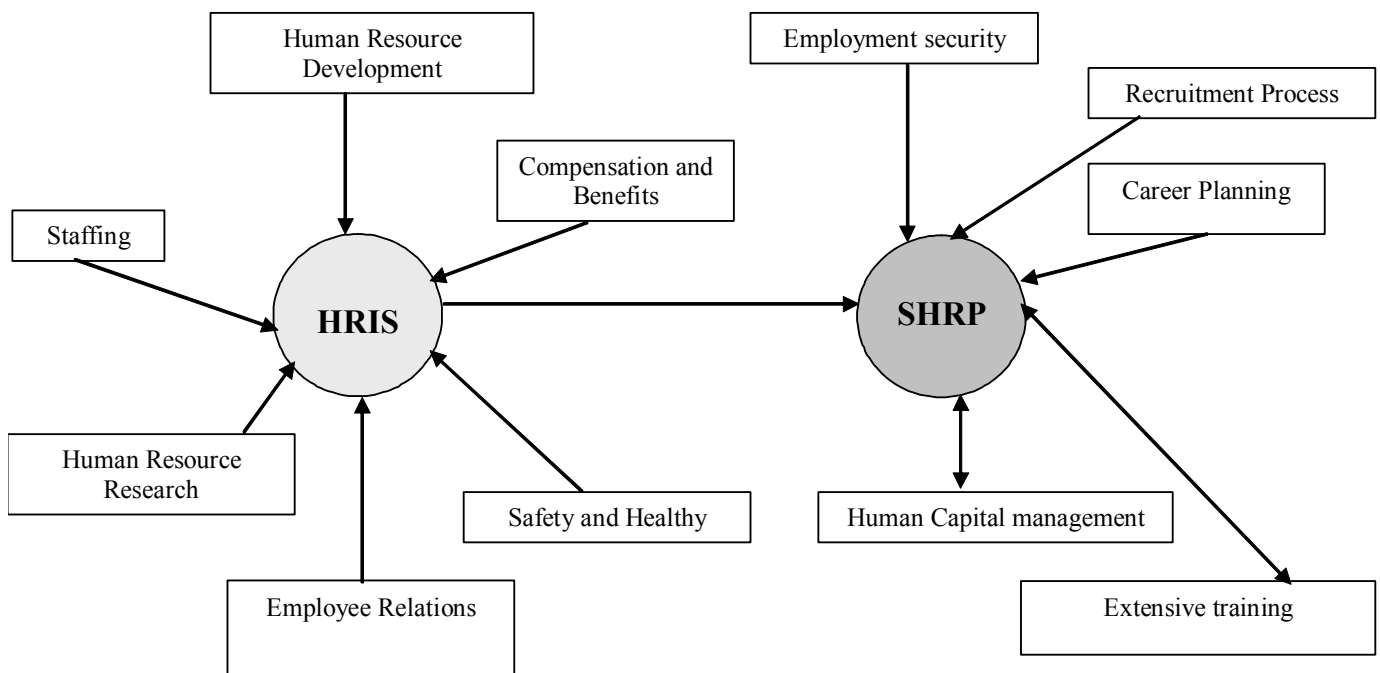
A critical unresolved debate involved whether a universally superior approach existed for managing human resources. Some scholars suggested that such an approach existed (Huselid and Becker, 1996; Pfeffer, 1998). Meanwhile, others noted that the effectiveness of human resource management practices depends on the specific organizational and environmental context. Recent theoretical research on business strategy has indicated that a firm's competitive advantage could be created by firm's human resources (HR). According to the resource-based view the firm could develop sustained competitive advantage through creating value in a manner that is rare and difficult for competitors to imitate. Traditional sources of competitive advantage, such as natural resources, technology and economies of scale have become increasingly easy to imitate. The concept of HR as a strategic asset has implications on this issue. HR is an invisible asset that creates value when it is embedded in the operational system in a manner that enhances the firm's ability to deal with a turbulent environment (Stuart, 2007).

