

Challenges and Risks of ICT Outsourcing: Perspectives from Botswana

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ABSTRACT

Outsourcing of Information and Communications Technology (ICT) is the process in which an organisation delegates tasks concerned with management, operation and maintenance of its ICT resources to an external service provider in order to improve performance. There is limited knowledge of the challenges and risks of ICT outsourcing in developing country contexts. This paper aims to contribute to this knowledge gap by focusing on the local ICT outsourcing industry in Botswana. The research approach combined a positivist and an interpretive stance to collect both quantitative and qualitative information in the public and private sector of Botswana. A survey questionnaire was administered to staff of 100 establishments that targeted senior managers responsible for ICT outsourcing. For interpretive analysis, a focus group strategy was followed by conducting a workshop consisting of 16 key managers from the public and private sector and non-government organisations. The findings show that firms are concerned with a variety of issues including lack of flexibility, security and overdependence on outsourcing firms; management of outsourcing relationships; outsourcing internationally; and loss of employee morale coupled with the habit of outsourcing firms of employing expatriates at the expense of locals. Outsourcing firms are also not happy with the policy of the main client of giving short-term contracts and splitting big jobs across many firms which leads to coordination problems and trading of blames. It is recommended that the government, being the main client should look into how outsourcing can bring efficiency in the ICT sector but at the same time be a catalyst for training of local ICT professionals.

Keywords: ICT Outsourcing, Outsourcing Politics, Outsourcing in Public Sector, Developing countries, Botswana.

INTRODUCTION

Information systems (IS) and information technology (IT) outsourcing have been driving business, organisations, governments and global industries and community services for many decades now. Several definitions are available for ICT outsourcing, but for the sake of

uniformity, this paper adopts Wang *et al.*, (2008)'s definition who describe it as a 'common business practice in which a client transfers property or decision rights over physical and/or human IT resources to a vendor for delivery of IT services such as network management, application development, data management, or infrastructure maintenance.' Over the years, the application of ICT outsourcing transcended from the private sector to public firms in developed countries, including government entities. Developing country firms and governments have become ardent consumers and users of ICT hardware and software services as well.

In Botswana, the Government and the private sector have been engaged in ICT outsourcing for several years now and millions of Botswana pula have been spent on this undertaking (NICT Policy, 2007). This has been necessitated by the lack of skilled ICT professionals in certain concentration of the profession. In developing country context of sub-saharan Africa, comparatively few studies have focused on the management and delivery of ICT outsourcing projects except the study by Johnson *et al.*,(2009) in South Africa and Adeleye *et al.*,(2004)'s in Nigeria. Indeed the few that may be cited manifest a particular focus on areas that are generic, lacking the depth in assessing the challenges and risks of ICT outsourcing in the public and private sectors. Several researchers (Lin, Pervan & Mcdermid, 2007; Kern & Willcocks, 2000; Lacity & Wilcocks, 1997) have noted that studies in this area are very limited globally. In particular, following up ICT outsourcing relationship issues has been envisaged to secure a win-win situation for both parties involved in an according to Kern & Willcocks (2000). Thus, little is known of the risks and challenges of ICT outsourcing in the public and private sector of the Botswana context. This study is therefore exploratory aiming to answer the following questions:

- i. What is the characteristic of the ICT outsourcing environment in Botswana
- ii. What are the challenges and risks of ICT outsourcing in the public and private sector of Botswana.

The structure of this paper is as follows; the literature review discusses the nature and characteristics of ICT outsourcing, followed by the challenges and risks of ICT outsourcing in section 2. This is followed by a description of how the study was undertaken and the revelation of the study results and findings. The discussion of findings is provided in section 4, followed by the conclusion, recommendations, and implications of the findings.

LITERATURE REVIEW

Characteristics of ICT outsourcing

The practice began in the early 1990s, as a way of supplementing in-house ICT development activities, and is still continuing to be a growing economic phenomenon worldwide (Pati & Desai, 2005). The Eastman Kodak company experience of outsourcing its activities to IBM is one of the early examples of ICT outsourcing cited in literature (Claver *et al.*, 2002; Pati & Desai, 2005). It led other organizations to follow and gain from such an arrangement (Claver *et al.*, 2002; Pati & Desai, 2005). A common feature amongst the firms that outsourced was that they were not totally self-sufficient in the provision of ICT services, and thus they outsourced those functions for which they had no competency internally (Lacity *et al.*, 2008). With the passing of time and the dynamism of ICT development, the scope, mode, degree, and functions of ICT outsourcing (Dibbern *et al.*, 2004) have changed drastically to reflect

the changing needs of consumers in developed and developing countries. Thus, ICT outsourcing has taken on various forms and trends based on the context of application. The most common areas for ICT outsourcing according to Han, Kauffman & Nault (2011) are systems development and integration, software and maintenance and support, hardware maintenance and support, and data processing and management. Dibbern *et al.*, (2004) provide four fundamental areas that determine the type or nature of ICT outsourcing exhibited by firms. These are:

