International Journal of Advanced Research in Management and Social Sciences
ISSN: 2278-6236
Impact Factor: 7.065

"THE LINK BETWEEN TECHNOLOGY AND STRATEGIES OF A BUSINESS"

AUTHOR: GIEHLITO CAMMAYO DULIN

ABSTRACT

In the present era of deregulation, privatization and increasing global market competition, most industrialists in developing countries have come to the realization that better technology is needed for the survival of both public and private sector enterprises.

Therefore, they acknowledge that technological considerations must be properly in corporated into overall business strategies. However, in the absence of an established theory and due to lack of relevant data, they face enormous difficulties.

This paper describes a simple framework for integrating business and technology strategies, particularly in the context of business management. Necessary considerations for technological capability development and technology strategy progression path are also discussed for different enterprise situations and development conditions.

KEYWORDS: *Technology, business, strategies*

Chapter I

INTRODUCTION

In today's fast-paced and rapidly changing business environment, companies have deeply modified their strategies to integrate technology into the business planning process. Technologies are now everywhere in the firm's value chain. Thus, it is necessary for firms to adapt their strategic process as technology is pervasively important as part of business function. This implies the need to study a technology strategy that link technology with business objective.

In this paper, the researcher reviews a structured approach to business and technology strategy. The process includes study a framework that serves as guidance to organizations enabling them to analyze the technology needs for a business.

Therefore, owners/managers must be aware of the strategic importance of technology in delivering value and competitive advantage to their companies. Among the awareness are deciding which technologies support the strategic objectives, identifying company's strengths and weaknesses, establishing technology priorities, and finally deciding strategic actions.

According to Floyd (1997), in particular of that, there are approaches for:

i. Deciding which technologies you need to support the strategic objectives of your business.

ii. Determining competitive strengths and weaknesses in the technologies matter

iii. Setting corporate technology priorities

iv. Deciding on strategic actions to strengthen your position

This research will explain the linking business objectives with technology competences to integrate business and technology strategies. The final product to be developed is an integrated plan linking business and technology strategies to guide a business organization to their desired goal.

STATEMENT OF THE PROBLEM

This study attempts to determine the link between the advancement of technology to the strategies of a business. Specifically aims to answer the following questions:

1. What is the profile of the respondents relative by occupation to:
    1.1. Age
    1.2. Gender
    1.3. Civil Status
2. What are the technologies available to the businesses of the respondents?
3. What technology is top rated technology needed in the growth of their businesses?

Significance of the Study

Technology has important effects on business operations. No matter the size of your enterprise, technology has both tangible and intangible benefits that will help you make money and produce the results your customers demand. Technological infrastructure affects the culture, efficiency and relationships of a business. It also affects the security of confidential information and trade advantages.

COMMUNICATION WITH CUSTOMERS

First and foremost, technology affects a firm's ability to communicate with customers. In today's busy business environment, it is necessary for employees to interact with clients quickly and clearly. Websites allow customers to find answers to their questions after hours. Fast shipment options allow businesses to move products over a large

geographic area. When customers use technology to interact with a business, the business benefits because better communication creates a stronger public image.

EFFICIENCY OF OPERATIONS

Technology also helps a business understand its cash flow needs and preserve precious resources such as time and physical space. Warehouse inventory technologies let business owners understand how best to manage the storage costs of holding a product. With proper technology in place, executives can save time and money by holding meetings over the Internet instead of at corporate headquarters

BUSINESS CULTURE AND CLASS RELATIONS

Technology creates a team dynamic within a business because employees at different locations have better interactions. If factory managers can communicate with shipment coordinators at a different location, tensions and distrust are less likely to evolve. Cliques and social tensions can become a nightmare for a business; technology often helps workers put their different backgrounds aside.

SECURITY

Most businesses of the modern era are subject to security threats and vandalism. Technology can be used to protect financial data, confidential executive decisions and other proprietary information that leads to competitive advantages. Simply put, technology helps businesses keep their ideas away from their competition. By having computers with passwords, a business can ensure none of its forthcoming projects will be copied by the competition.

RESEARCH CAPACITY

A business that has the technological capacity to research new opportunities will stay a step ahead of its competition. For a business to survive, it must grow and acquire new opportunities. The Internet allows a business to virtually travel into new markets without the cost of an executive jet or the risks of creating a factory abroad.

