

THE SIGNIFICANCE OF ABSORBED AND UNABSORBED SLACK TO INNOVATION: THE CASE OF JDI COMPANY

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ABSTRACT

Usage of Management Information Systems (MIS) so that businesses are aided in the achievement of goals. Companies typically prefer to remove slack as it has suffered from a negative reputation. However, recent studies by Bae and Rhee (2014) have shown that slack actually leads to innovation. The proponent conducted this study on the contribution of organizational slack towards the innovative performance. The researcher tested the presence of organizational slack in JDI Company by looking at their absorbed and unabsorbed slack. The author then assessed if slack indeed led to innovative performance as the studies of Tan & Peng (2003) suggested. Afterwards, the researcher measured the extent at which the following types of innovation were adopted by the firms: organizational, marketing, process, product, behavioral, risk. A correlational analysis between slack and innovation was performed in order to test the hypothesis. The result shows absorbed slack had a negative effect on JDI's organizational innovation, while it has a positive effect on company's behavioral innovation. Meanwhile, unabsorbed slack had a positive impact on company's organizational innovation. The recommendation put forward by the researcher is that JDI should invest more in unabsorbed slack or in "excess resources" as this benefits their organizational innovation.

Keywords: Management Information Systems, Innovation, Organizational Slack, Absorbed and Unabsorbed Slack

INTRODUCTION

Background of the Study

One of the most important things needed to keep up with the fierce competition in business is efficiency. In the current age where technology is rapidly evolving, the use of technology to manage information is becoming more popular. This technological revolution gave rise to Information Systems (IS), which are designed to reduce human error and improve efficiency with the aid of technology. There are several factors that contributed to the popularity of IS, foremost of which is the cheap access to educated human resources. These factors, however, cannot be the only reason why countries in Asia like the People's Republic of China, India, Malaysia, and the Philippines, are progressing faster than most of the other areas. There are countries with similar situations as these fast growing nations, and it can be said that there is no one method that can work for every country since each one should develop their own approach that is relevant to their needs.

Management Information Systems (MIS) is defined by Oprea (2007) as the usage of information systems at every level, may it be in operational, tactical, or strategic decisions, to help businesses achieve their goals and objectives. Hence, MIS is a system that collects and processes data and provides it to managers at all levels for decision-making, planning and implementation (Michalek, 2006). However, Dehning, Dow & Stratopoulos (2004) cast doubts regarding the credibility of information systems as there was an era, known as the productivity paradox era, where it was observed that there were no links between financial

performance and the usage of IS. This led to several organizations to temporarily veer away from using such technology as they deemed it to be ineffective and wasteful.

Upon assessing the strengths and weaknesses of using MIS, organizational slack proved to be one of the weaknesses. Organizational slack has always been one of the things that most companies aim to reduce as much as possible. It is defined by Zinn & Flood (2009) as resources that are in excess of the minimum necessary to produce a certain level or organizational output. Slack is something that has been avoided especially by the companies that practice total quality management, six sigma, and just-in-time method because their aim is to keep the “excess” to a minimum so that costs are reduced and profits maximized.

Despite its negative connotations, organizational slack can actually have a positive effect on companies. Some researchers have shown that slack in organizations have proven to be beneficial. Tan & Peng (2003) have pointed out that an inverse-U relationship exists between slack and innovation performance. Google and 3M are also some of the few companies that promote the use of slack in the workplace by encouraging their employees to take 20% of their work week off to be creative and do what they want as projects. This unconventional strategy boosted their number of ideas as well as their company’s overall morale; and thus began the slow but sure popularity of using slack as a beneficial tool. Tan & Peng (2003) also mentioned that even though slack is generally viewed as a negative factor, it may be used as something to be relied upon in case of emergencies, such as the need for repairing equipment, sudden change in supply and demand, or changes in the economic environment. Improving the creativity of employees and other such positive effects of organizational slack can lead to more ways on how to innovate the organization. Different innovation models have been provided. When firms develop a selection of innovations to maintain their competitiveness, this would require a strategic management approach rather than just operational, marketing, and technological views.

This study determined if organizational slack is indeed beneficial to companies, particularly companies under the home improvement industry in the Philippines. Unsurprisingly, slack has a negative implication on industry practitioners and business owners in the Philippines but using it as an opportunity to innovate can greatly improve the performance of organizations. The researchers likewise aims to know how organizational slack can help in the long-term plans of companies so that their presence in the market can be further strengthened. In the end, this study is important for it can help small- and medium-enterprise owners increase their competitive advantage through a phenomenon which conventional wisdom told them to eliminate.