- i. Degree - which describes whether the ICT outsourcing is total, selective or none,
- ii. Mode – which describes whether a single vendor/client or a multiple vendor/client relationship is in force, and
- iii. Ownership – which explains whether ICT outsourcing is totally owned, partially owned, and externally owned, and,
- iv. Time Frame – whether the relationship is short or long term. The exact definition of short-term differs from project to project. Some researchers have defined short-term to mean a period of six months from inception to the time an outsourcing contract expires (Gulla & Gupta, 2009).

Currie (2000) describes four types of ICT outsourcing decisions:

- (1) Insourcing (in-house sourcing) - Retaining ICT responsibilities as in-house functions, it is a relationship with the internal ICT department.
- (2) Multiple selective sourcing - A more comprehensive type, it describes a relationship where there is one or more ICT service suppliers providing service for only part of the ICT department needs.
- (3) Total outsourcing - The most comprehensive type, it describes a relationship where all ICT services are outsourced from one or more ICT services suppliers.
- (4) Strategic alliance/joint venture - Today's outsourcing agreements are in the spirit of long-term (5-10 years) partnerships and alliances.

Other versions have been described such as nearshoring, which is defined as 'outsourcing work to a supplier located in an adjacent country (Lacity *et al.*, 2008).

Although ICT outsourcing began with big companies in the early years, this trend has mutated to show great variety in the participants that includes small and medium-sized companies as well (Brooks *et al.*, 2009). In recent times, the same principle of ICT outsourcing has matured into new frontiers of mobile technology development that provide such services in the 'cloud', under the term 'cloud-sourcing'. However, this new development is not the main focus of this paper. Attention is drawn here to the challenges and risks of outsourcing in an exploratory albeit engaging fashion regarding the public and private sector of a developing country. Particular interest will be to show whether the challenges and/or risks are similar to those in the rich and developed regions of the world.

Challenges and Risks of ICT Outsourcing

Discussions on the challenges and risks of ICT outsourcing have ensued in IS literature (Moon *et al.*, 2010; Moschuris & Kondylis, 2007; Harland *et al.*, 2005; Fink, 1994), just to name a few. However, there are few if any, that paid a focus in the public and private sector of developing countries. This paper situates itself with attempts to fill this gap. The decision to outsource may lead to an elimination of a number of fulltime related positions (Moschuris & Kondylis, 2007) including the retrenchment of employees especially women (Lafferty and Roan, 2000). The fear of losing jobs is one of the major complaints with ICT outsourcing

(Tafti, 2005). Furthermore, Tafti adds that costs of post-outsourcing are another risk or challenge to firms. Such costs and their full repercussions on the organisation may not be fully appreciated until the process has been completed. Gonzalez, Gasco & Llopis (2006) add that workers from developed economies feel that outsourcing represents stronger competition for their working positions and their salaries as well.

In a Korean study undertaken by Moon *et al.* (2010) in the public sector, it was found that the government had fear of losing control and also exhibited a conservative organisational culture that could not allow IT organisations to operate freely. Another risk of ICT outsourcing cited in extant literature is security (Fink, 1994). This may refer to physical security, ensuring that the physical facilities in which IS are developed, maintained, implemented and operated are safe from threats affecting continuity of installation or resulting in loss of installation's assets (Fink, 1994). Security is always a concern as emphasis changes from the physical protection of data, assets and software to the recovery of resources in the event that vendors are unable to continue providing service, at all or at a reduced level (Fink, 1994).

