

# IT-BUSINESS PARTNESRHIP AS ENABLER FOR IT-BUSINESS ALIGNEMENT IN ORGANIZATIONS, A CASE OF COMPASSION INTERNATIONAL

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A RESEARCH PROJECT TO BE SUBMITTED TO DEPARTMENT OF COMPUTER AND INFOMATICS, SCHOOL OF PHYSICAL AND BILOGICAL SCIENCES AS PARTIAL FULLFILMENT OF DEGREE OF MASTER IN IFNFORMATION MANAGEMENT OF UNIVERSITY OF NAIROBI.

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Signature......Date.....

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## **Supervisor's Approval**

This research project has been submitted to us for examination in its present form with approval as University Supervisor.

Signature...... Date.....

Prof. Robert Oboko

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#### ABSTRACT

This study sought to assess IT-Business partnership as enabler for the IT-Business Alignment (ITBA) in the organization, a case of Compassion organization and understand the drivers and factors influencing forging of IT-Business partnership enabler. The objectives of the study were: to assess IT-Business partnerships in Compassion International Organization, to investigate partnership drivers for partnership between IT and Business in Compassion International, to investigate partnership facilitators for IT-Business partnership in Compassion International organization, to investigate the influence of IT-Business partnership on IT-Business Alignment (ITBA) in Compassion International Organization, to propose a model IT-Business partnerships to influence ITBA in compassion organization. The study employed the descriptive research design using Compassion organization in Africa as the case. The study was conducted during the months of January and April 2018 using all employees of Compassion organization in Africa. A population of 339 Compassion employees in Africa representing 67.3% of the population was included in the sample size using a random sampling technique. The study data was collected using an online questionnaire (i.e. Lime survey) for cost and convenience to all the respondents. The questionnaire was pretested for errors and relevance before fully deployed to the sample population. The data collected was analyzed using SPSS version 23. The analyzed data was presented using figures and tables for ease of interpretation and elaboration. The study found that, organization growth goals and serving our customers well were the top reason for internal partnership between IT & Business in the organization; and communication, harmony between IT & business and existence of skilled & competent staffs were the major factors influencing the internal partnership. Secondly, this study found that IT-Business partnership is indeed as an enabler for alignment of IT and Business strategies. This study recommended that the organization to have programs or systems for ensuring to periodic updates about strategic growth and customer improvement to help IT and business staffs understand mutual mandate required by the organization hence sparking more and more collaboration and relationships between the IT and Business departments which eventually strengthens internal IT-business partnership as enabler to for the alignment. Secondly, the organization to invest more in improving these aspects; communication, harmony between IT & business and existence of skilled & competent staffs so that strong internal IT-Business partnership is experienced in the organization catalyzing the alignment subject which will lead to organizational performance overall.

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## CHAPTER ONE INTRODUCTION

#### **1.0 Background**

For many years IT department has been viewed as a support function and not a key component of generating business value to organization. Many times, IT department and/or IT management do not participate in major decision-making process in business meetings (Mugo, 2010). However, this has been changing over time but still issues when it comes to IT and business to harmoniously partner and work together for organization's common good. A survey done by CIO Magazine cited by Topinka (2014) established that there exists a poor perception of business stakeholders to IT organization.

A survey on key IT and management issues carried out in 2012 to 2013 from 787 global organizations reported aligning IT and business strategies, as the top most issue ranked second (Luftman et al., 2013). This affirms that, alignment of IT and Business is a major issue that CIOs must deal with to realize better performance in organizations.

According to CIO magazine increased partnership between IT and Business can only make things better hence the need to forge partnerships between IT and Business. For this study we concentrate on internal IT-Business partnership within Compassion International.

#### **1.1 Problem statement**

To really generate value from IT requires strategic and operational IT business alignment (Njarambi and Ngugi, 2014; Owange et al, 2014). ITBA has been a persistent problem to get it right for decades (Ismail and King, 2014; Luftman et al, 2012).

Many businesses or rather organizations do not involve IT in any sort of planning. Less than onethird businesses involve IT in the strategic planning effort; this is according to Forrester Research cited by Topinka (2014). According to CIO magazine cited by Topinka (2014), there has been existence of poor perception of business stakeholders towards IT; only 15% of IT folks consider themselves business peers and 30% consider themselves as true partners with organization. From this we conclude that there is less collaboration and poor relationships between the IT and Business. Luftman (2004), argues that mutual relationship between IT and business ranks high among enablers of ITBA; and builds trust among participants, ensures key stake holders from business side getting involved directly in IT undertakings and sharing risks. Therefore, it's important to have partnership between IT and Business to promote alignment. The works of Luftman's maturity model and Strategic Alignment Model (SAM) by Henderson have looked into ways of achieving alignment in organizations. This study seeks to add on their contribution by looking at how IT-Business partnership can be forged and built within organization hence influencing the ITBA, for this study, a case of Compassion International.

### **1.2 Research objectives**

- 1) To assess internal IT-Business partnerships in the organization.
- To investigate partnership drivers for internal partnership between IT and Business in organization.
- 3) To investigate partnership facilitators for IT-Business partnership in organization.
- 4) To investigate the influence of IT-Business partnership on ITBA in organization.
- 5) To propose a model for internal IT-Business partnerships to influence ITBA in organization.

#### **1.3 Research questions and Hypotheses**

### **1.3.1** Research questions

- RQ1: What degree is internal IT-Business Partnership exercised in the organization?
- RQ2: What are the key partnership drivers for IT-Business partnership in the organization?
- RQ3: What are the top partnership facilitators for IT-Business partnership?
- RQ4: What is the relationship between IT-Business partnership and ITBA?

#### 1.3.2 Hypotheses

H0<sub>1</sub>: Use of funds efficiently has a positive relationship to IT-Business partnership.

H0<sub>2</sub>: Serve our customers well leads to IT-Business partnership.

H0<sub>3</sub>: Organization growth goals lead to IT-business partnership.

H0<sub>4</sub>: Leadership and governance leads to IT-business partnership.

H0<sub>5</sub>: Understand mutual benefits between IT & Business leads to IT-Business partnership.

H0<sub>6</sub>: Harmony between IT & Business leads to IT-business partnership.

H0<sub>7</sub>: Existence of skilled & competent staffs leads to IT-business leads to IT-Business partnership.

H0<sub>8</sub>: Communication between IT and Business leads to IT-Business partnership.

H0<sub>9</sub>: Trust between IT and Business leads to IT-Business partnership. H0<sub>10</sub>: IT-Business partnership leads to ITBA.

#### **1.4 Project Justification**

ITBA has a likelihood of leading to organizational performance. Therefore, organizations need to do all it takes to ensure better alignment. This study seeks to build on improving chances of aligning IT and Business strategies by looking at what contributes to forging strong IT and Business partnership to influence ITBA. The study is valuable for its contributions from both theoretical and practical view. From a theoretical view, it will contribute to the overall understanding of the importance of forging and building internal IT-Business partnerships as far as aligning technology with business is concerned. From the practical view, the study is significant to businesses by providing a model to help in building internal IT-Business partnerships in the organization and other NGOs. It will also provide empirical results about the relationship between IT-Business partnership and ITBA for organizations/firms. This study will help organizations like Compassion international to understand the relationship between IT-Business partnerships and ITBA goals.

# CHAPTER TWO LITERATURE REVIEW

### **2.0 Introduction**

Literature review involves going through other authors' literatures on related studies. This helps you understand other authors have found and documented so that you can form the premise for your research.

#### 2.1 Existing Literature Review

#### 2.1.1 Henderson and Venkatraman's model for alignment

According to Henderson and Venkatraman's model (1992, 1993), strategic alignment has two dimensions: (i) strategic fit, which focuses on external view that deals with business environment and (ii) functional integration focusing on internal view that separates business and IT functions. The model emphasized on relationship within(internal) and without(external) alignment. The model has four quadrants or domains: (i) core business strategic planning, (ii) IT strategic planning, (iii) internal processes and infrastructures for an organization, (iv) IT structures, systems and processes; and each have three components. All the components in the domains need to work together for alignment to be realized. They argued (i.e. Henderson and Venkatraman) that strategic alignment is an interaction among the four quadrants. Figure 2.1 shows two linkages due to interaction among the quadrants. From the model, external and internal alignment together is believed to bring alignment between IT and business. Lee et al. (2008) contributes on this by saying, external alignment is influenced by fitness between economic plans for a firm and those of the organization. Alignment internally is influenced by integrating organization functions and organizational factors i.e. organizational resources, organizational capabilities, organizational systems, processes and structures.

Henderson and Venkatraman studies focused more on explaining linkage between internal and external environments of the organization. However, what their studies don't tell us, is how the linkages can be achieved or a method to organization what to do so that linkages are realized and influence the alignment.