Rationale of the Study

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Statement of the Problem

“How does the organizational slack of Management Information Systems (MIS) contribute to Jardine Distribution Inc. (JDI) Company?”

Specific Problems

- With organizational slack that leads to organizational innovation, which between absorbed and unabsorbed slack will influence the innovative performance of the JDI Company?
- What innovation model can contribute to strategic planning ?
- Based on the findings of the study, what implications and recommendations can be drawn?

Objectives of the Study

The main objective of this research was to determine the contribution of the organizational slack of management information systems (MIS) for Jardine Distribution Inc. (JDI) Company.

Specific Objectives

- To determine whether absorbed or unabsorbed organizational slack influenced their innovative performance.
- To provide recommendations on where JDI should focus on in order to maximize slack.

Significance of the Study

The study offered significant information with regards to how Management Information Systems (MIS) affected organizational innovation leading to strategic planning. The results of the study revealed important information for the benefit of following entities:

Scope and Limitation

- Only the MIS of one company (Jardine Distribution Inc.) was used for data
- Interviews regarding Jardine’s organizational capabilities and their respective MIS were conducted with involved department heads.
- Surveys regarding the organization’s efficiency and effectivity were conducted, and respondents included both internal and external users (for applicable variables) of the chosen companies.
- As the MIS may have numerous weaknesses, the study only focused on organizational slack as the variable that leads to innovation.
- For organizational slack, the researcher proposed an innovation model which ultimately provides the impetus for thoughtful strategic planning.

FRAMEWORK

Theoretical Framework

Slack Leading to Innovation

Bae & Rhee (2014) also proposed a framework of their own consisting of control and moderating variables, aside from the standard dependent and independent variables as seen in Figure 3.3; their results show two major findings. When the firm size and firm age are controlled, both absorbed and unabsorbed slack have positive effects on technological innovation. And environmental uncertainty negatively moderates the relationship between absorbed slack and technological innovation while the environmental uncertainty had no moderating effect between unabsorbed slack and technological innovation (Bae & Rhee, 2014). This means that the degree of impact of organizational slack on technological innovation may vary depending on the control or moderating variables and that in business, moderate levels of organizational slack can actually aid in technological innovation and may contribute to better performance.

In addition, slack resources play significant role on firm technological innovation as Ujari (2002) mentioned. He examined the impact of technology strategy, firm-level absorptive capacity and slack resources, on technological innovation with industry type as a moderating variable. Technology strategy, firm-level absorptive capacity and slack resources all have positive relationships with innovation, however, technology strategy and firm-level absorptive capacity on their own were not very strong predictors for innovation, only the slack resources variable was a very strong predictor of innovation on its own, regardless of the other variables.

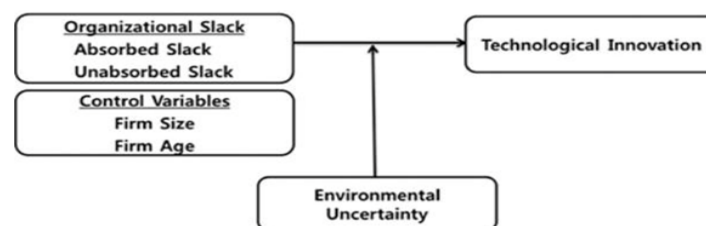


FIGURE 1
CONCEPTUAL MODEL ON SLACK-INNOVATION RELATIONSHIP (BAE & RHEE, 2014)

Heng, Ding, Guo & Luo (2014) also did a research on the relationship of organizational slack and innovation. They constructed a conceptual model (Figure 3.2) that links organizational slacks, entrepreneurial orientation and product innovativeness together, based on the insights from both Resource-Based View (RBV) and Dynamic Capability Theory (DCT). Through drawing implications from both RBV and DCT, their study not only gives a more holistic perspective on slack but also helps firms to achieve the innovation implications of Entrepreneurial Orientation (EO) by its moderating impacts on slack – innovation linkage. From its review of related literature, on the first part it points out that the absorbed slacks as resources can be substitutable with other resources that are less constrained in the redeployment factor, while the unabsorbed slacks as resources cannot be substitutable with resources such as absorbed slack. From its second set of review of related literature, it points out that when adding entrepreneurial orientation as the moderator, the relationship between two types of slack and product innovativeness becomes highly responsive.