Another risk or challenge involves mistakes organizations make in identifying core and non-core activities that lead organizations to outsource their competitive advantages, hence losing their organizational competence which is difficult to rebuild once lost (Harland *et al.*, 2005). Gonzalez *et al.* (2006), state that outsourcing can bring many hidden and unforeseen costs reducing the quality of service received. They also note that providers may decide to outsource to third parties, seeking greater profits without the customer knowing. Assessment costs on whether to make or outsource include additional cost burden of managing outsourcing relationships (Harland *et al.*, 2005). Certain costs are overlooked and ignored when it is difficult to quantify (Pai & Basu, 2007) especially the tangible hidden costs that are associated with giving up control of management of critical assets and security technologies for example experience, knowledge, skill development.

The risk of losing critical skills and resources has been cited as a negative outcome of ICT outsourcing in extant literature (Gonzalez *et al.*, 2005; Leavy, 2004; Pfannenstein & Tsai, 2004). Gonzalez *et al.* (2005) have ranked the risk of loss of critical skills as second important and frequent in organizations with more resources. Leavy, (2004) argue that the risk of losing skills could be the key to competing in the future comparing outsourcing with prematurely exiting the market. Similarly, other risks include vendor selection costs, the loss of intellectual assets, costs to transition ICT infrastructure to the vendor, layoff costs, legal contract costs, and possible exploitation from the vendor (Pfannenstein & Tsai, 2004).

The potential lack of quality in outsourced activities is another outstanding risk (Gonzalez, Gasco & Llopis, 2006). They add that lack of quality usually occurs when the organization doesn't have human resources with adequate training, hence there will be poor knowledge of the language, technical and managerial, making communication between the provider and customer difficult. The dependence on the provider is the largest risk Spanish firms are not willing to take (Gonzalez, Gasco & Llopis, 2005). They continue to say that excessive dependence on providers is associated with firms that outsource the most.

Beaumont & Sohal (2004) noted the difficulty in formulating and quantifying the requirements after the service-level agreements (SLA) have been signed. The caliber of ICT professionals currently undertaking and overseeing the outsourced tasks is extremely important although less researched in extant literature. Willcocks & Griffiths (2010)

identified the crucial role that middle managers play in both the vendor and client pool to articulate, interpret and deliver appropriate outsourcing needs in their organisations.

Harland *et al.* (2005) research reveals that there is lack of skills and expertise in organizations to deal with strategic and collaborative relationship management. Moschuris & Kondylis (2007) noted that most outsourcing clients experienced difficulty in bringing contract providers online. Another observed problem is the lack of coordination and integration between the vendors and the clients, and that there might be insufficient understanding of the vendors regarding the clients' operations (Moschuris & Kondylis, 2007). In the South African environment, Johnson *et al.* (2009) report some tangible and intangible challenges and risks that include the breach of privacy, inferior quality and performance, cultural and contract management issues.

Despite the many researchers stating the challenges and risks of ICT outsourcing, the treatise in the public and private sectors of developing country context has been very scanty (Moon *et al.*, 2010) and unable to detail the systematic issues after the service-level agreements (SLA) have been signed. These have rarely surfaced in literature especially in developing country contexts of southern Africa. The study by Lin *et al.*, (2007) also details the lack of literature on how to evaluate ICT outsourcing projects in the public sector and recommends more studies to be undertaken to allow for comparisons. This paper attempts to address this dearth of knowledge on the challenges and risks experienced by the public and private sector in a developing country context of Botswana. The next section explains how the research was carried out.

RESEARCH METHODOLOGY

The research approach combined a positivist and an interpretive stance to collect both quantitative and qualitative information in the public and private sector of Botswana firms. The aim was to benefit from the strengths of both approaches as a way of making the research findings more reliable (Goles & Hirschheim 2000). For quantitative analysis, the data collection instrument used a detailed survey questionnaire, which was administered to product/service organisations in both public and private sectors of Botswana that had active utilisation of ICT. The sampling frame was organised according to job positions in the organization, which formed the sampling strata. Three hundred and fifty questionnaires were distributed to staff of 100 establishments, following stratified sampling from the industrial cities of Botswana namely, Gaborone, Francistown, Jwaneng, Selibe Phikwe and Lobatse.

For interpretive analysis, a focus group strategy was followed. A workshop consisting of key stakeholders from the public and private sector and non-government organisations was undertaken based on the contextual perspectives relating to ICT outsourcing. The aim was to target specialised groups in the local economy who could provide in-depth information regarding their experiences with ICT outsourcing. The workshop was organised as a one-day event. Several issues were discussed relating to the subject matter including the risks and challenges that affect the local ICT outsourcing sector. This paper only reports on the aspects of the challenges and risks and possible suggestions made by workshop participants.