The survey referred to earlier of over 1.000 HR managers from organizations in 47 countries reported that HR managers believed that organizations that align their HR and business strategies are more profitable (Wright and Boswell, 2002). As a direct result of increasingly available information systems, the human resource department can use numerous strategies to contribute to the bottom line. The basic idea behind these strategies is to translate knowledge of human resources into terms that have tangible and recognizable economic benefits, especially to operating managers. Examples include analysis of the cost per hire, length of time to fill a position, and new-hire performance by recruiting strategy, with the intent of identifying the most effective strategy (Byars & Rue, 2006).

Suggested Model:

Independent Variable

Dependent Variable



Study Population:

To be able to examine the research problem and the questions raised in that respect and in order to fulfill the objectives of this study, the researcher has chosen to conduct her research on the "Jordanian mobile companies. The study population will comprise all four mobile companies dominant the local market, which are:

1. Zain
2. Orange
3. Express
4. Umniah

Unit of Analysis:

The unit of analysis is the top / senior managers, Human Resource Managers and human resource Staff at four Jordanian mobile companies.

Company name	Employees Number	Senior Managers Number	Human Resource Staff Number
Zain	1400	24	26
Orange	3500	45	55
Express	250	27	3
Umniah	300	12	8

The following table shows the number of distributed and returned questionnaires:

Company name	Distributed*	Returned*
Zain	50	33
Orange	100	78
Express	30	22
Umniah	20	14
Total	200	152

*Number of questionnaires

The researcher prepared a questionnaire taking into account the research objectives and the variables of study. The initial Questionnaires' questions were developed based upon: the literature review and the interviews with practical people to get the most important issues. The researcher opted to use the close-ended questionnaire by restricting the answer set according to the likert scale. The questionnaire was preceded by an explanatory letter to give participants an idea about the purpose and objectives of the questionnaire.

The sources of the questionnaire items for each construct are as follows.

Table (5-1) the sources of the questionnaire items for each construct:

Variables	Source
Human resource information systems applications which include:	
• Staffing:	Ngai, wat (2006)
• Human resource development	Ivancevich(2001)
• Compensation / benefits	Ivancevich(2001)
• Employee safety	Ivancevich(2001)
• Employee relations	Ivancevich(2001)
• Human resource research	Ivancevich(2001)
Human resource information systems benefits	Ngai, wat (2006)
Human resource information systems barriers	Ngai, wat (2006)
Strategic human resources planning variables which include:	
• Employment security	Change,Huang(2005) Conner, Ulrich(1996)
• Recruitment process	Change,Huang(2005) Conner, Ulrich(1996)
• Career planning	Change,Huang(2005) Conner, Ulrich(1996)
• Extensive training	Change,Huang(2005) Conner, Ulrich(1996)
• Human capital management	Change,Huang(2005) Conner, Ulrich(1996)

Validity Test:

In order to ensure that the instrument and its questions achieve the objectives of the study, the researcher tested the validity and the reliability of the instrument. The face validity was checked by the consensuses of a group of professionals and experts, who agreed that the questionnaire appears logically reflecting what it supposed to measure correctly. The researcher considered all the comments and recommendations made by the experts and professionals.

Factor analysis was used to measure the validity of each variable (construct validity)

Reliability Test:

Cronbach alpha was used to test the internal reliability of the measurement instrument. In this study 0.60 or higher is considered acceptance (Sekram, 2000). As shown in table (5-2) the Cronbach Alphas ranged from .84 to .95, thus establishing the reliability of the survey questionnaire. It is obvious that all values of alpha are high. This indicates that for each measurement of a variable, the items are highly correlated and hence highly consistent.

The table (5-2) shows the cronbach's alpha for each scale:

No.	Variables	Cronbach alpha
1.	Human resource information systems variables which include: Staffing:	.87
2.	Human resource development	.95
3.	Compensation / benefits	.91
4.	Employee safety	.84
5.	Employee relations	.87
6.	Human resource research	.92
1.	Strategic human resources planning variables which include: Employment security	.94
2.	Recruitment process	.93
3.	Career planning	.88
4.	Extensive training	.85
5.	Human capital management	.92

Hypotheses Testing

Hypothesis (1):

HO1: There is no link between human resource information systems and strategic human resources planning at Jordanian mobile companies.