Scope and Limitation of the Research

The scope of this study will focus on the Link between technology and strategies of the respondents' businesses.

Definition of Terms

Business. A privately owned, for-profit corporation can be either privately held by a small group of individuals, or publicly held, with publicly traded shares listed on a stock exchange. Cooperative: Often referred to as a "co-op", a cooperative is a limited-liability business that can organize as for-profit or not-for-profit.

Business Owner. Individual or entity who owns a business entity in an attempt to profit from the successful operations of the company. Generally has decision making abilities and first right to profit.

Company. A commercial business

Manager. A person responsible for controlling or administering all or part of a company or similar organization.

Strategy. A plan of action or policy designed to achieve a major or overall aim.

Technology. the application of scientific knowledge for practical purposes, especially in industry.; advances in computer technology"; machinery and equipment developed from the application of scientific knowledge; the branch of knowledge dealing with engineering or applied sciences.

Technology Advancement. The rate of technological advancement is increasing with time, society is looking to create and develop easier ways to live and lengthen their lives. The internet is a massive source of information that millions of people use and depend on every day.

CHAPTER II

Research Methodology

Research Design

Since this study aimed at finding link between advancement in technology and strategies of a business. The researcher made use of the descriptive co-relational design employing the checklist in gathering data.

Descriptive co-relational designs a method which describes an existing relationship between variables is related and it does so by the use of co-relational.

Respondents of the Study

Respondent	Population	Sample
Business owners/managers at the center of Tuguegarao City, Cagayan	100	50
Total	100	50

Data Gathering Tools

The main research instrument used in gathering data was a survey questionnaire informal interviews were also conducted to supplement the data gathered.

The questionnaire consists of two parts. Part I elicited items on the respondent's profile while Part II consist on the checklist.

Data Gathering Procedures

The distribution was done personally by the researcher and had to wait for the checklist to be done to prevent the form getting lost or misplaced.

Statistical Tool

In theanalysis of data, contain statistical formula had to use to determine the tendency of the respondents perception the researchers employed the simple frequency counts and percentage distribution for analysis of some other data.

In order to establish the perception of respondent's on the different variables the weighted mean was computed.

Chapter III

RESULTS AND ANALYSIS

This chapter presents the analysis as well as interpretation of the data gathered based on the objectives and hypothesis of the research study.