The experiences of the individual ICT managers and senior IS personnel provided knowledge and understanding of the challenges and risks as a socially constructed process (Walsham,

2006). All discussions were tape-recorded and later analysed into themes. The findings are presented in subsequent sections.

DATA ANALYSIS AND RESULTS

Demographic Profile

The study had been planned to cover all industries in the country. In particular, organisations that undertook ICT activities were earmarked through the Botswana Confederations of Commerce, Industry and Manpower (BOCCIM) list of companies. A total of 350 questionnaires were distributed to companies in the major cities of Gaborone, Francistown, Jwaneng, Lobatse, and Selibe Phikwe. A total of 110 responses were brought in, with 9 that could not be used due to blank spaces in some parts of the questionnaire. Thus 101 were usable and formed part of the analysis, representing 33% response rate. This is low percentage as there was a lot of publicity that had been undertaken by the researchers by calling individual managers that were known personally. However, this can still be accepted due to the general apathy that some organisations in Botswana have on participating in research (Uzoka *et al.*, 2007). The researchers also undertook qualitative analysis using a focus group workshop.

Age and Gender

The age group of the respondents was fairly young as shown in Table 1. Only seven percent were aged above 50. In terms of gender, 29% were female and 71% were male. The respondents profile were screened to establish that they indeed were at the level of making strategic decisions and could appreciate ICT outsourcing and insourcing decisions at managerial level. All respondents satisfied this requirement and those that could not articulate ICT issues satisfactorily were not allowed to participate.

Firm classification and Type of Industry

A fair distribution of respondents was obtained with 10.3% being in the public sector, 69.1% in the private and 20.6% were parastatal firms. About 4% did not indicate which sector they belonged to. Companies were represented from across a spectrum of industries. These are from wholesale trading, mining, Non-Government organisations (NGO), IT consultancy & vendors, Finance and Banking, Tourism and Hospitality, Printing and Publishing, Health service provision, Retail and Supermarkets, Government/Regulatory Firm, Security, Aviation, Legal, Environmental Affairs, Research and Development, Motor Retail, Courier, and Radio/Communications/Broadcasting.

Number of employees in the firms

In terms of the size of the organisations, the number of employees can be used to assess the characteristics of companies that participated. Table 1 shows the distribution with the majority of the companies being classified as small firms (have less than 100 employees).

Years of service by organisation and the Period of ICT Outsourcing

In terms of the years of service of the organisations, Table 1 shows the range of years that the firms had been in operation. Many companies had been in operation for more than 10 years.

Table 1: Demographic Profile of Respondents and their Firms

Variable		Frequency	Valid Percentage
Age	Below 30 years	39	39
	31-40 years	40	40
	41-50 years	14	14
	Above 50 years	7	7
	<i>Total</i>	100	100
Gender	Male	71	71
	Female	29	29
	<i>Total</i>	100	100
Classification of firm	Public sector	10	10.3
	Private sector	67	69.1
	Parastatal	20	20.6
	<i>Total</i>	97	100
How old is your organisation?	Less than 5 years	19	19
	6-10 years	18	18
	Over 10 years	63	63
	<i>Total</i>	100	100
How many full time employees does your organisation employ?	Less than 100	58	58
	101 – 500	25	25
	501 – 999	7	7
	Over 1000	10	10
	<i>Total</i>	100	100
What is your organization's annual IT budget?	Less than P100,000	31	34.4
	P100,001-P500,000	23	25.6
	P500,001-P2million	17	18.9
	P2million-P6million	12	13.3
	P6million-	3	3.3
	P12million	4	4.4
	Over 10 million	0	0.0
	<i>Total</i>	90	100

Challenges and Risks of ICT Outsourcing

On a Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree), respondents ranked several variables derived from literature that were deemed to be possible challenges to ICT outsourcing. Table 2 shows the challenges and risks and their respective mean (and standard deviation) in ascending order. Respondents strongly agreed that the 'excessive dependence on the provider or vendor' was a key challenge (mean=1.96, standard deviation = .946),

followed by potential loss of secrets and intellectual property, and the presence of vendors who had little or unnecessary skills and the overdependence on the vendors.