Table (7-9)
Test of hypothesis (HO1)

T calculated	T tabulated	T Sig.	Result of Ho
16.089	1.96	0.000	Reject

Referred to table (7-9), one sample t-test used to test the hypothesis and it was found that (calculated $t = 16.089$) is greater than tabulated t . According to the decision rule: Accept H_0 if calculated value is less than tabulated value and reject H_0 if calculated value is greater than tabulated value. Therefore, reject H_0 and accept H_a . Which indicates that a human resource information systems is largely used Jordanian mobile companies.

Measuring the Relationship between the Independent variable and dependent variable simple regression:

In order to test the first main hypothesis (H_0), there are six minor ones. These hypotheses are:

(H_0 -1) There is no significant relationship between staffing and strategic human resources planning at the Jordanian mobile companies

Table (7-10)
Correlations

		STAFFING	SHRP
STAFFING	Pearson Correlation	1	0.542**
	Sig. (2-tailed)		0.000
	N	152	152
SHRP	Pearson Correlation	0.542**	1
	Sig. (2-tailed)	0.000	
	N	152	152

** Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation was used to test the above Hypothesis and it was found that there are significant relationship at (.01) level between independent variable (Staffing) and Dependent variable (strategic human Resource planning), it was found also appositve and significant effect at function level ($\alpha \leq 0.01$) which supports hypothesis (Ha1-1), where (r=0.542) which is moderate.

(Ha1-2) There is no significant relationship between human Resource development and strategic human Resources planning at the Jordanian mobile companies.

Table (7-11)
Correlations

		DEVELOPMENT	SHRP
Development	Pearson Correlation	0.253**	1
	Sig. (2-tailed)	0.002	
	N	152	152
SHRP	Pearson Correlation	1	0.253**
	Sig. (2-tailed)	152	0.002
	N	152	152

** Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation was used to test the above hypothesis and it was found that there is significant relationship at (0.01) level between the independent variable (human resource development) and the dependent variable (Strategic human resource planning), it was found also appositive, and significant at function level ($\alpha \leq 0.01$) which supports hypothesis (Ha1-2), where (r= 0.253) which is very low.

Ho1-3: There is no significant relationship between compensation and strategic human resources planning at the Jordanian mobile companies.

Table (7-12)

Correlations

	COMPENSATION	SHRP
COMPENSATION	0.334**	1
Pearson	0.002	
Correlation	152	152
Sig. (2-tailed)		
N		
	1	0.334**
Pearson		0.000
Correlation	152	152
SHRP		
Sig. (2-tailed)		
N		

** Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation was used to test the above hypothesis and it was found that there are significant relationships between Independent variable (compensation) and dependent variable (strategic human Resources planning).It was found also a appositive and significant effect at function level ($\alpha \leq 0.01$) which supports hypothesis (Ha1-3, where (r= 0.334) which is positively moderate.

(HO1-4) There is no significant relationship between employee safety and healthy and strategic human resources planning at the Jordanian mobile companies.

**Table (7-13)
Correlations**

		SAFTEY	SHRP
SAFETY	Pearson Correlation	0.385**	1
	Sig. (2-tailed)	0.002	
	N	152	152
SHRP	Pearson Correlation	1	0.385**
	Sig. (2-tailed)		0.000
	N	152	152

** Correlation is significant at the 0.01 level (2-tailed).

Person correlation was used to test above hypothesis and it was found that there are significant relationship at (0.01 level) between Independent variable (safety) and the dependent variable (strategic human Resources planning), it was found also appositve, and significant effect at function level ($\alpha \leq .0.01$) which supports hypothesis (Ha1-4) where (r=0.385) which is moderate.

(Ho1-5): there is no significant relationship between employee /labour relations and strategic human resources planning at the Jordanian mobile companies.

**Table (7-14)
Correlations**

		EMPLOYEE RELATIONS	SHRP
EMPLOYEE RELATIONS	Pearson Correlation	0.479**	1
	Sig. (2-tailed)	0.000	
	N	152	152
SHRP	Pearson Correlation	1	0.479**
	Sig. (2-tailed)		0.000
	N	152	152

** Correlation is significant at the 0.01 level (2-tailed).

Person correlation was used to test above hypothesis and it was found there are significant relationship at (0.01) level between Independent variable (employee / labour relations) and the dependent variable (strategic human Resources planning), also table (7-14) indicates appositve, and significant effect at function level ($\alpha \leq .0.01$) where ($r=0.479$) which is positively moderate and support hypothesis.