1.1 Age

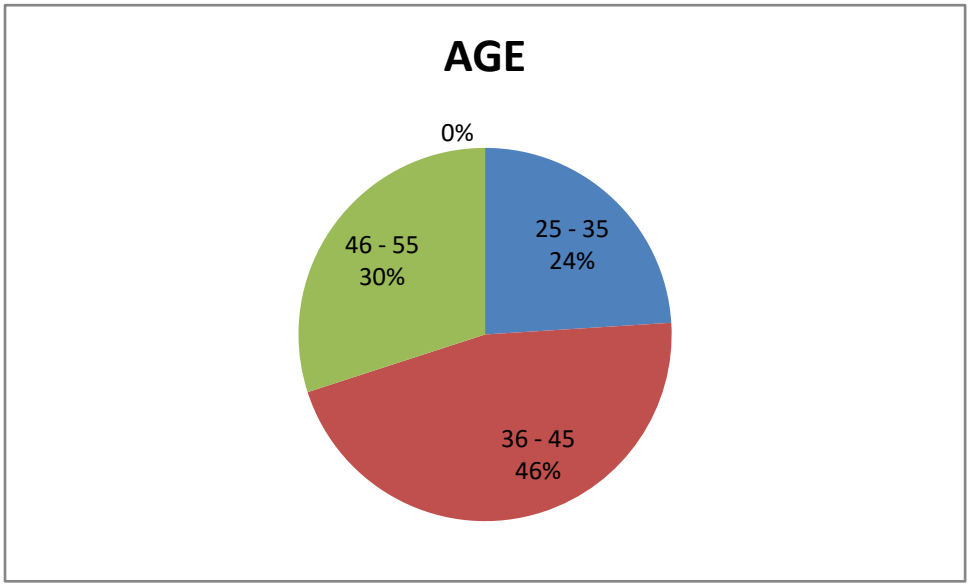
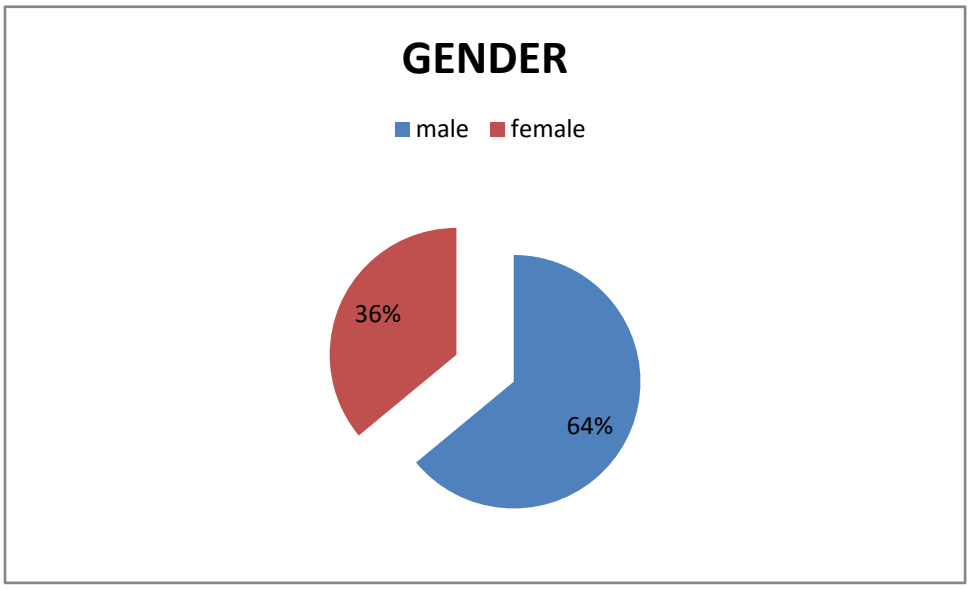


Table 2a

Frequency and Percentage Distribution of the Respondents According to Age

The Pie Chart shows that the majority of the respondents are from age bracket 36 - 45 years old at 46%. On the contrary, there is only 24% representing 25 TO 35 years old and up.

1.2 Gender



Frequency and Percentage Distribution of the Respondents According to Gender.

Table 2b

The Pie chart in Table 2b is showing that there are more male respondents than females in the research.

1.3 Civil Status

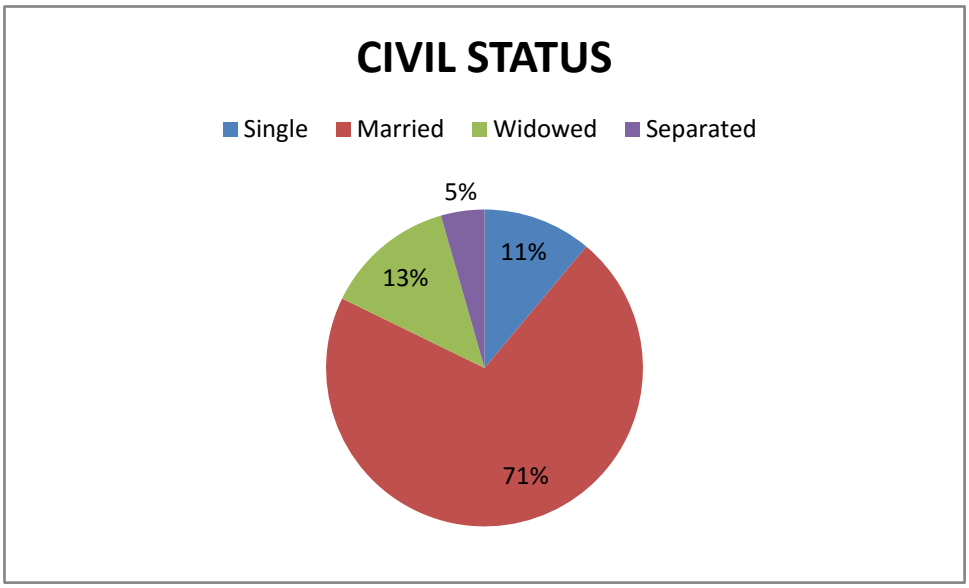


Table 2c

Table 2c is showing that majority of respondents are married and least would be widowed.