Table 2: ICT Outsourcing Challenges in Firms

Variable	N	Mean	Std. Deviation
Excessive dependence on the provider	97	1.96	.946
Potential loss of secrets and intellectual property	96	2.00	1.179
Vendor opportunism i.e. vendors without necessary skills	99	2.04	1.039
Over-dependence on the vendor	98	2.05	1.039
Vendor fails to provide contracted service to the required level	96	2.18	.883
Change in commitment or financial stability of a supplier	97	2.24	.955
Lack of flexibility (becoming locked into the vendor)	97	2.26	1.184
Vendor's lack of client's enterprise knowledge	92	2.29	1.085
Security problems in general	96	2.35	1.086
Loss of expertise within the company	97	2.38	1.203
Costs of controlling the vendor very high	96	2.42	1.102
Client engaged in new line of business-requires changes to contactor even termination of contract	96	2.42	1.033
Deficient quality	96	2.44	1.054
Hidden costs	96	2.45	1.178
Lack of active management of the vendor by the client	94	2.46	1.033
Lack of employee morale leading to poor performance and high staff turnover	95	2.49	1.157
International outsourcing risks	97	2.66	1.345
Treating IT as an unimportant commodity to be outsourced	94	2.79	1.190
Different time zones	95	2.99	1.325

In terms of variables that were not agreed upon, respondents slightly disagreed that ‘different time zones’ was a serious challenge to ICT outsourcing (mean = 2.99).

To further understand the structure of risks of outsourcing identified by the organisations an exploratory factor analysis using principal component analysis with Varimax rotation and Kaiser Normalization was used to summarise the set of variables into independent subsets. The result produced six factors with eigenvalues greater than or equal to 1.0 and accounted for 71.33% of the total variance. A further analysis with four factors as suggested by the scree-plot accounted for 66.098% of the total variance (see Table 3). An internal consistency

reliability coefficient (coefficient alpha) was calculated to establish the homogeneity of statements within each factor as recommended by Cronbach (1951). Cronbach's coefficient alphas for the four factors were 0.826, 0.734, 0.832, and 0.56. Nunally (1967, p.226) recommends that the minimally acceptable reliability coefficient for preliminary research should be in the range of 0.5–0.6.

Table 3: Factor Analysis of ICT Outsourcing Risks

Statement	Component			
	1	2	3	4
Lack of flexibility (becoming locked into the vendor)	.844			
Potential loss of secrets and intellectual property	.764			
Over-dependence on the vendor	.662			
Vendor opportunism i.e. vendors without necessary skills	.632			
Excessive dependence on the provider	.607			
Hidden costs	.578			
Lack of active management of the vendor by the client		.799		
Vendor fails to provide contracted service to the required level		.796		
Client engaged in new line of business- requires changes to contactor even termination of contract		.623		
Vendor's lack of client's enterprise knowledge		.535		
International outsourcing risks			.912	
Different time zones			.909	
Loss of expertise within the company				.892
Lack of employee morale leading to poor performance and high staff turnover				.565
Variance explained	34.573	13.385	9.226	8.913
Cronbach's alpha	0.826	0.734	0.832	0.56
Mean	2.13	2.30	2.86	2.44

The first factor was named *Lack of flexibility, security and overdependence*. By looking at the mean score of 2.13 it clearly shows organisations are very concerned with its potential impact. The second factor was named *Management of outsourcing relationship*. Respondents indicate that after the outsourcing agreement has been signed there is need for continued management of the relationship. This was the second most important concern on outsourcing relationships with a mean score of 2.30. The third factor is named *International outsourcing issues* while the fourth factor is named *ICT personnel issues*. Issues concerning impact of outsourcing on ICT personnel came third with a mean score of 2.44 while those of international outsourcing came last with a mean score of 2.86. Organisations are not very

concerned with personnel issues because it emerged from the discussion that generally outsourcing does not aim at getting rid of the existing ICT personnel. Where an organisation believes that they have enough ICT personnel but they are not delivering quality service the option has been to make the ICT department charge its services to other departments. International outsourcing has not come up as a big issue because almost all organisations outsource from within the country or from neighboring South Africa.