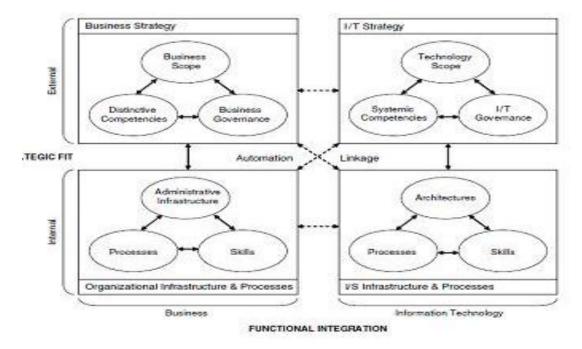


Figure 2.1: IT- Business alignment model for Henderson and Venkatraman

### 2.1.2 Model for Strategic Alignment Maturity(SAM) by Luftman

Luftman looks at the strategic alignment of IT and business from a different angle, by developing a measurement tool/model, strategic alignment maturity model (SAMM), with reference from the Capability Maturity Model Integration (CMMI). The model assumed the five stages of maturity: ad hoc, committed, established focused, improved or managed, and optimized processes in CMMI model; and each stage of maturity defines six distinctive areas: (i) communications, (ii) competence, (iii) governance, (iv) partnership, (v) technology and (vi) skills. Figure 2.2 illustrates that alignment gap reduces as we climb the pyramid from level 1 to level 5. The IT strategy and business strategy converge when all the six areas above have been optimized. In researcher's view, Luftman's maturity assessment method birthed an aspect of measuring the maturity of alignment providing organizations with a model/tool that gives the understanding of the relationship between business and IT. In deed we agree that the model is so useful in defining improvement areas, and importantly facilitating an open discussion with IT and business executives. Also, the researcher acknowledges that the six areas cover the elements that should be given close attention. Not singularly viewed, but all areas should be in sync for alignment to be realized. Luftman views the six elements, partnership being one of them as

management practices that should be assessed to try and attain ITBA maturity. From the model has not focused on a process to forge and build partnerships between the IT and Business.



Figure 2.2: climbing the strategic alignment maturity model (source: Business-IT alignment, 2010).

Lee et al. (2008), makes a statement that; environments for business tends towards collaborations and therefore the space of aligning internally broadens to encompass associations more and more from business departments as primary customers. The researcher agrees with the statement and now seeks to understand how IT business partnerships can be forged, built and the influence on ITBA in organization.

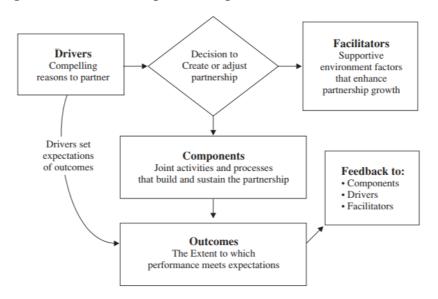
Luftman SAMM model focused more on measuring processes to determine the maturity level of and hence the strength of ITBA in the organization. We see little done by him in terms of guide lines that can lead to better alignment. Therefore, we see a gap and convinced that we need to focus on the steps or rather influencers of IT-business partnership as a building block for ITBA. Novianto and Suhardi (2013), summarized the SAMM attributes based on seven alignment criteria: 1. Communication factor, is about IT understanding business and business understanding IT, organization learnings, share of knowledge. 2. Competency factor deals with

IT & business metrics, well-adjusted metrics, SLAs (service level agreements). 3. Governance

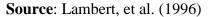
factor focuses on business and IT strategic planning, budgeting regulations/boundaries, well managing of IT investments and prioritizing them. 4. Partnership factor that this paper focuses on and which deals with the business perception of IT value, business perception of IT value and role of IT in strategic business. 5. Planning factor, handles shared goals, risks and rewards, IT program management, relationship/trust and business sponsor/champion. 6. Scope and architecture factor that focuses on traditional, enabler or driver, and standard articulation, architectural Integration, architectural transparency, flexibility and manage emerging technology and 7. Skills which includes skills such as: innovation skills, entrepreneurial skills, managerial and styles of management skills, social-political skills and selection and recruitment skills. Again, this focused more on measurement of alignment maturity and not the methodology or process of building alignment.

#### 2.1.3 Lambert Model on partnership building

Partnership is custom-made relationship that relies on trust, openness, sharing risk and rewards that leads business performance than when two entities are working without partnership. Partnership drivers and partnership facilitators examination, partnership component calibration, and outcomes measurements are four items that are included Partnership model (Lambert, Emmelhainz, and Gardner 1996, 1999). This is as shown in Figure 2.3 below. Before any partnership is formed between the parties, both parties must believe they will receive significant benefits if they partner than without partnerships. The major reward for partnership include: striving for efficiency in terms of cost, offering improved service to customers, finding market edge and growth in profits or profits stability. Partnership drivers motivates the forging of partnerships. However, even with a strong desire for building a partnership, the chances of succeeding both parties environments need be supportive of the relationships. The supportive environment elements that enhances integration of two parties in improving the success of partnership are corporate compatibility, managerial philosophy and techniques, symmetry and mutuality (Lambert, Emmelhainz, and Gardner 1996). The researcher thinks that a similar model can be used to inform the process of IT-business partnership. However, we refine it by few addons to make it more specific to internal IT and business staffs.







### **2.2 Empirical Review**

Luftman, Lyytinen & Zvi (2015) established that all six elements (skills, governance, partnership, communication, competency and technology) of SAMM model have a direct effect on aligning plans and strategies of both IT and Business in organization. Partnership between IT and Business functions has been proven to enable achievement of ITBA in organization (Al-Faouri, Al-Kasasbeh & Alkhaldi; 2009).

According to Shamekh (2008) companies like McGraw-Hill Companies, Inc., Charles Schwab Corporation have proven that effective use of innovative technology has successfully exploited the IT-business advantages.

Empirically, IT-Business partnership is among the six most important enablers of ITBA. Other enablers include: supporting IT by executives, understanding business needs/strategies by IT, IT get to participate in organizational strategy design, IT doing good job to prioritize projects and IT demonstrates leadership (Luftman & Brier; 1999). Luftman, (2006) tool modeled from CMMI for assessing company's alignment. At least 50 global companies out of 2000 global companies have tested alignment and it was the test was very successful, until this has become a benchmarking tool.

According to Chan et al. (2006) sited by Wu et al. (2014) noted that prior empirical research about aligning IT and business strategies, revealed that shared domain knowledge, IT-business

planning sophistication, environmental uncertainty and organization size are drivers or factors affecting alignment. Baker 2004; Luftman et al. 1999, sited by Wu et al. (2014) also found out that other factors affecting alignment subject reported in earlier studies included IT being supported by organization's executives, proper prioritization of IT projects, partnerships between IT and business and the character of CIO. With all those insights and efforts in this subject there has not been someone taken time to comprehensively study the crucial influence of partnership between IT and Business on ITBA. In another empirical study SAM model was tested by business and IT executives in 197 companies and proved to be sound. Also, it was found that SAMM model was a balanced and a valid tool in ITBA (El-Masri et al. 2015). In study of Teo and Ang (1998) of 168 firms dealing with different areas of businesses reported that, involvement of organizational leadership in tactical or well-planned use of IT was the top ranked critical success factors.

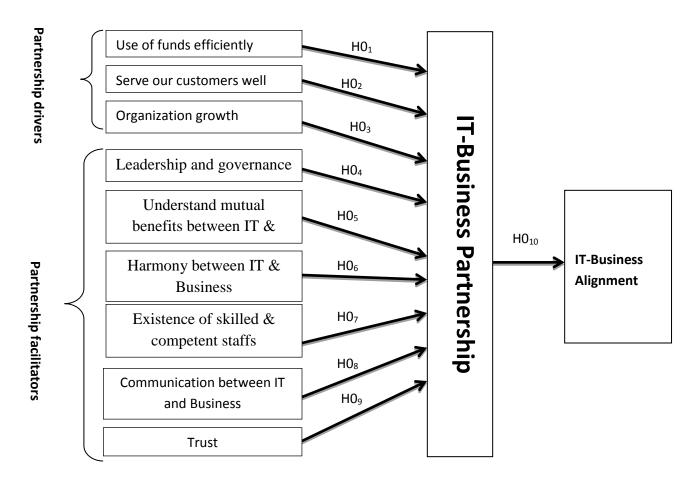
Lambert, Emmelhainz, and Gardner model (1996, 1999) developed partnership model with use of 18 case studies. They validated the model with the very case studies. It was also applied on other 3 relationships which further validated the model.

#### 2.3 Research Framework-Decomposition

As we stated earlier, the goal/objective of this study is assessing the extent of partnership between IT and business and its relationship on alignment of IT to business. From section above, we can agree that ITBA is an issue that has been intensively been dealt with. This includes the works from SAMM model and Strategic Alignment model by Henderson. For the researcher to deeply cover the IT-Business partnership and influence on ITBA it is important to define the variables and operationalize them.

To be able to reach the goal of ITBA goal, it is important to outline the design parameters or variable available from SAMM and SAM model. Even though partnership is an element in the SAMM model, little has been done to clearly explain how IT and Business can build internal partnerships for the good of organization hence we engage Lambert's model. For us to enumerate partnership parameters several factors contributing to IT-Business partnership which in turn influences alignment together with moderating variables. Figure 2.4 shows our research conceptual framework which constitutes some variables from Lambert model, SAM model and SAMM model. The researcher seeks to test the hypothesis H0<sub>1</sub>, H0<sub>2</sub>, H0<sub>3</sub>, H0<sub>4</sub>, H05, H0<sub>6</sub>, H0<sub>7</sub>,

 $HO_8$ ,  $HO_9$  and  $HO_{10}$  as depicted on the framework in figure 2.4 below. The researcher also seeks to answer RQ1, RQ2, RQ3 and RQ4 as stated above.