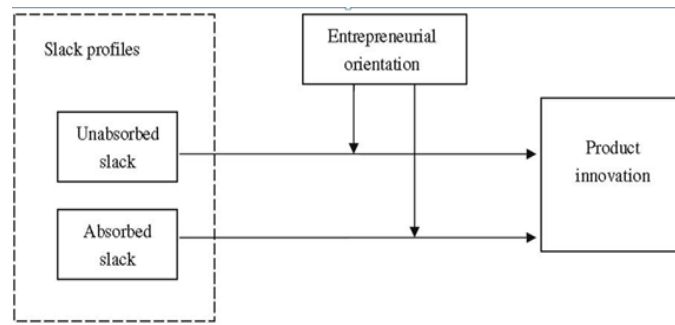


FIGURE 2
CONCEPTUAL MODEL ON SLACK-INNOVATION RELATIONSHIP (HENG ET AL., 2014)

Innovation Model

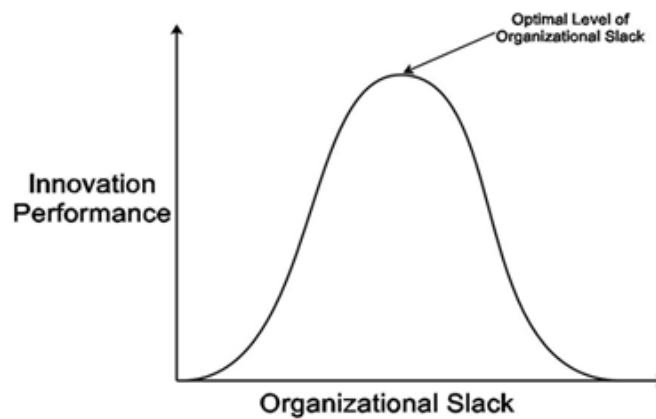


FIGURE 3
INVERSE U-SHAPE RELATIONSHIP OF INNOVATION PERFORMANCE AND ORGANIZATIONAL SLACK

Operational Framework

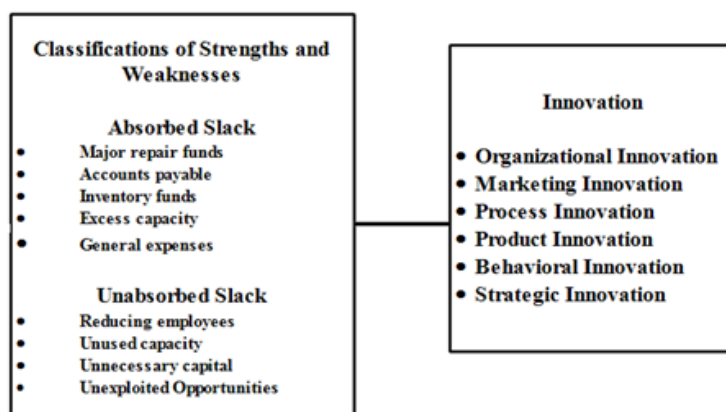


FIGURE 4
OPERATIONAL FRAMEWORK WITH VARIABLES

The operational framework involves two major steps that lead to strategic planning:

The first step was to be able to determine the classifications of the strengths and weaknesses of MMI. An expected result of this assessment is organizational slack, which, according to Tan & Peng (2003), despite its usual negative connotation, can actually prove beneficial to the company. Researchers such as Tan & Peng (2003); Bae & Rhee (2014) suggested that organizational slack and innovation can be explained through MIS and organizational slack. Tan & Peng (2003) talked about organizational slack and its implications. Gunday, et al., (2011); Wang & Ahmed, (2004) discuss the dimensions of innovation in depth and its implications on firms' performance. Plessis (2007) mentioned that these new knowledge are embodied in new products, processes, services or methods, and Wonglimpiyarat (2004) adds that these activities would improve the firm's strategic position. Dehning, et al., (2004) discusses the effects of information technology on organizational slack.

The second step determined what variables from the absorbed and unabsorbed organizational slacks contribute to the creation of innovation models in the company. Geiger & Cashen (2002) suggest that too much available and recoverable slack can impact the firm negatively; however, greater levels of potential slack appear to positively impact the firm. Referring to Figure 3.3, the presence of organizational slack has a positive relationship with innovation performance. The figure also shows that there is an optimal level of organizational slack that would lead to the optimal innovation performance. Additional organizational slack above the optimal level will decrease innovation performance. Bae & Rhee (2014) discuss the connection between slack and innovation with environmental uncertainty mediating them.