Results from Qualitative Analysis

Results from the qualitative data were obtained in two ways, which are:

1. Comments from the survey questionnaire.
2. Responses and interview notes from the focus group.

Qualitative responses from the Survey Questionnaire

Survey questionnaires were screened to obtain notes from the respondents. 57 respondents made comments on various issues related to ICT outsourcing. Over 50% of the respondents were using the on-shoring (Currie, 2000) method of outsourcing as they depended mostly on local companies such as citizen-owned IT firms. The challenge on this was that some vendors *lacked adequate personnel especially* when duty called for them to attend to client requests in the rural areas. Some respondents (9%) complained that *contractual obligations were not completely fulfilled* by their vendors. One clearly commented that *'some contractors do not complete their work'*. The next section reports on the data retrieved from the focus group interaction.

Responses from the Focus Group Participants

A focus group session composed of 16 decision makers allowed by their organizations to interact and discuss issues that related to ICT outsourcing in the local business environment of Botswana. The government of Botswana (GOB) through the Department of IT, which shall be referred to as MainClient in this paper, is the main client for most ICT outsourcing projects in the country. The MainClient contracts jobs for itself and on behalf of other government units and departments in the GOB. In 2007, the national ICT policy (NICT, 2007) estimated that the country's ICT industry amounted to over \$1 billion BWP in business transactions. In terms of ICT consumption, the GOB is the largest consumer of ICT services in the country, being dubbed the second largest business in the country, after mining (NICT, 2007). Even though the GOB has a very large base of ICT projects, it does not directly contribute to the development of ICT skill and personnel and hence the challenge to find very skilled ICT personnel. Some of the challenges have been discussed in Mgaya et al., (2012) for the sake of the reader who might desire to pursue this angle further. The second category of firms consisted of public firms other than the MainClient who also obtain ICT products and services from the market. The third category of firms consisted of two multi-national organisations that have provided the bulk of services to the MainClient. So far, these organisations have won the heart of their clients due to the competitive standard and quality of output in the past. Two multinational companies, pseudo-named MNC1, and MNC2 were in attendance. The fourth types of firms were large private companies that also demanded services from the ICT companies. Two companies were represented in this category. The fifth types of firms were small IT companies that provided ICT service to the Botswana market.

In summary, Table 4 shows the category of firms that participated in the workshop as well as whether they supplied ICT products or services or were demanding the service.

Table 4: Categories of Firms in the Focus Group Session

Category	Number of Participants	Supply or Demand
MainClient	1	Demand
Public sector or Parastatal	3	Demand
Multinational firms	2	Supply
Large Private sector	2	Demand
Small firms	8	Supply

An observation from the table above is that there is high demand for ICT products and services than there is supply for these. Further, the volume of demand from the GOB and the Public sector alone subsumes all other demands from other organisations in the local market in terms of economic value. Some challenges and risks affecting the local vendors and client are summarized in the following sections.

Awarding of Tenders

Awarding tenders to the same vendors has been seen as an unfair practice by some firms in the local industry. Complaints of ‘favoritism’ and ‘corruption’ have been leveled against the MainClient. Thus to resolve this, the MainClient resorted to awarding tenders on short-term contracts. This also creates some problems relating to staff retention and the period of engagement on the said projects.

Furthermore, the practice of awarding tenders based on price has been viewed as problematic because it was feared that it favours vendors who have an economic muscle and depend on manipulating other players with the aim of winning a tender.

Misunderstandings between Parties

Another scenario where conflicts have arisen is between internal employees, management and vendors. This is usually in cases where internal employees refuse to attend to assigned work arguing that vendors should attend to them because they have been paid to undertake such jobs. One manager commented that ‘this leads management to think that their employees are not self-driven.’

Vendors Exercising Power over the Clients

Another issue is vendors exercising power over the clients. Some respondents reported that ‘vendors can just take over a project and want to control everything forgetting that they are just there to help.’ Furthermore, it was reported that vendors ‘step over management and employees’ existence and appear like they own the organization.’ In this situation control measures and boundaries should be clearly stated.

Time Barriers

The issue of time-barriers emerged in the discussions. Vendors who are abroad and working with clients in Botswana experience time difference issues that cause challenges in the management of the projects.

Loss of Trust and Dependability

A female participant from a public firm narrated that ‘generally ICT staff members do not like the idea of outsourcing because they feel their services are not needed and they are left feeling undermined their skills not improved and not appreciated.’ It was reported that:

‘the IT staff feel they are worthless and not taken seriously’. Furthermore, ‘they feel management does not have confidence in their capabilities and skills as employees. Employees also feel insecure about their jobs and where they are heading in terms of skills advancement/ development. They feel they will be compelled to depend on service providers giving vendors dominance in their area of work. The general feeling about outsourcing some functions was that it ‘creates redundancy and therefore it’s confusing to define roles.’