1.5 Survey Result

Table 2e

TECHNOLOGY CHECKLIST

NAME: (OPTIONAL)			
AGE:	**GENDER:**	**CIVIL STATUS:**	**BUSINESS LINE:**

Businesses are quickly deploying all kinds of technology. Different kinds of technologies come with different risks and strategies to protect them.

This checklist is designed to help you identify the technology in your business you need to protect. In addition, there are some basic security tips, considerations and links to resources that can help you learn more to detect, respond to and recover from cyber incidents.

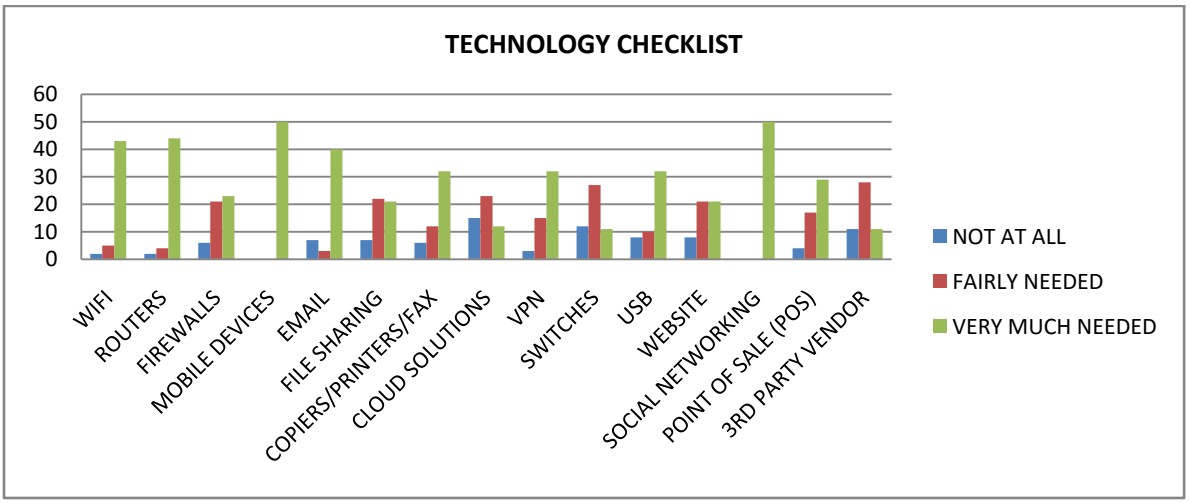
START HERE:

DIRECTION: Put an (X) mark on the column that corresponds your answer, which legend is below.

1 - NOT AT ALL 2 – FAIRLY NEEDED 3 – VERY MUCH NEEDED

	1	2	3
WIFI	2	5	43
ROUTERS	2	4	44
FIREWALLS	6	21	23
MOBILE DEVICES	0	0	50
EMAIL	7	3	40
FILE SHARING	7	22	21
COPIERS/PRINTERS/FAX	6	12	32
CLOUD SOLUTIONS	15	23	12
VPN	3	15	32
SWITCHES	12	27	11
USB	8	10	32
WEBSITE	8	21	21
SOCIAL NETWORKING	0	0	50
POINT OF SALE (POS)	4	17	29
3RD PARTY VENDOR	11	28	11

Table 2f



The Table 2f shows that most of the respondents responded that technology plays a big part in the marketing and tracking their supplies. Generally, a smartphone, particularly an i-phone, is said to be any business owners' partner in technology.

Some other technology devices importance depends on the nature of business, respondents' feedback.

Chapter IV

DISCUSSION

The data collected from this research shows that technology plays a very important part in the growth of a business. The following is the consolidated feedback of respondents during the interview:

1. *Rapid Communication:* Communication can help increase productivity. E-mail servers (Gmail, Yahoo), chat services (Skype, FaceTime), and company sites improve communication between fellow employees and the employer. These resources can also be used to update employees or employers on what you have accomplished, and what still needs to be done.
2. *Increased Efficiency:* Conjoined work systems, allocated storage, and shared work spaces can increase efficiency and allow employees to finish more work quickly.
3. *Creating Competitive Advantages:* IT resources allow companies to create new products, expand their products from older markets and build upon their customer service.