Ho (1-6): There is no significant relationship between human resource research and strategic human resource planning. There is no significant relationship between human resource research and strategic human resource planning at the Jordanian mobile companies.

**Table (7-14)
Correlations**

		RESEARCH	SHRP
RESEARCH	Pearson Correlation	0.285**	1
	Sig. (2-tailed)	0.000	
	N	152	152
SHRP	Pearson Correlation	1	0.285**
	Sig. (2-tailed)		0.000
	N	152	152

Person correlation was used to test above hypothesis and it was found that there are significant relationship at (0.01) level between Independent variable (human resource research) and dependent variable (strategic human Resources planning), table (7-14) indicates appositve, and significant effect at function level ($\alpha \leq .0.01$) where ($r=0.285$) which is very low but is support hypothesis (Ha1-6).

Hypothesis (2):

HO2: strategic human resources planners at the Jordanian mobile companies do not recognize the importance of using Human resource information systems in their strategic human resources planning.

**Table (7-16)
Test of hypothesis**

T calculated	T tabulated	T Sig.	Result of Ho
13.017	1.96	0.000	Reject

Referred to table (7-16), one sample t- test used to test the hypothesis. (Calculated t value=13.017) is greater than tabulated t value. According to statistical decision rule: accept Ho if calculated t value is less than tabulated t value and reject Ho if calculated t value is greater than tabulated t value. Therefore reject Ho2 and accept Ha2. So that strategic human resources planners at the Jordanian mobile companies recognize the importance of using human resources information systems in their strategic human resources planning.

(Ho5): There is no significant relationship between some personal and company variables (educational levels, working experience, working position, and HRIS budget) and the utilization of human resource information systems at the Jordanian mobile companies.

In order to test this main hypothesis, there are four minor ones, these hypotheses are:

ANOVA Test was used to test is there is significant difference in Independent variable according to (educational level, working position, experience HRIS budget).

The Following results were found:

- 1) Educational level and the utilization of HRIS at Jordanian mobile companies.

(Ho5-1) There is no significant relationship between educational level and the utilization of human resource information systems at the Jordanian mobile companies.

Table (7-19)

ANOVA test for difference between educational levels and the utilization of HRIS

Education level	Sum of Squares	df	Mean square	F	Sig.
Between groups	3.459	2	1.729	3.958	.021
Within groups	65.101	149	437		
Total	68.560	151			

(F) Value is significant at (0.05) level which means that there is a significant relation between educational level and the utilization of HRIS at the Jordanian mobile companies.

Ho5-2) There is no significant relationship between working position and the utilization of human resource information systems at the Jordanian mobile companies.

Table (7-22)

ANOVA test for difference between working position and the utilization of HRIS

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.855	3	0.952	2.144	0.097
Within Groups	65.706	148	0.444		
Total	68.560	151			

(F) Value is not significant at (0.05) level which means that there are no differences according to working position in the utilization of human resource information systems

(Ho5-3) There is no significant relationship between working experience and the utilization of human resource information systems at the Jordanian mobile companies.

Table (7-24)

ANOVA test for difference between working experience &the utilization of HRIS

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.325	3	2.108	5.014	0.002
Within Groups	62.235	148	0.421		
Total	68.560	151			

Table (7-25)

* The mean difference is significant at the 0.05 level.

(F) Value is significant at (0.05) level which means that there are differences according to working experience and the utilization of human resource information systems.

Ho (5-4) there is no significant relationship between HRIS budget and the utilization of human resource information systems at the Jordanian mobile companies.

Table (7-26)

ANOVA test for difference between HRIS budget and the utilization of HRIS

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	36.844	3	12.281	57.308	0.000
Within Groups	31.717	148	0.214		
Total	68.560	151			

(F) Value is significant at (0.05) level which means that there are differences according to HRIS budget and the utilization of human resource information systems.

(H06) There is no significant impact of Human resource information systems (HRIS) on strategic human resources planning at Jordanian mobile companies.

In order to test this main hypothesis, there are five minor ones. These hypotheses are:

(H0₆₋₁) There is no significant impact of Human resource information systems (HRIS) on employment security at the Jordanian mobile companies.