#### Independent Variables

### **Dependent Variables**

### **Figure 2.4: Conceptual framework**

Independent and dependent variables in the framework were derived as shown in Table 2.1 and operationalized in Table 2.2 below respectively.

Theory/Model	Variables	Variable group
Lambert's model	-Partnership drivers	Independent
	-Partnership facilitators	
SAMM And SAM models	-Communication	Independent
	-Skills and competencies	
	-Governance	
	-Technology	

Construct	Explanation	Operation definition
Partnership	Reasons for	Elements that indicate the expected benefits from
Drivers	partnership between	relationship (between IT and Business). These can be
	IT & Business	summarized in three categories:
		1: Asset/cost efficiencies
		2: Customer service improvements/Serve our customer well
		3: Organization growth goals or organization
		stability/steadiness.
		Chances of Partnership success gets more when drivers are
		well established.
Partnership	Supportive	Factors that increase likelihood of partnership (between IT
Facilitators	environment (factors)	and Business) success. Facilitators measure how well the
	that enhance	partners (IT and Business) mesh and include:
	partnership growth.	1: Leadership and Governance
		2: Mutuality between the partners
		3: Degree of symmetry/harmony between the parties
		4: Existence of skills and competences of staff.
		5: Trust
IT-Business	This is about the	Tries to answer the question to what extend have business &
Partnership	relationship between	IT forged true partnerships
	IT and Business staffs	These include:
		1: How the value if any generated by IT is viewed by
		Business
		2: What is the role of IT in business strategies
		3: How goals, risks, rewards and penalties are shared
		4: How IT programs are management
		5: What relationship style exists;
		6) What are business sponsors & champions
ITBA	ITBA is aligning IT&	This is the product of forging IT-Business partnership
	Business strategies	1: Measure alignment maturity of organization

 Table 2.2 Variable Operationalization

# CHAPTER THREE RESEARCH METHODOLOGY

## **3.0 Introduction**

Theory of science and methodology many times are used by scientists as an avenue to support the research they are conducting (Jakobsen, 2013). This means research may be conceived based on research philosophy, which will in turn inform the strategy and instruments used to for answering research question(s).

## 3.1 Research Philosophy

Myeko (2014) states that according to Lehaney & Vinten; a research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. We have three major research philosophies; Positivism, Interpretivist and pragmatic.

### 3.1.1 Positivism

In the post of Tarhini (2014) of Brunel University London cited, according to Orlikowski and Baroudi a study is positivist when there exist formal indications, computable measurable variables, hypothesis validation and verification, and deduced inferences for about a case or scenario from a sample to entire population. Positivism generally is a philosophical position emphasizing on empirical data and scientific methods. This philosophy believes that, knowledge can be deduced from the actual world by making observations, hence being more concerned by making generalization rather than being specific. Orhan cites according to Onwuegbuzie (2000), positivists believe there is one reality and therefore can be expressed using variables and which can be measured reliably and validly.

Aspects/Assumptions	ns Characteristics of positivist paradigm	
Ontology	Native realism	
Epistemology	Objectivist; findings true	
Methodology	Experimental, verification of questions/hypotheses; majorly quantitative	

### **Table 3.1 Positivist's characteristics**

### 3.1.2 Interpretivism

Constructivist is also called interpretivist (Orhan, 2012). The name 'constructivist' implies that research is aimed at constructing something from the existing world; meaning from small or specific to big or more general; building a theory out of a complex world.

### 3.1.2.1 Characteristics of Interpretivism/ constructivism

- Interpretivists believe reality and the observer (the researcher) are inseparable.
- Interpretivists recognize that the knowledge they build reflects their goals, culture, experience, history, and so on.
- Interpretivists are concerned that their acquired knowledge via their research are defensible, meaning it be examined based on what was collected, what research process(es) were used, the context the study was conducted by researcher and aspects of researcher in real-world; and based on this it is concluded that researcher's findings in the study are agreeable and reasonable.
- Interpretivists believe a given study can be dependable by others and can be demonstrated.

## 3.2 Selection and justification of research philosophy

For this study we believe that positivist research is a suitable philosophy to drive our research. This is because:

- Looking at our research question we are seeking evidence that in deed, out of suggestion exist a relationship between IT-Business partnership and ITBA and if that is true then what kind of correlation relationship (perfect negative or perfect positive) is it.
- Our research conceptual framework has number of variables (e.g. partnership growth factors of building IT-Business partnership) which need to be measured descriptively. We will operationalize the framework and measure variables and make necessary deduction of that.
- Positivism characteristic about native realism and separable nature of the researcher and reality; and objectivism swings well with our study. The outcome of our research would be independent from the researcher and will not be subjectively influenced hence the choice of positivist.
- Lastly, the positivism characteristic of verification of questions/hypothesis also weave in well with our conceptual model that seeks to test H0<sub>1</sub>, H0<sub>2</sub>, H0<sub>3</sub>, H0<sub>4</sub>, H05, H0<sub>6</sub>, H0<sub>7</sub>, H0<sub>8</sub>, H0<sub>9</sub> and H0<sub>10</sub>, see figure 2.4; the research framework and hence the selection of positivist philosophy.

### 3.3 Research Design

Research design is the master plan/overall strategy specifying the methods and procedures for collecting & analyzing the needed information in a study. It's like a road map or compass to conduct a study. Its element includes; research approach description, population; size of the sample and procedure/technique, tools and methods, time & data collection method and method of analysis These elements are logically organized to answer the specific research question(s) or test a research hypothesis (Maheswari, 2014).

### **3.4 Research Approach**

There exist two broad approaches or methods of reasoning; deductive and inductive. For this study we use deductive approach. Why deductive? The answer is explained in the bullets below.

- According to William (2006), deductive reasoning/ presumption tends from generality to specificity. Meaning you begin thinking up a theory and then narrow down to research question or hypothesis to answer or test respectively, using specific data. Our conceptual framework in chapter 2 is to test H0<sub>1</sub>, H0<sub>2</sub>, H0<sub>3</sub>, H0<sub>4</sub>, H05, H0<sub>6</sub>, H0<sub>7</sub>, H0<sub>8</sub>, H0<sub>9</sub> & H0<sub>10</sub>.
- We operationalized variables which need to be measured quantitatively. We seek to do that hence deduction is suitable for our study.

### **3.5 Research Strategy**

UK Essays quoted Palliative Medicine (2004) sentiments, "selecting an appropriate research strategy is important to ensure the research questions are addressed in a valuable manner and congruent to a bigger topic, questions and purpose of research". UK Essays added that Saunders et al. argued that it must be noted that there exists no powerful or less powerful strategy. All strategies are vital and key to any researcher and a given study. UK Essays cited Robson (1993) that research strategies are largely; experiment, survey and case studies. For this study we use surveys. Why surveys?

• Surveys involve collecting data from a large sample systematically and economically. UK Essays cited according to Saunders et al surveys allows a sizable significant data collection from singled or selected sample.

## **3.6 Population Sample**

Population is defined as all individuals that we interested in studying. Population sample: a subset of the individuals involved in a study (Social Science Research & Instructional Center, 1998). The population of this study is based on Compassion organization employees in Africa region in IT and Business departments. Currently IT and Business have 30 and 474 employees respectively (according to HR records 2017).

Category	Population	Percentage (%)
Business department	475	30
IT department	30	30
Total	<u>504</u>	<u>60</u>

## Table 3.2 Target Population

## 3.7 Sampling Techniques and Sample size

Both purposive and random sampling techniques were used in carrying out the study.

At least 156 employees (which consists of categories in table 3.2) in Compassion International will be selected purposively out of 504 employees based on the criteria that the employee has worked in compassion at least 2 years.

And then IT department and business employees in the organization with more than 2 years working in the Compassion International will be randomly selected as respondents for the study. According to Mungenda & Mugenda (2003) cited by Wason & Bichanga (2014), suggests that for descriptive studies at least 10% to 30% of the total population is enough for a study. Therefore, a sample size of 30% of the total population will be used which translates to 156 employees from the purposively sampled employees will constitute the sample population for the study.

Category	Population	Percentage (%)	Sample
Business department	474	100	474
IT department	30	100	30
Total	<u>504</u>	<u>200</u>	<u>504</u>

We will all the population as the sample size and from it we expect 300 respondents returned.

## **3.8 Data Collection techniques and instruments**

One way to gather data is by carrying out surveys with closed-ended questions e.g. interviews (Clare, n.d).For our study we plan to use face-to-face interviews with closed-ended questions and closed ended questionnaires. This is because.

- Face-to-face interviews with closed-ended questions: Have high response rate and allows researcher to clarify ambiguous answers; this according to Leedy and Ormrod (2001) cited by Clare(n.d.).
- Closed-ended online questionnaires: Believed to be time and money saving, this is according to Leedy and Ormrod (2001) cited by Clare(n.d.). It is because of its time and money saving factor we consider it as a fall back plan of collecting data if we ran out of time and money in case of the face-to-face interviews which are said to be dear and time consuming.

## **3.9 Data Analysis**

We will use both descriptive and inferential statistics in analysis of our data. Descriptive statistics will help the researcher to meaningfully describe data. That is, we will summarize the collected data using tables, graphs and charts. Descriptive will help us measure; central tendency (e.g. means), variability (e.g. standard deviation) and relationship (e.g. correlations).