Gunday, Ulusoy, Kilic & Alpan (2011) proposed several types of innovation, namely, product innovation, process innovation, marketing innovation and organizational innovation. Moreover, Wang & Ahmed (2004) proposed behavioral, product, process, market and strategic innovation. There are different innovation models from which the variables were extracted. The determination of the strengths and weaknesses of the companies and the absorbed and unabsorbed slack would further lead to innovation. As it was stated, the optimal level of organizational slack can lead to maximum innovation. According to Rainier & Turban (2009), innovation would detect the organization's decision in developing new technologies. These innovation models would be significant in determining the performance of the firm and improving it.

From the determination of the slack, it would give an opportunity for further innovation on the work processes being done in the company. The innovation models would pave the way for the firm's improvement. Najmaei (2014) stated that innovations are developed by a firm in order to maintain their competitive advantage.

Proposition of the Study

Based on literature and basic understanding, the proponent formulated the following propositions for the problem of the study:

- A. Organizational slack can help create innovation models among the companies under study.
- B. Organizational slack has a positive impact on an organization.

Operational Definition of Terms

- Absorbed Slack - a type of slack that corresponds to excess amount of cost in organizations
- Customer Satisfaction - how organization's offerings meet customer expectation, needs and wants
- Environmental Uncertainty - conditions wherein circumstances and happenings are constantly changing within a business environment
- Financial Investment - a sum of money put into an asset hoping for a future gain
- Financial Resources – all financial funds of a company that is available for spending

- Hardware – these are the physical components of the computer that enables it to run a mix of programs and processes called software
- Home and Garden – a type of industry associated with housing and gardening
- Home Improvement – an act of renovating or adding new things to the house
- Human Resources – a group of people who make up an organization’s workforce
- Industry – group of companies providing the same or similar goods and/or services
- Innovation – an idea and actualization of future needs or wants
- Management Information System (MIS) – computer based system that provides upper management tools to evaluate and make decisions
- Operational Management – designing and controlling production process
- Organizational Capability – ability and capacity of an organization
- Organizational Effectivity – how effective and organization is in achieving intended outputs
- Organizational Efficiency – ability to implement plans using the least amount of resources
- Organizational performance- refers on how a firm executes its operations, through utilization of inputs, those results to the intended output
- Organizational Slack – “pool of resources in an organization that is in excess of the minimum necessary to produce a given level of organizational output.” (Bae and Rhee, 2014)
- Physical Resources – tangible assets owned and used by a company
- Strategic Planning – systematic process of envisioning future and translating this vision into desired goals or objectives
- Strength – an advantage or benefit of an organization
- Technological innovation- development of different innovations that create improvement on technology
- Unabsorbed Slack - a type of slack where resources are untapped and has not been designated for particular purposes
- Utilization – to make an effective use of something
- Weakness – a disadvantage of an organization that needs to be improved

RESEARCH METHODOLOGY

Company Background

Jardine Distribution, Inc. (JDI) Company is a wholesale distributor of agricultural and applied construction chemicals. The vision of the company is to be the marketing and distribution company of choice in the market in which they operate. The company also represents a number of leading global and local crop protection and applied construction materials companies, each with world class quality products and technical support. The key focus of the company’s operations is the safe and proper use of products, with due consideration for environmental protection and this forms part of their regular training program. The stewardship programs and the extension services offered to the customers consistently reflect their principles. The product distribution is done through a wide network of authorized distributors and dealers nationwide, and market coverage is achieved highly trained sales force and technical support team. Products are distributed through the company’s distribution network by accredited truckers and forwarders whose staff is annually trained in the safe and proper handling of chemicals. Operations and Sales & Distribution staff are regularly trained basic safety and first aid procedures, with special emphasis on safe handling and use of chemicals.

Research Design

This mixed-method study used the multiple-embedded case study design in gathering as well as analyzing data. Methods to gather both quantitative and qualitative data included surveys, participation-observation and fieldwork. The survey was used in the study as it can gather data from a large population in a relatively convenient and efficient manner. Surveys are systematic, self-monitoring and representative as it is often used in research studies

(Burton, 2007). Survey as a methodology studies the sampling of individual units from a population and constructs questionnaires as a form of quantitative data collection. On the other hand, participation-observation was also used in the study. Burton (2007) defined participant observation as the systematic description of behaviors in a social setting of a chosen study. Furthermore, survey forms were also deployed to assess the Management Information System (MIS) efficiency and effectiveness in an organization. The researcher also chose to do field work for this study since it is often used to monitor human behaviors in natural conditions of their daily life (Basinska, 2012). Hence, the researcher is closer to the real world and thus gains from immediate contact with the respondents. It is one of the best ways to discover the particular information required and to answer research problems.