Table (7-28)

Correlations

		HRIS	Employment security
HRIS	Pearson Correlation	1	0.217**
	Sig. (2-tailed)		0.007
	N	152	152
Employment security	Pearson Correlation	0.217**	1
	Sig. (2-tailed)	0.007	
	N	152	152

** Correlations is significant at the 0.01 level

Person correlation was used to test above hypothesis and it was found that there are significant relationship at (0.01) level between Independent variable(human resource information systems) and dependent variable (employment security),

the table above showed a appositve, and significant effect at function level ($\alpha \leq .0.01$) where ($r=0.217$) which is very low but is support hypothesis (Ha1-6).

(H0₆₋₂) There is no significant impact of Human resource information systems (HRIS) on recruitment process at the Jordanian mobile companies.

**Table (7-29)
Correlations**

		HRIS	Recruitment process
HRIS	Pearson Correlation	1	0.485**
	Sig. (2-tailed)		0.000
	N	152	152
Recruitment Process	Pearson Correlation	0.458**	1
	Sig. (2-tailed)	0.000	
	N	152	152

** Correlations is significant at the 0.01 level

Pearson correlation was used to test above Hypothesis and it was found that there are significant relationship at (.01) level between human resource information systems and Dependent variable (recruitment process), table (7.29) indicates appositve and significant effect at function level ($\alpha \leq 0.01$) which supports hypothesis (Ha6-2), where ($r=0.485$) which is moderate.

(H0₆₋₃) There is no significant impact of Human resource information systems (HRIS) on career planning at the Jordanian mobile companies.

**Table (7-30)
Correlations**

		HRIS	Career planning
HRIS	Pearson Correlation	1	0.388**
	Sig. (2-tailed)		0.000
	N	152	152
Career planning	Pearson Correlation	0.542**	1
	Sig. (2-tailed)	0.000	
	N	152	152

** Correlations is significant at the 0.01 level

Person correlation was used to test above hypothesis and it was found that there are significant relationship at (0.01) level between Independent variable human resource information systems and dependent variable (career planning), the results indicates also appositive, and significant effect at function level ($\alpha \leq .0.01$) where ($r=0.388$) which is moderate but is support hypothesis (Ha3-6).

(H0₆₋₄) there is no significant impact of Human resource information systems (HRIS) on extensive training at the Jordanian mobile companies

**Table (7-31)
Correlations**

		HRIS	Extensive training
HRIS	Pearson Correlation	1	0.287**
	Sig. (2-tailed)		0.000
	N	152	152
Extensive Training	Pearson Correlation	0.287**	1
	Sig. (2-tailed)	0.000	
	N	152	152

** Correlations is significant at the 0.01 level

Person correlation was used to test above hypothesis and it was found that there are significant relationship at (0.01) level between Independent variable human resource information systems and dependent variable (extensive training), the table also indicates appositive, and significant effect at function level ($\alpha \leq .0.01$) where ($r=0.287$) which is very low but is support hypothesis (Ha6-4).

(H0₆₋₅) There is no significant impact of Human resource information systems (HRIS) on human capital management at the Jordanian mobile companies

**Table (7-32)
Correlations**

		HRIS	Human capital management
HRIS	Pearson Correlation	1	0.378**
	Sig. (2-tailed)		0.000
	N	152	152
Human capital Management	Pearson Correlation	0.378**	1
	Sig. (2-tailed)	0.000	
	N	152	152

** Correlations is significant at the 0.01 level

Person correlation was used to test above hypothesis and it was found that there are significant relationship at (0.01) level between Independent variable human resource information systems and dependent variable (human capital management), and it was found also appositive, and significant effect at function level ($\alpha \leq .0.01$) where ($r=0.378$)

This result is moderate but is support hypothesis (Ha6-5).
7-4 Multi Regression measurement:

Table (7-33)