WiFi:

• Use strong administrative and network access passwords

• Use strong encryption (WPA2 and AES encryption)

• Use separate WiFi for guests

• Physically secure WiFi equipment

• Get savvy about WiFi hotspots – Limit accessing sensitive information on public WiFi – Use VPN

Virtual Private Network (VPN):

• Use strong passwords, authentication and encryption

• Limit access to those with valid business need

• Provide strong antivirus protection to users

Network Devices: Routers and Switches

- Use a network monitoring app to scan for unwanted users
- Restrict remote administrative management
- Log out after configuring
- Keep firmware updated
- Use strong passwords Firewalls
- Default rules should block everything that is not specifically necessary for the business

USBs:

- Scan USBs and other external devices for viruses and malware when connected
- Only pre-approved USBs allowed in company devices
- Educate users about USB risks

Website:

- Keep software up to date
- Require users to create strong passwords to access
- Prevent direct access to upload files to site
- Use scan tools to test your site's security – many are free
- Register sites with similar spelling to yours
- Run most current versions of content management systems or require web administrator/hosts to do the same

Mobile Devices:

- Keep a clean machine: Update security software on all devices
- Delete unneeded apps
- Secure devices with passcodes or other strong authentication such as a finger swipe and keep physically safe
- Encrypt sensitive data on all devices
- Make sure "find device" and "remote wipe" are activated

Email:

- When in doubt, throw it out: Educate employees about remaining alert to suspicious email
- Provide all email recipients with an option to opt off your distribution list
- Require long, strong and unique passwords on work accounts
- Get two steps ahead: Turn on two-factor authentication

File Sharing:

• Restrict the locations to which work files containing sensitive information can be saved or copied

• If possible, use application-level encryption to protect the information in your files

• Use file-naming conventions that are less likely to disclose the types of information a file contains

• Monitor networks for sensitive information, either directly or by using a third-party service provider

• Free services do not provide the legal protection appropriate for business

Point of Sale (POS):

• Make unique, strong and long passwords and change regularly

• Separate user and administrative accounts

• Keep a clean machine: Update hardware and software as needed

• Avoid web browsing on POS terminals

• Use antivirus protection

Other: Secure Disposal

• Be aware that many devices, not just PCs and phones, have memory. Know how to clean old data before disposing Internet of Things (IoT) Consumer Protection and Defense Recommendations

• Isolate IoT devices on their own protected networks and change default passwords

• Know what information is being collected and how and where it's being stored and protected

• Consider whether IoT devices are ideal for their intended purpose

• Purchase IoT devices from manufacturers with a track record of providing secure devices

• When available, update IoT devices with security patches

Social Networking:

• Create page manager policies and roles

• Limit administrative access

• Require two-factor authentication

• Secure mobile devices

Cloud and other 3rd Party Vendors:

• Discuss the approach to security and codify in any agreements and contracts

Copiers/Printers/Fax Machines:

• Understand that digital copiers/printers/fax machines are computers

• Ensure devices have encryption and overwriting

• Take advantage of all the security features offered

• Secure/wipe the hard drive before disposing of an old device

• Disable the web management interface or change the default password

BIBLIOGRAPHY

A. Journals

Personnel Psychology [online].via Business Source Premier

REFERENCE

Building a Virtual Library. (2002). / ed. A. Hanson. Hershey : Information Science Publishing. ebrary (13.04.2004) (E-book from a database)

Developing Web-based instruction : planning, designing, managing, and evaluating for results. (2003). / ed. E. A. Dupuis. London : Facet. (Book, no author)

Hertle, A.R. (2005). Waste Water Treatment. – Water Encyclopedia, 1, 623-635. John Wiley & Sons. Knovel (14.04.2010) (Article from a reference e-book)

Min, M., Kink, A., Parve, T. (2002). A rate adaptive pacemaker : EP1169084. espacenet (20.07.2014)

Papstel, J. (2003). Introduction of the flexible curriculum of management in engineering education. – Proceedings of the 14th International DAAAM Symposium, Bosnia-Herzegovina. Vienna : DAAAM International Vienna, 339-340. (Conference Paper)