Basinska (2012) emphasized the importance of fieldwork especially in data gathering in different organizations as it allows the researcher to interact, understand the people in the company, and see problems that cannot be extracted from interviews. Through the use of the data from the surveys and interviews, the proponent used 3 major methods of analysis for this study, namely, descriptive analysis, cross-tabulation and correlational analysis. Descriptive analysis is the summarization of the data retrieved from the respondents and presenting them in an easy to understand manner; this includes the mean, median, and mode. For the case of this study, however, the researcher decided not to include median as it is not relevant to the investigation. Cross-tabulation is a statistical analysis that presents the data in tables in such a way that it is easier for the reader to find patterns and trends from it; it is done by plotting the variables or sub-variables to be used against the different cases of the study. Correlational analysis is the use of statistical tools to evaluate the intensity of the relationship between variables. The correlation coefficients range from -1.00 and 1.00, negative values mean that the variables are inversely proportional, while a positive value denotes a directly proportional.

Sampling Plan

According to Robert Yin (2014), the embedded case study involves more than one unit of analysis; it occurs when, within a single case, attention is also given to a subunit or subunits. The subunits can often add significant opportunities for extensive analysis, enhancing the insights into the single case. The research studied three (3) companies under the home and garden industry of the home improvement category. Since three companies were studied, this study was a Multiple Case study design. Yin (2014) suggests that evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust. Multiple case studies allow for replication. Each case must be carefully selected so that it either: (a) predicts similar results (a literal replication) of using MIS, since the three companies has the same industry and same structure, the researcher can find out what do they have in common in terms of using MIS, types of MIS, MIS model and organizational capabilities or (b) predicts contrasting results but for a predictable reasons (a theoretical replication), thus, the proponent can find out what are the differences from one to the other.

Companies are screened to make sure that they have been using Management Information Systems (MIS) for at least three (3) years to account for the lag effect in innovation. The chosen companies were given surveys to be answered by both internal and external users to determine the effect MIS has on employees and their customers. Furthermore, as this study used a mixed method approach, the researcher also conducted interviews with all the departments involved in using the chosen companies' MIS, as well as the finance and Information Technology (IT) departments to obtain the needed information outside of the surveys. The internal respondents refer to the employees that use the MIS and the external users refer to the long term (5-10 years) clients of the companies.

Method of Data Analysis

According to Creswell (2009), there are different approaches in a mixed method data analysis. In concurrent strategies, data can be transformed to either quantifying qualitative data or qualifying quantitative data. Quantifying qualitative data involves creating codes and themes and counting the number of times they occur in the text data which enables a researcher to compare results with the data. Another approach is to examine multiple levels. In a concurrent embedded model, surveys were conducted at one level to gather quantitative results about a sample, and interviews were done at the same time to be able to explore the phenomenon with specific individuals. When comparing data, information from both data types is combined into a matrix. The horizontal axis could be a quantitative categorical variable, while the vertical axis would be the qualitative data. Information in the cells could be either quotes, counts of the number of codes, or some combination. The matrix would be able to present an analysis of the combined data.

Qualitative data were taken from the interviews conducted with the respective individuals from the different departments involved in using MIS through the Work-Centered Analysis (WCA) framework. From the information collected, a content analysis was conducted with a matrix showing the similarities and differences of the data gathered from the three (3) chosen companies. An example of the said matrix is shown below.

RESEARCH FINDINGS

Initial Analysis

As mentioned in the previous chapter, the researcher used self-administered questionnaires in gathering data from both the staff and customers of JDI Company. Afterwards, in-depth interviews were conducted with the IT heads of the company so that their insights can be gathered. Both quantitative and qualitative data were collected from January 2017 to May 2017 and during this period, 45 internal customers and 22 external customers were invited to answer the survey on organizational capabilities, organizational effectiveness and efficiency, absorbed slack, and unabsorbed slack. The survey also covered the 6 innovation models pertaining to organizational, marketing, process, product, behavioral, and strategic concerns. By using correlational analysis, the researcher was able to establish the association between the variables and it further revealed whether the relationship between the constructs was significant or not. Further details regarding the statistical analysis of quantitative data gathered are shown throughout this chapter.