Correlations

		DEP	STAFFING	DEVELOPM	COMPENSA	SAFETY	EMPLOYEE	RESEARCH
Pearson Correlation	DEP	1.000	.542	.253	.334	.385	.479	.285
	STAFFING	.542	1.000	.311	.711	.770	.791	.352
	DEVELOPM	.253	.311	1.000	.334	.475	.504	.477
	COMPENSA	.334	.711	.334	1.000	.599	.720	.412
	SAFETY	.385	.770	.475	.599	1.000	.737	.281
	EMPLOYEE	.479	.791	.504	.720	.737	1.000	.459
	RESEARCH	.285	.352	.477	.412	.281	.459	1.000
Sig. (1-tailed)	DEP	.	.000	.001	.000	.000	.000	.000
	STAFFING	.000	.	.000	.000	.000	.000	.000
	DEVELOPM	.001	.000	.	.000	.000	.000	.000
	COMPENSA	.000	.000	.000	.	.000	.000	.000
	SAFETY	.000	.000	.000	.000	.	.000	.000
	EMPLOYEE	.000	.000	.000	.000	.000	.	.000
	RESEARCH	.000	.000	.000	.000	.000	.000	.
N	DEP	152	152	152	152	152	152	152
	STAFFING	152	152	152	152	152	152	152
	DEVELOPM	152	152	152	152	152	152	152
	COMPENSA	152	152	152	152	152	152	152
	SAFETY	152	152	152	152	152	152	152
	EMPLOYEE	152	152	152	152	152	152	152
	RESEARCH	152	152	152	152	152	152	152

Based on the results in table (7-33) which represent Pearson Correlation Coefficients, there is a positive significant effect between the independent variables (staffing, human resource development, compensation, safety, employee relations, human resource research) and the dependent variable (strategic human resources planning), at function level ($\alpha \leq .0.01$) which supports the hypotheses: (H01-1, H01-2, H01-3, H01-4, H01-5, H01-6).

Table (7-34): Regression for human resource information systems & strategic human resources information systems

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.138	.258		8.290	.000
	STAFFING	.422	.095	.605	4.449	.000
	DEVELOPMENT	.605E-02	.066	.076	.848	.398
	COMPENSATION	-.102	.057	-.186	-1.775	.078
	SAFETY	-.978E-02	.075	-.157	-1.305	.194
	EMPLOYEE	.116	.087	.178	1.322	.188
	RESEARCH	.850E-02	.065	.075	.899	.370

a. Dependent Variable: DEP

Based on the results in table (7-34) which represent multi regression analysis, It is clear that there is a positive significant between the independent variable, (staffing) on the dependent variable (strategic human resources planning, at function level ($\alpha \leq .0.01$). where significant (beta=.422) (t-value = 4.449).

Discussion of The Study Findings:

This section contains a condensed summary of the conclusion study results. The results of the hypotheses testing are discussed under the heading of the related variables, in addition to a comparison with the results of previous studies.

Research question 1:

What is the extent of using human resource information systems (HRIS) in strategic human resources planning at Jordanian mobile companies?

Direct relationship hypotheses are: (H01, H0₁₋₁, H0₁₋₂H0₁₋₃H0₁₋₄H0₁₋₅ H0₁₋₆)

The results show that human resource information systems are largely used at Jordanian mobile companies. The study also shows that all the respondents' mobile companies have a separate HR unit also the majority of the respondents companies had more than ten members of staff employed in the HR unit. Thirty eight percent of the respondents indicate

that their company had spent approximately (10,000-50,000) JD to set up the HRIS in their companies. On average, the HRIS are used or developed for payroll service and human resource development. Perhaps it is not surprising that, as with previous studies, the areas to which HRIS are applied include the automation of various human resource management activities rather than for decision support (Ball, 2001; Kovach and Cathcart, 1999). However HRIS is not only designed to automate human resource management activities in order to gain administrative advantages, but it can also be used for decision making to provide strategic advantage for companies (Kovach, 2002). Mobile companies currently using HRIS should pay attention to this area in order to obtain the full benefits of HRIS. This result agrees with study by Ngai & Wat (2006)

Research question 2:

To what extent do strategic human resource planners at Jordanian mobile companies recognize the importance of using HRIS in their decisions?

Direct relationship hypothesis is: (H02)

The research's findings regarding this question shows that strategic human resource planners at Jordanian mobile companies recognize the importance of using human resource information systems in their strategic human resources planning. The results show that all managers might be affected significantly by strategic plans participate in the planning process at their companies and the overall use of HRIS in support of strategic decision making was highly consistent for Jordanian mobile companies. These findings demonstrated that Jordanian mobile companies that have HRIS used them extensively in support of strategic decision making, regardless of company size.