Similarly, cultural challenges were noted to be creeping in due to the outsourcing trend in the local environment. These related to the ‘loss of unity’ and a ‘sense of belonging’ among corporate employees who feel that their organisations prefer external workers other than them.

Lack of Service–Level Agreement Enforcement and Contract Agreement

Another challenge narrated by the participants was that most projects lack the enforcement of service-level agreements (SLA). As noted by Al-Omari (2013), SLA require very high management involvement; however the managerial knowledge, capabilities and competencies have been lacking. A manager from the MainClient stated this:

It has been a challenge to drive strategy, enforce SLA`s, coordinate activities, manage contracts and projects. It is very clear that capabilities and competencies lack within the organization hence the outsourcing decision. That been said it has not been value adding to employees within organizations because vendors do not exercise the skills-transfer agreement for obvious reasons such as desiring business continuity on their part- which means no hand-shaking whatsoever. As a result internal employees remain stagnant, frustrated and confused about their roles.

Over-control and Power Traits

The issue of control emerged that pitted a consulting firm against the MainClient, the stronger business partner. As noted in the case of one small firm, codenamed C4Teq in Shemi (2013), the strength of the outsourcing contract usually leaned to preserve the interests of the bigger player. As a result, there is no long-lasting relationship that is developed since the government’s policy is to deal with all local business companies fairly. As one manager noted:

‘All we can say is that most business relationships are short-term, one cannot expect a long-term relationship here. This has a spill-over effect in the case of managing expatriate skilled ICT personnel. Most firms are unable to plan for future human resource needs as they do not know what type of personnel would be committed to working with them in the future. Furthermore, firms face the challenge of sustaining continued commitment to the outsourcing agreements as their employees may not be granted long period of stay in the country.’

Lack of Quality and Commitment

Another challenge in the local scenario was the lack of quality and commitment to outsourcing obligations by some local firms. An ICT manager from the MainClient narrated that:

‘some firms tender for big and demanding jobs with claims of having the necessary skill and expertise to undertake the required tasks. However, this was usually with expectations that some mutual agreement have been made between the main contractor and the other agreed parties on how benefits of the work must be shared. As most main contractors are local citizen-owned firms or some preferred company, they sometimes fail to honour the mutual agreements with the sub-contracted companies. This then impacts on the delivery of the project and the subsequent completion of the job.’

Lack of Professional IT staff

The continued dependence on the external ICT resource particularly from South Africa and some offshore sources such as the UK, India, US, and others, is a perpetual feature in the local ICT outsourcing industry. Both vendors and clients rely on external ICT resource for the maintenance and delivery of ICT applications.

Other Risks and Challenges

An ICT manager with MainClient stated that there hadn’t been major lay-offs despite the increase in ICT outsourcing projects. He further reported that ‘as for government -it takes a political stand because it is the largest employer in the country. ICT is supposed to create employment for its citizens rather than lay them off. The other reason for taking this stance is the need to retain internal capabilities.’ Another manager noted that the risk of having low staff-morale is very high in the public sector. She further narrated that:

‘most government departments and ministries don’t restructure their staff even after outsourcing but instead they keep employees around just in case they might need them in future. Thus they end up keeping such employees for menial tasks such as help desk or other similar duties.’

DISCUSSION OF FINDINGS

Results of the factor analysis have identified factors such as Lack of flexibility, security and overdependence, Management of outsourcing relationship, International outsourcing issues, and ICT personnel issues as very critical in the local ICT outsourcing environment. These issues became focal points of discussion in the focus group workshop at which practitioners

were able to converse in depth regarding the impact of these factors. The Botswana ICT outsourcing environment depicts the presence of a major client who provides business opportunities to several vendors whose expectations are varied depending on their nature and characteristics, such as small or large firms. Some of the vendors, typically small firms have allegedly failed to meet their contractual obligations, which is not an uncommon feature in literature as noted by Kern & Willcocks (2000).