On the other hand, inferential statistics will come handy when the researcher is generalizing. We know that it may not be easy or economically viable to get respondents in the entire population in Compassion International for data collection, therefore need for inferential statistics techniques. In other words, it will help before inferring to measure; confidence interval (sample error), Pearson Correlation and Bi-variate & multivariate Regression.

#### **CHAPTER FOUR**

### DISCUSSIONS OF RESULTS AND FINDINGS

### **4.0 Introduction**

In this chapter, we discuss results and findings for the study on partnership between IT and Business and its influence on ITBA. The findings are deduced from the data collected, analyzed and presented in this chapter. The total number of questionnaires issued was 504 and 339 were returned. Therefore, we used 339 for the analysis representing a 67.3% response rate. Discussion involved is in perspective of findings in this study and of other scholars.

### 4.1 Summary

This study sought to investigate partnership drivers and facilitators that influence internal IT-Business partnership as enabler for ITBA in organization using Compassion International as the case. The objectives of this study were: to assess IT-Business partnerships in Compassion International Organization, to investigate partnership drivers for partnership between IT and Business, to investigate partnership facilitators for IT-Business partnership, to investigate the influence of IT-Business partnership on ITBA and then lastly propose a model for internal IT-Business partnerships to influence ITBA in organization. The independent variables that the research investigated were: partnership drivers (i.e. use of funds well, server our customers' well, organization growth goals goal), partnership facilitators (i.e. leadership and governance, understand mutual benefits between IT & Business, harmony between IT & Business, existence of skilled & competent staffs and willingness of IT and Business to communicate) and partnerships between IT and Business which was independent variable to ITBA. These components were constituted from Lambart's and SAMM models.

The study employed descriptive research design using Compassion International as the case. We conducted the study during the months of January and June 2018 using all employees of Compassion International in Africa region. In total 339 employees representing 67.3% of the populations were included in the sample size using a random sampling technique. We used online questionnaires to collect data to safe on cost and for convenience. We pretested the questionnaire before deploying it to the entire sample, just to make sure it was relevant and error

free. Data collected was analyzed using SPSS version 23. We made use of tables and figures in presenting analyzed data for better data interpretation.

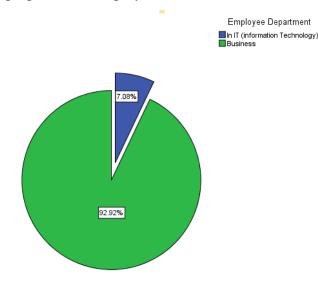
### 4.2 Descriptive analysis

### 4.2.1 Background Information

The respondents' characteristics i.e. departments, tenure is discussed in this section.

### **4.2.1.1 Employee Department**

A survey on three hundred and thirty-nine employees was done in this study. We carried descriptive analysis on the data. 92.92% of the respondents to this study were from business department (i.e. HR, Finance, Risk office, Donor Sponsor Services (SDSs), Program, and Marketing). These findings imply that population of study was characterized by a higher proportion of employees from Business than from IT. This is as illustrated in the Fig 4.1 below.

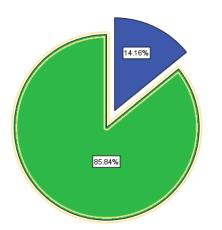


**Figure 4.1: Department of Respondents** 

### 4.2.1.2 Employee years of service in Compassion Ministry

Descriptive analysis revealed that 85.84% of the respondents to this study had worked for Compassion Ministry a long period of more than two years. This is as illustrated in Fig 4.2 below. These findings imply that population of study was characterized by a higher proportion of employees who have worked in the Ministry this may imply that majority of the respondents have a better understanding of the relationships if any between Business and IT.





### Figure 4.2: Employee years of service in Compassion Ministry

### 4.2.1.3 Assessment of the extent of IT-Business Partnership in Compassion Ministry

The respondents rated the extent of IT-Business partnership using a scale of Likert that ranges between 1-5. 1 standing for strongly disagree and 5 strongly agree. Descriptive analysis revealed that 43.36% of respondents strongly agreed that there exists IT-Business Partnership in the Ministry. 40.71% agreed that IT-Business Partnership is experienced in the Ministry. In total 84.07% respondents agreed that IT-Business partnership is exercised in the ministry and 11.50% of the respondents were undecided and 2.95% disagreed and 1.47% strongly disagreed. These findings imply that Business and IT employees work as partners for common good of the Ministry. This is as illustrated in figure 4.3 below.

Effective partnership between IT experts and business professionals is a major factor in getting market edge/advantage for a given business through IT (Bassellier and Benbasat, 2004). From the results, the study established that internal IT-Business partnership is highly experienced in the Compassion organization. Benbasat et al, (2003) reported similar findings in their study when reported that, partnership between IT and business was rated highly by line managers who represented the business department. However, some literature got different findings with researcher's one when they assessed the levels of partnership engagements in several organizations. For instance, Luftman, (2000) findings found out that IT-business partnership is a one of the manufacturing company was at level 1, meaning a little bit of partnership is experienced but was very low and poor.

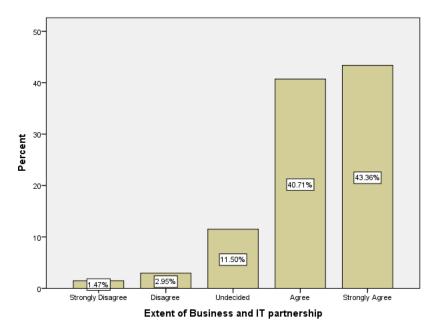


Figure 4.3: Extent of IT-Business Partnership in Compassion Ministry

### **4.2.2** Partnership drivers' variables

The respondents rated the partnership drivers using a Likert scale of 1-5. 1 means that a respondent disagrees beyond doubt and 5 means respondent agrees beyond doubt with asked question. Analysis on independent variable partnership drivers is as shown in the table 4.1 below.

#### Table 4.1 Partnership drivers

	N	Mean	Std. Deviation
Partnership Driver: Use of funds efficiently	339	4.07	.957
Partnership Driver: Serve our customers well	339	4.26	.972
Partnership Driver: Organization growth goals	339	4.29	.919
Valid N (listwise)	339		

**Descriptive Statistics** 

Source: Researcher data 2018

The respondents were asked to rate these drivers: 'organization growth goals' (M=4.29 and SD=.919) and 'serve our customers well' (M=4.26 and SD=.972) and use of funds efficiently (M=4.07 and SD=.957). Descriptive statistics revealed high means, meaning that majority of respondents agreed that partnership drivers above enhance internal IT-business partnership in the organization. Growth of the organization and serve our customers well, were rated as the top drivers. These findings imply that 'growth of the organization' and 'serve our customers well' are the top most reasons why Business and IT work as partners.

Lambert, (2008) had similar findings when noted that compelling reasons to partner or rather the drivers of partnership between parties are based on the interest of cost efficiencies, customer service improvements and profit stability and growth. In addition, Oudot, (2005) noted that partnerships are forged with an aim of minimizing the cost and wastage. Minimizing cost is one aspect of using funds efficiently which we investigated in our study and found out that is a contributor driver of IT-Business partnership.

#### 4.2.3 Partnership Facilitators variables

The respondents rated the partnership facilitators using a Likert scale of 1-5. 1 represented strongly disagree and 5 representing strongly agree. The respondents were asked to rate these partnership facilitators: 'healthy communication between business and IT' (M=4.47 and SD=.847), 'trust' (M=.4.40 and SD=.855), 'harmony between IT & business' (M=4.37 and SD=.854) , Understanding mutual benefits between business and IT (M=4.30 and SD=.870), Existence of skilled & competent staffs (M=4.30 and SD=.925) and 'harmony between IT & Business(M=4.15 and SD=.911). Descriptive statistics revealed high means, meaning that majority of respondents agreed that the partnership facilitators above influence the internal IT-business partnership in the organization. Trust and communication between business and IT were rated as the top partnership facilitators. These findings imply that trust and communication between business and IT were top partnership facilitators for cultivating internal IT-business partnership in the Organization. This is as shown in table 4.2 below.

	Ν	Mean	Std. Deviation
Partnership Facilitator: Communication between IT and Business	339	4.47	.847
Partnership Facilitator: Trust	339	4.40	.855
Partnership Facilitator: Harmony between IT & Business	339	4.37	.854
Partnership Facilitator: Understand mutual benefits between IT & Business	339	4.30	.870
Partnership Facilitator: Existence of skilled & competent staffs	339	4.30	.925
Partnership Facilitator: Leadership and Governance	339	4.15	.911
Valid N (listwise)	339		

#### **Table 4.2 Partnership Facilitators**

Source: Researcher data 2018

### **4.2.4 IT-Business Partnership variables**

The respondents rated the influence of IT-Business partnership on ITBA (M=4.34 and SD=.836) using a Likert scale of 1-5. 1 means that a respondent disagrees beyond doubt and 5 means respondent agrees beyond doubt with asked question. Majority of respondents agreed that the internal IT-business partnership above influence the ITBA in the organization. IT-business partnership (M=4.34 and SD=.836) high mean, indicates that respondents agreed that IT-business partnership influences ITBA. This is as shown table 4.3 below. These findings imply that internal IT-business partnership affects the ITBA in the Organization.

### Table 4.3 influence of IT-business partnership on alignment

	Ν	Mean	Std. Deviation
Influence of IT-Business partnership to business-IT alignment	339	4.34	.836
Valid N (listwise)	339		

## 4.3 Reliability Test Analysis

Since in our survey we used multiple Likert's questions, we use this test to check the reliability of the scale generated by Likert's questions.