Also it was found that most Jordanian mobile companies use HRIS or other software exclusively in support of strategic HR tasks. Furthermore, there are differences in the relative use of HRIS in advanced tasks or in strategic decision making between Jordanian mobile companies in three categories: payroll service, employment benefits and recruitment. In each of these, the degree of usage was relatively greater for companies that have large numbers of employees' such as Zain and Orange companies. This results agrees with study by Hussain, Wallac & Cornelius (2006)

Research question 3:

What are the most important benefits of using human resource information systems in strategic human resources planning at Jordanian mobile companies?

Direct relationship hypothesis is: (H03)

The third purpose of the study was to identify the benefits that can be achieved through HRIS. The research's results showed that there are additional benefits of using human resource information systems in strategic human resources planning at Jordanian mobile companies. The results also show that "tracking and controlling different HR functions" was the most important uses of HRIS. Based on the empirical results, the major benefit of HRIS is its quick response and the access it provides to information in order to track and control the different HR functions. York's survey in Wille and Hammond (1981) showed similar results with improved timeliness of information ranked first in importance. Quick response is extremely important for employees, as rapid access to data makes it possible to finish tasks much more quickly. This result agrees with study by Ngai & wat (2006)

Research question 4:

What are the most important obstacles of using human resources information systems in strategic human resources planning at Jordanian mobile companies?

Direct relationship hypothesis is: (H04)

The fourth purpose of the study was to identify the perceived barriers to the implementation of HRIS. The research's results show that there are obstacles limiting the full use of human resource information systems in strategic human resources planning at the Jordanian mobile companies. The greatest barriers to the implementation of HRIS were their no suitable HRIS and insufficient financial support. This result agrees with study by Ngai & wat (2006). The empirical study demonstrates that many companies face a lack of fund to design and develop HRIS (Beckers and Bsat, 2002; Patterson, 2002).one of the possible explanations for this is the high cost of HRIS. So in order to promote the smooth adoption of HRIS operations, it is necessary first to ensure that top managers are willing to give their support in order to set up a HRIS. In fact, the size of a mobile company may have an effect on the achievement of a number of benefits and obstacles faced when implementing HRIS.

Mobile companies like Zain and orange have well-established facilities such as intranets and extranets to access the required personal information quickly and efficiently. While mobile companies such as Umniah and X-press lack the capital and technical resources required for full implementation of HRIS. A more feasible way for these companies was to start use prepackaged HRIS software. Also the lack of commitment from top managers was the most frequently cited barrier to Full implementation of HRIS in Jordanian mobile companies. The support of

top management is one of the most important factors in the successful implementation of HRIS (Kovach and Cathcart, 1999). Top management have the main responsibility for providing sufficient financial support and adequate resources for building a successful HRIS. The lack of financial support and adequate resources will inevitably lead to failure. . This result agrees with study by agreeable with Ngai & wat (2006)

Research question 5:

What is the level of perception of some human resource staff variables toward the utilization of human resource information systems at Jordanian mobile companies?

Direct relationship hypotheses are: (H05) (H0₅₋₁) (H0₅₋₂) (H0₅₋₃) (H0₅₋₄)

The research findings approve these hypotheses, the results showed that there are significant relations between the educational level, working experience, HRIS budget and the utilization of HRIS at the Jordanian mobile companies. The results showed that PhD holders have differences with master degree holders in the utilization of HRIS at Jordanian mobile companies. Also employees with more than five years experience use HRIS more frequently in their jobs and they obtain more advantages from implementing HRIS.

Also, the results showed that HRIS budget differ from one mobile company to another. May be the size of a company have an effect on the achieved benefits of implementing HRIS. Companies such as Zain and orange have well established facilities such as intranets and extranet to access the required personal information quickly and efficiently. Comprehensive HRIS requires a sizable budget to implement and maintain. So top management should understand how the HRIS bring the benefits to the company and should be willing to allocate valuable resources for effective implementation. Also, there is empirical evidence that small companies in particular feel that the costs of such systems are too high. This result agrees with a study by Hussain, Wallace and Cornelius (2006). The study also shows that there is no significant difference between a working position and the utilization of HRIS at the Jordanian mobile companies. This means that administrative, technical staff and managers utilize HRIS but their increasing use of HRIS was considered to be equal to that of HR staff.