Company Name	Internal Respondents		External Respondents	
JDI	Freq count	% share	Freq count	% share
Location				
Warehouse	12	26.67%	N/A	N/A
Office	33	73.33%	N/A	N/A
Age				
18-25	4	8.89%	0	0%
26-30	10	22.22%	5	22.73%
31-35	12	26.67%	6	27.27%
36-40	10	22.22%	5	22.73%

41-45	3	6.67%	6	27.27%
46-50	3	6.67%	0	0%
51-55	2	4.44%	0	0%
56-60	1	2.22%	0	0%
Gender				
Male	35	77.78%	20	90.91%
Female	10	22.22%	2	9.09%
Jardine	Name		Rank	
IT Representative	Susan Dizon		IT Manager	

Relationship of Organizational Slack and Innovation

Table 2 SLACK TABLE	
Organizational Slack	JDI Company
Absorbed slack	The firm has been operating below engineered capacity.
	The equipment has not reached their limits.
	The firm always has accessible funds for major repairs.
	The firm has excess inventory funds.
Unabsorbed slack	Retained earnings of the firm have been sufficient.
	A pool of financial resources can be used on a discretionary basis.
	Necessary bank loans can be obtained.

Table 3 INNOVATION TABLE	
Innovation	JDI Company
Organizational Innovation	The company renews its routines, procedures and processes to execute firm activities in innovative manner.
	The company renews the supply chain management system.
	The company renews the production and quality management systems.
	The company renews the human resources management system.
	The company renews the in-firm management information system and information sharing practice.
	The company renews the organization structure to facilitate teamwork.
	The company renews the organization structure to facilitate coordination between different functions such as marketing and manufacturing.
	The company renews the organization structure to facilitate project type organization.
	The company renews the organizational structure to facilitate strategic partnerships and long- term business collaborations.
Marketing Innovation	The company renews the design of the current and/or new products through changes such as in appearance, packaging, shape and volume without changing their basic technical and functional features.
	The company renews the distribution channels without changing the logistics processes related to the delivery of the product.
	The company renews the product promotion techniques employed for the promotion of the current and/or new products.
	The company renews the product pricing techniques employed for the pricing of the current and/ or new products.
	The company renews general marketing management activities.
Process	The company determines and eliminates non-value adding activities in production

Innovation	processes.
	The company decreases variable cost components in manufacturing processes, techniques, machinery and software.
	The company increases output quality in manufacturing processes, techniques, machinery and software.
	The company determines and eliminates non-value adding activities in delivery related processes.
	The company decreases variable cost and/or increases delivery speed in delivery related logistics processes.
Product Innovation	The company increases manufacturing quality in components and materials of current products.
	The company decreases manufacturing cost in components and materials of current products.
	The company develops newness for current products leading to improved ease of use for customers and to improved customer satisfaction.
	The company develops new products with technical specifications and functionalities totally differing from the current ones.
	The company develops new products with components and materials totally differing from the current ones.
Behavioral Innovation	The employees a lot of support from managers if we try new ways of doing things.
	In the company, the employees tolerate individuals who do things in a different way.
	The employees are willing to try new ways of doing things and seek unusual, novel solutions.
	In the company, everyone is encouraged to think and behave in original and novel ways.
	Employees' behaviour depends on what the company wants them to.
Risk Innovation	The firm's R&D or product development resources are adequate to handle the development needs of new products and services.
	Key executives of the company are willing to take risks to seize and explore "chancy" growth opportunities.
	Senior executives constantly seek unusual, novel solutions to problems <i>via</i> the use of "idea men" or someone who provides original ideas.
	When the employees see new ways of doing things, they are first at adopting them.
	The employees prioritize new way of doing things rather than using old ways.

Correlational Analysis

The researcher used a correlation analysis to know if organizational slack significantly relates to innovation in JDI Company. A correlation analysis is used to find the relationships the 2 variables of the study. In this case, the two variables are organizational slack and innovation. Organizational slack is divided into absorbed and unabsorbed slack while innovation is divided into organizational, marketing, process, product, behavioral and strategic. A positive correlation value would mean as one variable increases, the other variable would increase as well. On the other hand, a negative correlation value would mean as one variable increases, the other variable decreases. The proponent decided to use a confidence level of 95% in conducting this correlation analysis of the study.