Some literature naively assumes that outsourcing entails that a vendor is usually better equipped to undertake such tasks (Wang, Gwebu, & Wang, 2008) as stipulated in the service level agreement. This has not usually been the case as evidenced in the Botswana context where some vendors have provided unsatisfactory service to their clients. The studied context shows over-dependence on the MainClient to provide business opportunity to all local and externally-based vendors. This naturally creates a culture of power that favours the MainClient. To an extent the MainClient also feels justified to act in ways that can restore fairness to all stakeholders in the small economy. However, without much dedicated back-office activity similar to the ones proposed by Lacity *et al.*, (2008) that could respond to organisational needs as requested by the vendors, the MainClient does seem to solely rely on the vendors for certain tasks such as file management, and other systems and network management services.

In order for ICT outsourcing to achieve its intended goals in organisations, the role of middle management is very critical (Willcocks & Griffiths, 2010) although very few organisations realize this. Some of the issues raised in the discussions by key managers point to the inadequate pool of middle managers that can meet the ICT outsourcing needs in the Botswana environment. A continued reliance on ICT outsourcing also entails less growth on the part of professionalism in the local market. The study also finds the ICT unemployment rate does not improve but instead goes downward as the vendors (employers) prefer to hire expatriates than depend on the local expertise that have been poured out from the local institutions of IT learning. The managers have thus noted that ICT outsourcing does not improve the local ICT profession due to the over-reliance on foreign professionals from places such as South Africa and sometimes offshoring opportunities from overseas. These findings are similar to Huang *et al.*, (2008)'s in the US IT industry.

The lack of specific ICT mediators to oversee and manage ICT outsourcing agreements between the MainClient and its vendors creates a vacuum in their respective firms and in the IT industry as a whole. This is not a novel revelation as such because previous studies have also pointed to this dilemma (Mgaya *et al.*, 2012; Uzoka *et al.*, 2011). This revelation points to the need for up-skilling of IT professionals to meet international standards by improving educational policy and curricula in training institutions in the country.

CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS OF FINDINGS

This study investigated the challenges and risks of ICT outsourcing in the public and private sector of a developing country context of Botswana. A myriad of challenges and risks have been discussed that include the lack of knowledge transfer by the vendors, over-controlling the ICT industry by the major client, lack of professionalism in managing the ICT personnel, low staff-morale, short-term contracts, lack of strategic policy for ICT outsourcing in firms, unreliable and poor service from local small companies, vendor opportunism, bureaucratic tendencies, lack of transparency in information provision, job splitting by the MainClient,

and cultural and political pressure that favours certain projects. This exploratory study brings to awareness the pertinent issues affecting the IT outsourcing industry in Botswana. Although a maiden study in the Botswana context, it encourages practitioners in the public and private sector to attach significance and awareness to issues regarding ICT outsourcing, contractual relationships, policy formulation and other related areas.

Recommendations were made by participants on how to resolve the challenges and risks of ICT outsourcing relationships. Participants expressed preference for mature and long-term contractual agreements. The government of Botswana must also re-think its overall strategy on ICT outsourcing. As a major player in the local economy, the MainClient must take the initiative to fully participate in the management and delivery of ICT projects so that it can thoroughly understand the position of internal employees as well as the vendors. There is need for the government to develop and manage its own ICT professionals in-house so that it can understand the activities of both the vendors and the clients and be able to mitigate issues affecting various sections in the ICT outsourcing industry. Recalling the work of Seddon (2001), where the Australian government had outsourced too much that there was little benefit in the short and long-run period, this study aligns with Lacity *et al.*, (2009)'s recommendation that urges firms not to over-outsource. Another recommendation from the focus group participants was the need to give whole jobs to one vendor rather than a client splitting up a job to several vendors. This will make it easier to trace accountability thereafter and also avoid misunderstanding between different vendors. Another suggestion relates to partnership issues where vendors needed to be encouraged to reveal more detail at the service delivery level. Client firms are also requested to develop detailed strategic ICT delivery plans and make sure they are conversant of benefits they wish to derive from them before seeking external assistance.

The results of this study have specific implications for further research. There is need for further research particularly relating to developing country contexts on the management of ICT outsourcing in public and private sector. Such research can assist in learning how other countries overcome the challenges and risks they face. As ICT deployment in firms becomes more and more ubiquitous, relevant research that can inform practice in the local context is imperative. At policy-level, there is need for the government's arm, the MainClient to benchmark its ICT outsourcing activities with other countries in the region and beyond for purposes of learning and comparing experiences in this area. Lessons so learnt can improve the effective and efficient delivery of ICT outsourcing in the local industry and thereby ameliorating some of the challenges and risks of outsourcing.

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