Research question 6:

What is the most significant effect of Human resource information systems (HRIS) on strategic human resources planning at Jordanian mobile companies?

Direct relationship hypotheses are: (H06, H06.1, H06.2H06.3, H06.4, H06.5)

The research finding regarding this question supported by the major and the minor hypotheses, the results of testing the specific strategic human resources planning Demonstrate that differences exist in specific usage however this agreeable with Hussaain,Wallac & Cornelius (2006):

- :Employment security: the study showed that there are significant relationship between HRIS and employment security but the use of HRIS to support employment security was significantly smaller and low than the researcher expect by chance alone although there is no evidence of a difference in relative usage between the four Jordanian mobile companies.
- Recruitment process: the study shows that there are significant relationship between HRIS and recruitment process. The use here by Jordanian mobile companies showed a significant difference from routine usage with the reported number of companies being higher especially Zain and orange. Also there is evidence that the use of HRIS for recruitment by Jordanian mobile companies was significantly larger that the researcher expected by chance alone.
- Career planning: the study showed that there is significant relationship between HRIS and career planning but there was no difference in the proportion of users from one mobile company to another who uses HRIS in support of HR planning.
- Extensive training: the study showed that there is significant relationship between HRIS and extensive training at Jordanian mobile companies' also their usage of HRIS in training was very low.
- Human capital management: the study showed that there is significant relationship between HRIS and human capital management. The use of HRIS in human capital management by Jordanian mobile companies was found to be significantly lower than the recommended.

Recommendation:

Based on the results the researcher recommends the following:

1. Jordanian mobile companies should more activate the use of human resource information systems (HRIS) in their decision making in order to provide strategic advantages for companies like using information about in this strategic human resource planning payroll service, employment benefits and recruitment process.

2. Jordanian mobile companies should be more aware of the full usage of HRIS applications in their decision efficiency such as improving data control, reducing data re-entry and enhancing competitiveness.
3. Some Jordanian Mobile companies use prepackaged HRIS software because of lack of capital and technical resources to implement HRIS .So it's recommended that these mobile companies should start to design their own HRIS Depending on their needs and their internal resources.
4. Provide human resource staff at Jordanian mobile companies with appropriate qualifications that help them use HRIS to assure systems quality and increase effectiveness.
5. Top management at Jordanian mobile companies should be more aware of the benefits that could be achieved from the full implementation of HRIS such as improving customer services and enhancing competitiveness.
6. The study recommend obtaining the support and involvement of top management at all significant stages (initiation, development and major changes) especially at the initiation stage in order to assure the successful implementation of HRIS.
7. Jordanian mobile companies should also adopt a comprehensive planning approach where the integration of the different HRIS applications is a top priority.
8. Also Jordanian mobile companies should have a systematic evaluation methodology for HRIS before and after implementation with the participation of all users and other systems beneficiaries.
9. Human resources staff at Jordanian mobile companies is considered to be the most important factor if trained well, so management especially at some mobile companies have to invest in these employees' and offer them specialized training programs to gain skills and be more productive and efficient.
10. When comparing the degree of computerization of strategic tasks to company size grouping, the relative increase of HRIS usage for advanced functions appears to be slightly more pronounced for companies like Zain and Orange so other companies should be take advantage of that.
11. Jordanian mobile companies should also align compensation, reward, and recognition efforts with the performance management system and achievement of the company's business or other objectives.

Study Limitations:

The limitations that confronted the researcher while conducting her study can be summarized as follows:

1. Personal bias: some of the information in this study reflects the judgment of individuals who provided the information and may have biases favoring the success of their companies.
2. The new concepts of (HRIS) in Jordan: the term HRIS is not a common term and that was reflected in the scarcity of resources discussing the topic especially the Arabic ones.
3. The other limitations is the lack of sufficient sum of data. The reason behind that is that most companies consider data related to human resources confidential, or at least should not be publicized; however, the appropriate analysis method and ensuring the anonymity of responses should solve this problem.
4. Some Jordanian mobile companies were conservative in providing information.
5. The nature of HRIS effect creates other limitations. Part of HRIS effects tangible and hence, could be measured , while the other parts are intangible and difficult to measure, however , the statistical method of using participants scores to ensure the study questions will be used to deal with this problems.