## 4.3.1 Cronbach's Alpha

This test involves the degree to which an assessment tool produces stable and consistent results. We carried this test (Cronbach's Alpha) to test whether the instruments that were used to find out the partnership drivers and partnership facilitators how they influence the IT-Business partnership and how in the end the IT-business partnership impact the aligning of IT and Business strategies in an Organization. Whenever coefficients were near one, that's indicate that the tested factor was valid and consistent in measuring IT-business partnership and ITBA. According to Nunnally, J. (1978) anything above 0.6 is acceptable. With Cronbach's alpha= .936 for 14 items revealed the tool used was reliable and consistent in this study. This is as show as in the table 4.4 below.

### Table 4.4: Reliability analysis(ALPHA)

Sta	atistics
Cronbach's Alpha	No. of Items analyzed
.936	14

Source: Researcher data 2018

#### **4.3 Normality Test Analysis**

The normality test is used to test if the data set is normally distributed. There are two types of normal tests: Kolmogorov-Smirnov, which is used to test normal distribution of a large data set of at least 2000 respondents and Shapiro-Wilk which is used to test the normal distribution of a small data set of at least 200 respondents. For our study we used Shapiro-Wilk since we have a smaller data set of 340 respondents. Data set is normally distributed when significance (sig) values are very large and data set is not normally distributed if sig values are very small and close to zero. We did normality test on our data set and the Shapiro-Wilk sig. values are very small and closer to zero. This test reveals that our data set is not normally distributed. This is as shown in table 4.5 below.

Tests of Normality <sup>b</sup>				
		Shapiro-Wilk		
	Statistic	df	Sig.	
Years worked for Compassion	.390	9	.000	
Employee Department	.345	11	.000	
Extent of Business and IT partnership	.851	9	.077	
Influence of IT-Business partnership to business-IT alignment	.772	9	.010	
ITBA to organization performance	.682	9	.001	
Partnership Driver: Use of funds efficiently	.813	339	.000	
Partnership Driver: Serve our customers well	.734	339	.000	
Partnership Driver: Organization growth goals	.748	339	.000	
Partnership Facilitator: Leadership and Governance	.799	339	.000	
Partnership Facilitator: Understand mutual benefits between IT & Business	.746	339	.000	
Partnership Facilitator: Harmony between IT & Business	.712	339	.000	
Partnership Facilitator: Existence of skilled & competent staffs	.739	339	.000	
Partnership Facilitator: Communication between IT and Business	.652	339	.000	
Partnership Facilitator: Trust	.707	339	.000	

#### Table 4.5 Normality Test – Shapiro-Wilk

Source: Researcher data 2018

#### 4.4 Correlation analysis

Since our data set is not normally distributed as proven by the normal test performed in section 4.3 above, this study used Spearman's coefficient of correlation which is the nonparametric version measuring how strong or weak is the relationship between variable 1 and variable 2. Spearman's correlation coefficient determines the weakness or strength in association between two variables.  $\rho$  indicates the Spearman's coefficient, it ranges from +1 to -1 or in short +1>=  $\rho$  >=-1. Negative value indicates negative correlation/relationship and positive values indicates positive correlation/relationship. A positive  $\rho$  value expresses a positive relationship between the two variables meaning increase in independent variables results to increase in dependent variable, while a negative  $\rho$  value indicates a negative relationship meaning an increase in the independent variable leads to a decrease in the dependent variable. We conducted correlation analysis to test the relationships among variables (independent ones and dependent ones) using the Spearman's Correlation method. We did this to quantify the strength and direction of the relationship between the variables. The rule of thumb is that if p>0.05 or p>0.01 with a confidence level of .95 or .99 respectively, it can be assumed that there's no statistically significant correlation between variables.

The findings revealed that independent variables: partnership drivers(Use of funds efficiently, Serve our customers well, Organization growth goals) and partnership facilitators(Leadership and Governance, Understand mutual benefits between IT & Business, Harmony between IT & Business, Existence of skilled & competent staffs, Communication between IT and Business, Trust) had a positive correlation coefficients of( $\rho$ =.456\*\*,  $\rho$ =.518\*\*,  $\rho$ =.520\*\*,  $\rho$ =.495\*\*,  $\rho$ =.553\*\*,  $\rho$ =.582\*\*,  $\rho$ =.567\*\*,  $\rho$ =.576\*\* and  $\rho$ =.593\*\*) respectively to dependent variable IT-Business partnership. These findings imply that partnership drivers (Use of funds efficiently, serve our customers well, Organization growth goals) and partnership facilitators (Leadership and Governance, understand mutual benefits between IT & Business, Harmony between IT & Business, Existence of skilled & competent staffs, Communication between IT and Business, Trust) were statistically significant in terms of relationship to IT-Business partnership. This is a shown in 4.6 below.

Serve our customers well had a positive and significance correlation to IT-Business partnership, meaning an increase in desiring to serve our customers well leads to an increase in IT-Business partnership. Similar findings of Park et al, (2004), that noted that the key reason for e-commerce firms partnering with brick-motor marketplace was influenced by the need to serve their online customers well and in a timely manner. Additionally, the findings of Christopher et al, (1991) also agreed with our findings when noted that alliances in other words partnerships are formed due to the total quality management in terms of customer service.

Growth of the organization also was one of the strongest contributors as to why internal IT-Business partnership is needed in the organization. Similar findings established in the 'want' 'find' and 'manage' model of Slowinski and Sagal, (2010) noted once the firm identifies the organization growth goals and objectives it's next step is get into collaborative relationships to achieve that growth objective of the firm. This is to say growth objective influences the partnerships within or without.

The study found out that 'trust' was the top contributor to IT-business partnership. Similar findings were recorded by Willis and Huston as quoted by Tuten and Urban, (2001) that noted a relationship (i.e. partnerships) requires an atmosphere of mutual trust and hence full disclosure of information between partners a top most ingredient for successful relationship. In other words, any partnership within or without organization thrives where there exists mutual trust. Mohr and Spekman as quoted by Tuten and Urban, (2001) added, that when 'trust' attribute exists in partnering, it results to a beneficial partnership or rather relationship.

Communication between IT and Business was also a main contributor as a facilitator for IT-Business partnership. This finding agreed with the findings in Mohr and Sperkman model quoted by Tuten and Urban, (2001) that communication behavior (i.e. quality communication, information sharing and participation) between the partnering parties was a major factor identified, that contributed to a successful partnership. Our findings were further confirmed when Tuten and Urban, (2001) concluded that communication is key and most important in any sort of partnership.

Harmony between IT and Business or parties also our study rated it as a contributor to ITbusiness partnership. This was emphasized in the findings of Samii et al. quoted by Jamali and Keshishian, (2009) that the top requirement of effective partnerships is the degree of symmetry or harmony of common goal between the parties. Mutual benefit between parties was another contributor that recorded slightly strong correlation to IT-business partnership. Similar findings were found by Mohr and Sperkman, (1994) who noted formation of partnerships is motivated majorly by mutual benefits between parties.

The study found that leadership and governance lead to forging and building IT-business partnership. Weill and Ross, (2004) findings had similar agreement that leadership and governance influence partnership in an enterprise by approving or signing off on sort of partnerships within or without organization.

# Table 4.6 Correlation analysis: partnership drivers & facilitators and internal IT-Business partnership

				-	C	orrelations	_	-	_	-	-	
armar	Influence	Correlation	Influence of IT- Business partnershi p to business- IT alignment	Partnershi p Driver: Use of funds efficiently	Partnershi p Driver: Serve our customers well	Partnershi p Driver: Growth of organizati on	Leadershi p and	Partnershi p Facilitator: Understan d mutual benefits between IT & Business	Partnershi p Facilitator: Harmony between IT & Business	Partnershi p Facilitator: Existence of skilled & competent staffs	Partnershi p Facilitator: Communi cation between IT and Business	PartnersI p Facilitato Trust
0	of IT- Business partnershi	Coefficient	1.000	.456"	.518"	.520"	.495"	.553"	.582"	.567"	.576"	.593
	p to business-	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.00
	п	N	339	339	339	339	339	339	339	339	339	33
	p Driver: Use of funds	Correlation Coefficient	.456**	1.000	.609**	.437**	.568"	.464	.505**	.488"	.432**	.41
	efficiently	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.0
		N	339	339	339	339	339	339	339	339	339	3
	Partnershi p Driver: Serve our customers	Coefficient	.518"	.609"	1.000	.557**	.590"	.491	.597**	.520"	.562"	.56
	well	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.0
		Ν	339	339	339	339	339	339	339	339	339	3
	Partnershi p Driver: Growth of organizati	Coefficient	.520"	.437"	.557"	1.000	.547"	.545"	.495	.434"	.456	.50
	on	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.0
		Ν	339	339	339	339	339	339	339	339	339	3
	Partnershi p Facilitator: Leadershi	Correlation Coefficient	.495"	.568"	.590"	.547"	1.000	.566"	.645	.509"	.506"	.56
	p and Governanc	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.0
	e	N	339	339	339	339	339	339	339	339	339	3
	p Facilitator: Understan	Correlation Coefficient	.553"	.464**	.491	.545	.566**	1.000	.699**	.569	.581	.58
	d mutual benefits	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.0
	between	Ν	339	339	339	339	339	339	339	339	339	3
	p Facilitator: Harmony	Correlation Coefficient	.582"	.505"	.597"	.495	.645	.699"	1.000	.606"	.694	.71
	between IT &	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.0
	Business	N	339	339	339	339	339	339	339	339	339	3
	Partnershi p Facilitator: Existence	Correlation Coefficient	.567"	.488"	.520"	.434"	.509"	.569"	.606"	1.000	.632"	.64
	ofskilled &	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.0
	competent		339	339	339	339	339	339	339	339	339	3
	Partnershi p Facilitator: Communi	Correlation Coefficient	.576**	.432	.562**	.456	.506**	.581"	.694**	.632**	1.000	.72
	cation	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.0
	IT and	N	339	339	339	339	339	339	339	339	339	3
	Partnershi p Facilitator: Trust	Correlation Coefficient	.593"	.414"	.563"	.508"	.566"	.583"	.718"	.643"	.727**	1.0
	Tuat	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
			1		1							