Propositions	Slack	Jardine	
		Survey	Interview
	Absorbed	Organizational	
		Pearson R= -0.761	
		P-Value=0.000**	

<p>Proposition 1. Organizational slack can help create innovation models in the companies under study.</p>		Marketing	<p>Organizational slack can pave way in bringing about innovation models in the company since it assesses the areas from which the management needs to improve.</p>
		Pearson R= -0.251	
		P-Value=0.031*	
		Process	
		Pearson R=0.025	
		P-Value=0.435	
		Product	
		Pearson R= -0.226	
		P-Value=0.067	
		Behavioral	
		Pearson R= -0.404	
		P-Value=0.003**	
		Strategic	
		Pearson R= -0.607	
P-Value=0.000**			
	<p>Unabsorbed</p>	Organizational	
		Pearson R= -0.230	
		P-Value=0.064	
		Marketing	
		Pearson R= -0.151	
		P-Value=0.161	
		Process	
		Pearson R= -0.450	
		P-Value=0.001**	
		Product	
		Pearson R= -0.508	
		P-Value=0.000**	
		Behavioral	
		Pearson R=0.110	
P-Value=0.236			
Strategic			
Pearson R=0.376			
P-Value=0.005**			

Significance of Slack on Innovation

As observed in table 4, there are a number of types of Innovation that are affected by absorbed slack, which are organizational, marketing, behavioral, and strategic innovation.

Among the six types of innovation only process and product do not have a significant effect on JDI Company; the remaining four factors effect JDI negatively. As for unabsorbed slack, process (-), product (-), and strategic innovation (+) are the only factors which significantly affect JDI.

Absorbed Slack	JDI Company
Organizational	Significant (-)
Marketing	Significant (-)
Process	Not Significant
Product	Not Significant
Behavioral	Significant (-)
Strategic	Significant (-)

Unabsorbed Slack	Jardine Distributions
Organizational	Not Significant
Marketing	Not Significant
Process	Significant (-)
Product	Significant (-)
Behavioral	Not Significant
Strategic	Significant (+)

Organizational Slack	Innovation	Jardine Distribution, Inc.
Absorbed	Organizational	Absorbed Slack has a negative effect on Jardine's Organizational Innovation
	Marketing	Absorbed Slack has a negative effect on Jardine's Marketing Innovation
	Process	Absorbed Slack has no effect on Jardine's Process Innovation
	Product	Absorbed Slack has no effect on Jardine's Product Innovation
	Behavioral	Absorbed Slack has a negative effect on Jardine's Behavioral Innovation
	Strategic	Absorbed Slack has a negative effect on Jardine's Strategic Innovation
Unabsorbed	Organizational	Unabsorbed Slack has a negative effect on Jardine's Organizational Innovation
	Marketing	Unabsorbed Slack has a negative effect on Jardine's Marketing Innovation
	Process	Unabsorbed Slack has no effect on Jardine's Process Innovation
	Product	Unabsorbed Slack has no effect on Jardine's Product Innovation
	Behavioral	Unabsorbed Slack has a negative effect on Jardine's Behavioral Innovation
	Strategic	Unabsorbed Slack has a negative effect on Jardine's Strategic Innovation

Organizational Slack and Its Impact on an Organization

Table 8 PROPOSITION 2	
Proposition	JDI Company
Organizational slack has a positive impact to an organization	Slack can still produce negative impacts when not handled appropriately, thus, the employees must still be careful. Slack in resources can either bring about a positive or negative impact on the organization.

Slack can have a positive on an organization, however that is always not the case as seen in JDI Company's situation, where slack and innovation are inversely proportional. Instead, now that it is known that additional slack for JDI is harmful for their innovation, they can make use of this information and reduce their slack. The organizational slack is present in JDI. With the use of the system, they assure utilization of resources properly and effectively. However, slack can still produce negative impacts when not handled appropriately, thus, the employees must still be careful. Slack in resources can either bring about a positive or negative impact on the organization. It is more likely dependent on the employees' perspective.

CONCLUSION

Innovation has always been one of the main targets of businesses worldwide as it provides strong competitive advantage against their rivals. As seen in the review of related literature, there are a number of studies which show that organizational slack leads to innovation. Slack has often been viewed in a negative light but this study has revealed that its subsequent effect can actually depend on the organization.

For every type of business, there appears to be an optimal MIS model that is being adopted by each one of them. One has to always consider the type of industry, company size and financial capabilities. To date, many business establishments do not use MIS and this is particularly true for micro and small enterprises. However, in the home garden industry even SMEs like Jardin have tried using MIS and have seen good results. Based on the information gathered from interviews, it can be concluded that they have the appropriate organizational capability to run the MIS. In terms of employees, no user is allowed to operate the system unless they have received proper training and have exhibited their aptitude in using the system. The MIS is also widely received in each organization because of how it eases their workload. Feedback from the users is also taken into consideration every time an update or upgrade would be scheduled.