Source: Researcher data, 2018

The findings revealed IT-Business partnership had a positive correlation coefficient of  $(\rho=.511^{**})$ . This is to say an increase in IT-Business partnership leads to an increase in ITBA. These findings revealed statistically significant relationship between IT-Business partnership and ITBA. This is as shown in table 4.7 below. This study established that IT-Business partnership had a positive correlation to ITBA. Luftman and McLean, (2003) reported similar findings when noted that close partnership between IT and business is ranked as number two enabler for ITBA. They also reiterated that the executives should pay attention on improving the partnership between IT and business. This was just to reaffirm our findings that for ITBA to be successful, IT-Business is a major contributor among others. Our study indicated IT-business partnership 37% influence on ITBA meaning that we have other contributors that constitute of 63%.

		Correlations		
			Influence of IT- Business partnership	ITBA to
			to business-IT	organization
			alignment	performance
Spearman's rho	Influence of IT-Business partnership to business-IT	Correlation Coefficient	1.000	.511**
	alignment	Sig. (2-tailed)		.000
		Ν	339	339
	ITBA to organization performance	Correlation Coefficient	.511**	1.000
	performance	Sig. (2-tailed)	.000	
		N	339	339
**. Correlatio	n is significant at the 0.01 leve	l (2-tailed).	11	

Table 4.7: Correlations analysis: IT-Business Partnership and ITBA

Source: Researcher data 2018

#### **4.5 Collinearity and Multicollinearity Test**

Collinearity is defined as; strong association between variables (especially independent variables) that can heavily influence deductions made by regressing. Collinearity exists when independent variables associate to one another significantly. We performed collinearity test to test if the independent variables were highly correlated to one another in the model. We did this using variance inflation factor (VIF), which is the mostly used diagnostic for multicollinearity. We performed linear regression of the predictor 'use of funds efficiently' independent variable (IV)

on other predictors or rather IVs. The calculated tolerances and VIFs are as shown in table 4.8 below.

Coefficients <sup>a</sup>		
	Collinearity	Statistics
Model	Tolerance	VIF
Partnership Facilitator: Leadership and Governance	.416	2.401
Partnership Facilitator: Understand mutual benefits between IT & Business	.294	3.396
Partnership Facilitator: Existence of skilled & competent staffs	.380	2.631
Partnership Facilitator: Communication between IT and Business	.239	4.193
Partnership Facilitator: Trust	.234	4.265
Partnership Facilitator: Harmony between IT & Business	.200	4.998
Partnership Driver: Serve our customers well	.407	2.457
Partnership Driver: Organization growth goals	.474	2.108

Table 4.8 Coefficients for regressing 'use funds efficiently' on all other IVs

Source: Research data, 2018

When interpreting the VIF values the following rules applies. When VIF=1 then there is no correlation in the IVs; and when the VIF >1 and VIF<=5 then exists moderate correlation in the IVs; and when the VIF >5 then IVs are highly correlated (Daoud, 2017). This is as explained in table 4.9 below.

### Table 4.9 VIFs

VIF -value	conclusion
VIF = 1	Not correlated
$1 < VIF \le 5$	Moderately correlated
VIF > 5	Highly correlated

Source: Journal of Physics, 2017

Looking VIFs in the table 4.8 above indicates there's moderate collinearity in the IVs. The multicollinearity problem can be dealt with by removing some predictors from the model before we carry out multiple regressions or use partial least square regression of principal components analysis. For us we got rid of one predictor: Trust from the model to increase the effect of the predictors on dependent variables (DVs). This resulted to VIFs going as below as 2.89 points. This is as shown in table 4.10 below.

	Coefficients <sup>a</sup>		
		Collinearity	Statistics
Model		Tolerance	VIF
1	(Constant)		
	Partnership Facilitator: Existence of skilled & competent staffs	.393	2.544
	Partnership Facilitator: Communication between IT and Business	.347	2.881
	Partnership Driver: Use of funds efficiently	.540	1.853
	Partnership Driver: Serve our customers well	.377	2.651
	Partnership Driver: Organization growth goals	.496	2.017
	Partnership Facilitator: Leadership and Governance	.427	2.342
	Partnership Facilitator: Understand mutual benefits between IT & Business	.358	2.791
a. Depen	dent Variable: Partnership Facilitator: Harmony between IT & Business	II	

Table 4.10 Coefficients for regressing 'Harmony between IT & Business' on others IVs

Source: Research data, 2018

## 4.6 Regression Analysis

After performing collinearity test we identified some collinearity issues. We then decided to resolve the issues/problems by removing Trust (one of IV) from the model so that we can regress the variables by multiple regression analysis to determine the relationship of IVs to DVs.

Regression analysis statistical technique helps in identifying the relationship between two or more quantitative variables i.e. a dependent variable, whose value need to be predicted, and an independent variable(s). The technique eventually finds the equation that represents the relationship. The study used SPSS version 23 to code, enter and compute multiple regression.

R -Squared indicates how best a single or many IVs forecasting outcome (dependent variable). The rule of thumb is that when R-Square ( $R^2$ ) equals 1.0 then given the value of one variable, you can perfectly predict the value of another variable. If R -Square is 0.0, then knowing the value of one variable does not assist to predict the value of the other variable. In short, a bigger R-Square value indicates that you can decisively predict a single variable from another.

#### 4.6.1 Partnership Drivers and Facilitators Analysis

By regressing the eight independent variables (Use of funds efficiently, Organization growth goals, serve our customers well, Existence of skilled & competent staffs, Communication between IT and Business, Leadership and Governance, understand mutual benefits between IT & Business and Harmony between IT & Business) resulted to 0.819 R and R<sup>2</sup> of 0.670. This means implies that the eight IVs contribute 67.0% to internal IT-Business partnership. This is as shown in table 4.11 below. The analysis further revealed that IVs were statistically significant in affecting the dependent variable at significance level of 0.000 as shown in the Sig. F Change in the Anova and model summary.

	Model Summary										
				Change Statistics							
			Adjusted R	Sig. F							
Model	R	R Square	Square	R Square Change	F Change	df1	df2	Change			
1	.819 <sup>a</sup>	.670	.662	.670	83.787	8	330	.000			
a. Predictor	s: (Constant),	Partnership H	Facilitator: Com	munication between I	Γ and Business, Partn	ership Driver:	Use of funds	efficiently,			
Partnership	Driver: Orga	nization grow	th goals, Partne	rship Facilitator: Lead	ership and Governan	ce, Partnershij	p Facilitator: I	Existence of			
skilled & co	skilled & competent staffs, Partnership Driver: Serve our customers well, Partnership Facilitator: Understand mutual benefits between										
IT & Busin	ess, Partnersh	ip Facilitator:	Harmony betw	een IT & Business							

Table 4.11 Model summary: Partnership drivers and facilitators

Source: Research data 2018

#### 4.6.1.1 ANOVA: Partnership Drivers and Facilitators

Regression sum of squares is 158.135 at 8 degrees of freedom with a mean square of 19.767 and residual sum of squares being 77.853 at 330 degrees of freedom with a mean square value of .236. The Total sum of squares is 235.988 with 338 degrees of freedom. The test for the joint significant which is given by the F statistic is 83.787 which are statistically significant at .000 percent level of significance. This is as shown in the table 4.12 below. This implies that the independent variables (IVs): Use of funds efficiently, Organization growth goals, serve our customers well, Existence of skilled & competent staffs, Communication between IT and Business, Leadership and Governance, understand mutual benefits between IT & Business and Harmony between IT & Business) together explain how they influence the internal IT-Business partnership in compassion organization.

	ANOVA <sup>a</sup>									
Model		Sum of Squares Df Mean Square		Mean Square	F	Sig.				
1	Regression	158.135	8	19.767	83.787	.000 <sup>b</sup>				
	Residual	77.853	330	.236						
	Total	235.988	338							
a. 1	Dependent Variable: I	Influence of IT-Busine	ss partnershi	ip to business-IT alignment						
b.	Predictors: (Constant)	, Partnership Facilitate	or: Commun	ication between IT and Business, P	artnership Driver: Use of fu	ands efficiently,				
Pa	rtnership Driver: Orga	anization growth goals	, Partnership	Facilitator: Leadership and Govern	nance, Partnership Facilitat	or: Existence of				
ski	lled & competent staf	fs, Partnership Driver:	Serve our c	ustomers well, Partnership Facilitat	tor: Understand mutual ben	efits between IT				

 Table 4.12 ANOVA: Partnership drivers and facilitators

Source: Researcher data 2018

#### 4.6.1.2 Coefficients: Partnership drivers and facilitators

& Business, Partnership Facilitator: Harmony between IT & Business

The coefficients table further helps us understand which independent variables (IVs) heavily affects predicting the dependent variable (DV) internal IT-Business partnership in the organization and by how much. Communication between IT and Business indicate strongest contribution of  $\beta$ = .241 which was statistically significant to the equation with *p*= .000 (0.000<0.05). Harmony between IT and Business followed closely contributing at  $\beta$ = .210 which was statistically significant to the equation with *p*=.002 (.002<.05). Existence of skilled & competent staffs came third contributing at  $\beta$ = .157 which was also statistically significant to the equation with *p*=.002 (.002<0.05). Understand mutual benefits between IT & Business came fifth contributing at  $\beta$ = .122 was also statistically significant to the equation with *p*=.038 (.038<0.05). Use of funds efficiently, serve our customers well and Leadership and Governance followed contributing at  $\beta$  .060, .026 and .013 respectively which were not statistically significant to the equation with p values of .165, .622 and .790 respectively that were greater than 0.05. This is as shown in table 4.13 below.

	Coefficients <sup>a</sup>									
		Unstandardized Coefficients	Standardized Coefficients							
M	odel	В	Beta	Т	Sig.					
1	(Constant)	.370		2.338	.020					
	Partnership Driver: Use of funds efficiently	.052	.060	1.390	.165					
	Partnership Driver: Serve our customers well	.022	.026	.494	.622					
	Partnership Driver: Organization growth goals	.126	.139	3.077	.002					
	Partnership Facilitator: Leadership and Governance	.012	.013	.266	.790					
	Partnership Facilitator: Understand mutual benefits between IT & Business	.117	.122	2.088	.038					
	Partnership Facilitator: Harmony between IT & Business	.205	.210	3.070	.002					
	Partnership Facilitator: Existence of skilled & competent staffs	.142	.157	3.102	.002					
	Partnership Facilitator: Communication between IT and Business	.237	.241	4.063	.000					

#### Table 4.13 coefficients: beta and sig. values

Source: Researcher data 2018

**Y**=**a**+**bX**, depicts a linear regression formula. **b**= the slope, and **a**= the intercept, i.e. y value when x = 0.

This study established a linear equation as:

 $Y = 0.370 + 0.060X_1 + 0.026X_2 + 0.139X_3 + 0.013X_4 + 0.122X_5 + 0.210X_6 + 0.157X_7 + 0.241X_8.$ 

Where;

- Y=Dependent variable (i.e. IT-Business partnership)
- 0.370=intercept (value of y when x=0)
- $X_{1}$ .....  $X_{8=}$  Independent variables
- 0.060, 0.026, 0.139, 0.013, 0.122, 0.210, 0.157 and 0.241= are slopes of the line

Therefore;

Internal IT-Business partnership = 0.370 + (0.060 x Use of funds efficiently) + (0.026 x Serve our customers well) + (0.139 x Organization growth goals) + (0.013 x Leadership)and governance) + (0.122 x Understand mutual benefits between IT & Business) + (0.210 x Harmony between IT and Business) + (0.157 x Existence of skilled & competent staffs) + (0.241 x Communication between IT and Business).

#### 4.6.2 IT-Business Partnership as IV

By regressing the IT-Business partnership resulted to 0.610 R and  $R^2$  of 0.372. This means implies that the IV contributes 37.2% to ITBA. This is as shown in table 4.14 below. The analysis showed that the IV was statistically significant in affecting the dependent variable at significance level of 0.000 as shown in the Sig. F Change in the Anova and model summary.

	Model Summary <sup>b</sup>									
					Change Statistics					
			Adjusted	R Square Sig.						
Model	R	R Square	R Square	Change	F Change	df1	df2	Change		
1	.610ª	.372	.370	.372	199.851	1	337	.000		
a. Predictor	a. Predictors: (Constant), Influence of IT-Business partnership to business-IT alignment									
b. Depender	b. Dependent Variable: ITBA to organization performance									

Source: Researcher data 2018

### 4.6.2.1 ANOVA IT-Business Partnership

Regression sum of squares is 71.409 at 1 degree of freedom with a mean square of 71.409 and residual sum of squares being 120.414 at 337 degrees of freedom with a mean square value of .357. The Total sum of squares is 191.823 with 338 degrees of freedom. The test is given by the F statistic of 199.851 which was statistically significant at .000 percent level of significance. This is as shown in the table 4.15 below. This implies that the independent variable (IV): IT-Business partnership explains how it influences the ITBA in organization.

Table 4.15 ANOVA: IT-Business partnership

	ANOVA <sup>a</sup>									
Model		Sum of Squares Df		Mean Square	F	Sig.				
1	Regression	71.409	1	71.409	199.851	.000 <sup>b</sup>				
	Residual	120.414	337	.357						
	Total	191.823	338							
	Dependent Variable: ITBA Predictors: (Constant), Infl			) business-IT alignmen	t					

## 4.6.2.2 Coefficients: IT-Business partnership

The coefficients table helped in understanding how IT-Business Partnership contributed to the prediction of the dependent variable (DV) ITBA in the organization and by how much. IT-Business partnership indicated strong contribution of  $\beta$ = .610 which was statistically significant to the equation with *p*= .000 (0.000<0.05). This is as shown in table 4.16 below.

Coefficients <sup>a</sup>									
		Unstandardized Coefficients	Standardized Coefficients						
Model		В	Beta	t	Sig.				
1	(Constant)	2.206		12.830	.000				
	Influence of IT-Business partnership to business-IT alignment	.550	.610	14.137	.000				
a. 1	Dependent Variable: ITBA to organization per	formance		1					
b.	Predictors: (Constant), Influence of IT-Busine	ss partnership to busi	ness-IT alignment						

Table 4.16 Coefficients: IT-business partnership

Source: Researcher data 2018

**Y=a+bX**, depicts a linear regression formula. **b**= the slope, and **a**= the intercept, i.e. y value when x = 0.

This study established a linear equation as:

 $Y = 2.206 + 0.610X_1$ 

Where;

- Y=Dependent variable
- 2.206=intercept
- $X_{1}$  = Independent variable
- 0.610= is slope of the line

### Therefore;

ITBA= 2.206 + (0.610 x IT-Business partnership).

# 4.7 Hypothesis Testing

We tested our hypothesis using the paired sample t Test. This involves comparing mean difference of the paired variables. To determine whether to reject or fail to reject we looked at the sig. values in table 4.17 below. Null hypothesis is rejected when the p<0.05 otherwise fail to reject.

		Reject/Fail to
#	Hypothesis	Reject
	Use of funds efficiently has a positive relationship to IT-Business	
$H0_1$	partnership.	Reject
H0 <sub>2</sub>	Serve our customers well leads to IT-Business partnership.	Fail to Reject
H0 <sub>3</sub>	Organization growth goals leads to IT-business partnership.	Fail to Reject
H0 <sub>4</sub>	Leadership and governance leads to IT-business partnership.	Reject
110	Understand mutual benefits between IT & Business leads to IT-Business	
H05	partnership.	Fail to Reject
H0 <sub>6</sub>	Harmony between IT & Business leads to IT-business partnership.	Fail to Reject
110	Existence of skilled & competent staffs leads to IT-business leads to IT-	
H07	Business partnership.	Fail to Reject
H0 <sub>8</sub>	Communication between IT and Business leads to IT-Business partnership.	Reject
H0 <sub>9</sub>	Trust between IT and Business leads to IT-Business partnership.	Fail to Reject
H0 <sub>10</sub>	IT-Business partnership leads to ITBA.	Reject
HU <sub>10</sub>	II-Business partnership leads to II BA.	Keject

Table	4.17	Reject	or Fai	l to	Reject	Hypothesis	•

Source: Researcher data 2018

# Table 4.18 Paired samples Test

			Paired Sa	nples Test					
		Paired Differences				T			
		Mean	Std. Deviation	Std. Error Mean	Interva	95% Confidence Interval of the Difference ower Upper		Df	Sig. (2- tailed)
Pair 1	Partnership Driver: Use of funds efficiently - Influence of IT-Business partnership to business-IT alignment	271	.882	.048	366	177	-5.664	338	.000
Pair 2	Partnership Driver: Serve our customers well - Influence of IT-Business partnership to business-IT alignment	080	.790	.043	164	.005	-1.857	338	.064
Pair 3	Partnership Driver: Organization growth goals - Influence of IT-Business partnership to business-IT alignment	050	.781	.042	134	.033	-1.182	338	.238
Pair 4	Partnership Facilitator: Leadership and Governance - Influence of IT-Business partnership to business-IT alignment	192	.774	.042	274	109	-4.561	338	.000
Pair 5	Partnership Facilitator: Understand mutual benefits between IT & Business - Influence of IT-Business partnership to business-IT alignment	035	.652	.035	105	.034	-1.000	338	.318
Pair 6	Partnership Facilitator: Harmony between IT & Business - Influence of IT- Business partnership to business-IT alignment	.027	.598	.032	037	.090	.818	338	.414
Pair 7	Partnership Facilitator: Existence of skilled & competent staffs - Influence of IT-Business partnership	038	.698	.038	113	.036	-1.012	338	.312