Despite the heavy initial investment needed for the MIS, the companies are still able to maintain, manage, and operate the system. Investing in the MIS has also improved the management of financial resources in the companies as it is easier for them to make decisions with the system. The Management Information System managed to bring about improvements on the business processes of all the companies in terms of customer satisfaction, operational management and financial investment. The MIS also increased the motivation of the employees as it reduced the burden of the workload. The customers are satisfied with the use of the information system. The Management Information System is able to deliver maximum productivity since it produced timely and accurate data. The information stored can easily be accessed and it has a friendly interface. Thus, the users experienced minimal difficulty in using the information system. The users only encountered minimal

problems while using the system. Although training was a part of executing and using the system, the users had the appropriate skills in using the system and the training was said to be useful. Moreover, the employees were able to organize their work with the use of the system.

Relating to the aforementioned, the MIS has also significantly reduced paper trail from each company. It also made the companies become transparent internally because all transactions are recorded, which means it can be reviewed by management any time they wish. Their previous systems were not automated, so when looking for necessary documents, the employees had to the storage room to manually find the necessary documents. It took time away from their intended productive hours. Now, they save time because most information is just a click away; this has also reduced discrepancies and mistakes caused by human error.

With growing companies such as the ones under study, data input is constantly increasing. The MIS would need more processing power, and this entails additional investments in hardware and software. As long as the company has enough financial resources to maintain and operate the MIS, this will not be a problem. Between absorbed and unabsorbed slack, both of them can influence specific types of innovation. Each type of slack influences the various types of innovation differently and some types of innovation are not even being influenced by these slacks. When comparing the two slacks it is apparent that absorbed slack affects innovation more for all of the companies. But not all effects from slack are positive, as it will soon be discussed in the recommendations.

After scouring through various literatures and assessing the results of both surveys and interviews, the researcher summarized the business practices that organizations in the home and garden industry should try to follow in order to maximize their levels of innovation. The managers (a) should have an active role in monitoring the system, (b) organizations should integrate their company policies into their processes to reduce policy, (c) they should keep their hardware and software updated, and (d) they should ensure that their system is always up-to-date. While it isn't necessary to always match their software and hardware together, it would be better for them to purchase software and hardware with an eye on the future so that any updates or changes to the system would still be compatible to the one they have.

RECOMMENDATION

Based on proponent's observation, in these changing times, new technology and consumer wants must challenge this corporation to find ways in dealing with their business or face the consequences of becoming irrelevant. The proponent would like to quote the statement of Rainer and Turban (2009) that: "Management Information System is a set of business systems designed to provide information for decision-making. A computerized MIS is most effective if it is integrated throughout the entire organizations. The extent of a computerized MIS varies from company to company, but the most effective kinds are those that are integrated. An integrated MIS incorporates all five managerial functions – planning, organizing, staffing, directing, and controlling – throughout the company."

In the 21st century, companies are becoming competitive and dynamic. Thru this, all the companies need to apply Management Information System (MIS) in able to prepare the people in organizations to meet challenges of a knowledge-based economy and to respond to the dynamics of the work environment with technological skills and a high level of thinking skills, and to achieve their vision and mission, as well as their corporate goals and objectives.

JDI Company

To maximize innovation for JDI, they should reduce both absorbed and unabsorbed slack as much as possible since slack and innovation are inversely proportional in Jardine's case. As long as they cut back on excessive spending (equipment) and make use of their spare resources (reserve funds) all types of innovation will improve. As mentioned in the previous chapter, JDI Company is heavily dependent on the system itself as well as the internet connection; should one of them experience any technical difficulties, all processes will immediately slow down. As such, it might be better to prepare alternative courses of action should such situations arise.

JDI Company should also consider backing up the data from the server regularly as all of the systems are connected to the main server and they already experienced technical problems before. By using a back-up system, it will help the company prepare for similar situations that may arise.

Academe

There have been several studies arguing the influence of MIS, and whether organizational slack is actually beneficial or not. Additionally, there is scant literature in the Philippine setting regarding these topics. But after the gathering and analysing of data for survey and interviews, there have been new data and information that has come to light. This might further enrich the literature already established regarding MIS, absorbed and unabsorbed slack, and innovation models. It is recommended that the academe further pursue studies along these topics.

Future Researchers

Future researchers must take into consideration the size of the company they are studying. Big companies will have little to no time to entertain such extensive scholarly undertakings. Future researchers must be patient with respondents and key informants since answering interviews and surveys will interrupt with their work. It is also encouraged that future researchers do their best to improve the survey questionnaires as it was deemed too long by many respondents under the study.

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