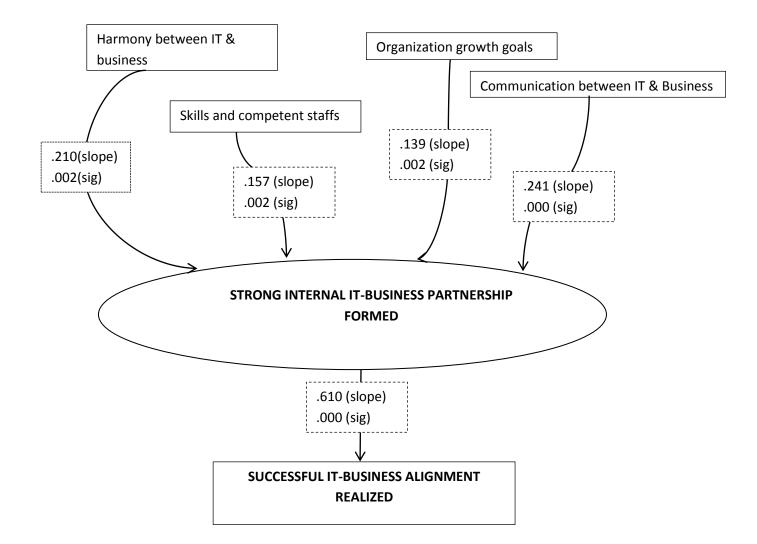
	to business-IT alignment								
Pair 8	Partnership Facilitator: Communication between IT and Business - Influence of IT-Business partnership to business-IT alignment	.136	.605	.033	.071	.200	4.129	338	.000
Pair 9	Partnership Facilitator: Trust - Influence of IT- Business partnership to business-IT alignment	.059	.627	.034	008	.126	1.733	338	.084
Pair 10	Influence of IT-Business partnership to business-IT alignment to organization performance	254	.705	.038	329	178	-6.622	338	.000

Source: Researcher data 2018

# **4.8** Optional Proposed Model for Building strong internal IT-Business Partnership that will largely influence achieving alignment of IT and Business strategies

Serve our customers well and organization growth goals, communication, harmony between IT & Business and existence of skilled and competent staffs were independent variables to IT-Business partnership variable and IT-Business partnership was independent variable to ITBA. Partnership drivers: 'serve our customers well' and 'organization growth goals' were found by the study to have strong, positive influence on IT-business partnership. Similarly, Partnership facilitators: 'communication', 'harmony' between IT & business and 'existence of skilled & competent staffs' were found by the study to have strong, positive influences positive influence on IT-business and 'existence of skilled & competent staffs' were found by the study to have strong, positive influence on IT-business partnership and 'IT-business partnership' had strong positive influence on alignment of IT and Business. Therefore, the study proposes an optional model and when used well we can achieve strong internal IT-Business partnership which largely will to much better ITBA.





#### **CHAPTER FIVE**

#### CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Conclusions**

This section deals with conclusions and recommendations for this study. With findings discussions in chapter four, below are the conclusions drawn in this study.

#### 5.1.1 Partnership drivers

Descriptive analysis findings indicated that organization growth goals and serve customer well came as major driver or reasons for IT-Business partnership. Correlation analysis also revealed very strong relationship between organization growth goals and serve customers well to IT-business partnership than the use of funds. This null hypothesis 'use of funds efficiently has a positive relationship to IT-Business partnership' was rejected. The study further affirms that use of funds efficiently was not a priority in building IT-Business partnership and the research did not have convincing data that the study could fail to reject the hypothesis. Then study concludes that growth and organization and serve customers well are key building blocks to IT-Business partnership. We can further conclude that some respondents seem not interested in efficient usage of organization fund.

The linear equation indicated that Organization growth goals largely contributed to the equation with high higher slope. Based on that the study can generalize by concluding that the number one reason, why the internal IT-Business partnership strives is highly motivated by growth of origination.

#### 5.1.2 Partnership facilitators

Descriptive analysis findings indicated that communication, trust, harmony, mutual benefits between IT & business and existence of skilled & competent staffs in that order they came as top most factors for internal IT-Business partnership. Leadership and governance rated low in relation compared to other factors listed above. Similar case happened with correlation analysis as well. The study reported statistically significance relationships between communication, trust, harmony, mutual benefits between IT & business and existence of skilled & competent staffs, with leadership and governance scoring the lowest. The study concluded that communication, trust, harmony, mutual benefits between IT & business and existence of skilled & competent staffs,

staffs influence the forging and thriving of internal IT-Business partnership. However, the study did not have convincing data to fail to reject the null hypotheses: 'communication between IT and Business leads to IT-Business partnership' and 'leadership and governance leads to IT-business partnership' and we rejected the hypotheses.

The linear equation indicated that communication, harmony between IT & business and existence of skilled & competent staffs largely contributed to the equation with the highest slopes. Based on that, the study can generalize by concluding that the major factors for building the internal IT-Business partnership are: communication, harmony between IT & business and existence of skilled & competent staffs.

#### 5.1.3 IT-Business Partnership

Descriptive analysis findings indicated that internal IT-Business partnership that it has influence on ITBA. The correlation reported a strong statistically significance relationships between IT-Business partnership and ITBA. The study concluded IT-business has a positive influence on ITBA and it generalized that ITBA can be predicted with an increase in IT-Business partnership.

#### **5.2 Recommendations for practice**

The following recommendations are made to be used for policy making in the organization and can be consumed at management level for decision making.

#### 5.2.1 Recommendation on partnership drivers

As per the findings of this study, organization growth goals and serve customers well, majorly influence the building of internal partnership between IT and Business in the organization. The study recommends that organization to have programs/systems to ensure periodic updates about strategic growth and customer improvement to help IT and business staffs to understand the mutual mandate required by the organization. This will spark more and more collaboration and relationships between the IT department and other business departments, hence strengthening IT-business partnership which eventually impacts IT and Business strategies alignment, bringing efficiency and high organizational performance.

In addition, the study found out that 'use of funds efficiently' lacked convincing data to convincingly conclude that it impacts the IT-Business partnership. Study recommends that organization use these findings to try and understand why driver was not a key in building IT-Business partnership. Does it mean that staffs are incentive on usage of funds efficiently and probably wastage of hard earned funds?

#### 5.2.2 Recommendation on partnership facilitators

Drawing from finding of this study; IT and Business being able to communicate, IT and Business being able to work harmoniously and existence of skilled & competent staffs, majorly impact internal partnership between IT and Business in the organization. The study recommends that organization to invest more resource in improving these aspects; communication, harmony between IT & business and existence of skilled & competent staffs and by doing so strong internal IT-Business partnership will continue to exist in the organization hence catalyze alignment of IT and Business strategies which in long run will lead to organizational performance overall.

#### 5.2.3 Recommendation on IT-business partnership vs. ITBA

As per the findings of this study, IT-business partnership is just one of the influencer of better alignment of IT and Business strategies. It involves people relationships and we know the power of people as a resource to the organization. The study recommends that it should be taken serious by forging intentional programs that involve making people happy and have a reason to work as partners so that by doing so it majorly impact on the best alignment results.

#### 5.2.4 Recommendation for future studies

This study only looked at one organization. To validate the findings in this study, the study recommends that future studies be performed in other different organizations, industries or firms or businesses. In addition, since this study lacked convincing data to convincingly conclude 'use of funds efficiently' is a key driver for internal IT-Business partnership, the study also recommends that future studies investigate in deed if this true or not.

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#### **APPENDICES**

## **Appendix 1: Questionnaire sample**

#### Section 1:

- 1) How long have you worked for Compassion?
  - $\Box$  Less than 2 years
  - $\Box$  More than 2 years
- 2) Which area do you work in?
  - □ In IT (information Technology)
  - □ In Business (e.g. Program, Marketing, Finance, Sponsor donor services, others)

#### Section 2:

ON SCALE OF 1-5, with 5 strongly agree, to what extend do you agree with statements in questions 3 to 14

3) "Business (e.g. Program) and IT employees work as internal partners in the organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

 "Use of donors' funds efficiently and where needed is the reason why IT and Business (e.g. Program) work as internal partners in the organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

5) "Serving supporters, donors, ICPs and beneficiaries is the reason why IT and Business (e.g. Program) work as internal partners in the organization.

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

6) "Expanding and growing the ministry in terms of more sponsorships, is the reason why IT and Business (e.g. Program) employees work as internal partners organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

7) "Leadership and governance enable IT and Business (e.g. Program) employees to work as internal partners in the organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

 "Understanding of mutual benefits between IT and Business (e.g. Program) employees enhances IT and Business to work as internal partners in the organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

9) "Harmony between IT and Business (e.g. Program) employees promotes IT and Business to work as internal partners".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

10) "Skilled and competent staffs promote IT and Business (e.g. Program) employees to work as internal partners in organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

11) "Healthy communication promotes IT and Business (e.g. Program) employees to work as internal partners".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

12) "Trust promotes IT and Business (e.g. Program) employees to work as internal partners in the organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

13) "When IT and Business (e.g. Program) employees work as internal partners leads to alignment of IT and Business strategies in the organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree

14) "When IT and Business strategies are aligned, this leads to a better performance of the organization".

1= strongly disagree, 2= disagree, 3= undecided, 4= agree and 5= strongly agree