

# The State Of IT Governance In Zimbabwe Polytechnics: Case Of A Polytechnic In Zimbabwe

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**ABSTRACT:** IT governance is one of the major areas of concern in Zimbabwe public and private sector organisations. Most organisations in the country are running their IT function without any consideration of the international best practices in as far as governance of the IT function is concerned. This research seeks to identify the structure of the IT services department in polytechnics and its associated roles and responsibilities, the structure of the board that play the oversight function over the IT service department and conduct a detailed investigation on a wide range of IT governance issues that include: - IT governance status and alignment, drivers and barriers, Input and decision making in IT governance, IT governance structures and processes, IT performance and accountability and assessing IT governance performance.

**INDEX TERMS:** IT governance, IT function, status and alignment, drivers and barriers, input and decision making, structures and processes, performance and accountability.

## 1. INTRODUCTION

IT governance is the process by which decisions are made around IT investments, how decisions are made, who makes the decisions, who is held accountable and how the results of decisions are measured and monitored are all parts of IT governance (Symons, 2005). Good IT governance ensures that IT investments are optimized, aligned with business strategy, and delivering value within acceptable risk boundaries- taking into account culture, organisational structure, maturity and strategy(Forrester Research Inc., 2005). In Zimbabwe most public and private companies are running without structures and statutes of IT governance. Most Chief Executive Officers (CEOs) and Directors tend to distance themselves from the day-to-day operations of their IT departments, trying not to be accountable for any mishaps there (Rutsito, 2013). In Zimbabwean Polytechnics have had a fair share of IT governance problems, until in 2003 when a non-governmental organisation (VVOB (a Belgian abbreviation which translates in English to Flemish for technical assistance)) came up with a project to help these institutions with the maintenance and management of IT equipment. This project established IT units within polytechnics, which is a group of IT experts who manage and maintain IT equipment and are led by the IT Manager. In addition to the IT units, they also helped create a Senior management Committee called the Polytechnic task force(PTF), whose job is to monitor and evaluate the activities of the IT units, determine and prioritise IT projects and ensuring total alignment of IT activities with overall Polytechnic strategy(VVOB Project document, 2003). Five polytechnics were involved in this project when it started, including the Polytechnic understudy. It is this researcher's view that the level of maturity of IT governance in these polytechnics wholly depend on the existing management's desire to uphold and improve on the structures that were put in place by this project, which ran from 2003 to 2008 and provided not only the structures but technical training to the IT unit members and management training for the PTF members and Polytechnic administrators.

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## 2. DESIGN/METHODOLOGY/APPROACH

This paper is based on a survey conducted at a polytechnic in Zimbabwe, which is one of the polytechnics that were involved in the VVOB project that gave birth to IT governance in Zimbabwe polytechnics. The survey was conducted on thirty people, seventeen members of the senior management, who are the leaders of both the academic and administrative divisions within the institution and thirteen others, mainly ordinary lecturers and non-academic staff members. A questionnaire was prepared which covered a wide range of IT governance issues such as IT governance status and alignment, drivers and barriers, Input and decision making in IT governance, IT governance structures and processes, IT performance and accountability and assessing IT governance performance. The survey was conducted within the Polytechnic campus to ensure that members had all the information they needed at their disposal to respond to questionnaire. It also gave this research the opportunity to verify some of the responses obtained, with the situation on the ground. Members were encouraged to respond freely and truthfully and base their responses mainly on experience and perceptions on IT governance in the Polytechnic. This researcher also attended one of the PTF meetings to have more inside information on how the taskforce operates. Two documents were availed to this researcher, which are the VVOB project (2003) document, which has detailed information on duties and responsibilities of the IT units and Polytechnic Task Force, and the Polytechnic IT policy document, which elaborates on the usage and general rules concerning ICTs in the polytechnic. A tour of the polytechnic ICT infrastructure was also conducted. ICT policy documents were also obtained from other Polytechnics, which were part of the VVOB project.

## 3. RESULTS/FINDINGS

Zimbabwe polytechnics in general adopted and introduced IT governance in 2003 and this polytechnic in particular adopted, implemented and made improvements on IT governance systems. It has not yet reached the IT governance best practices level, but it is improving and if it continues in that direction, it will reach the highest level of IT governance maturity in the near future.

## 4. DISCUSSION

### 4.1 The IT Unit

According to the polytechnic ICT policy document (2011) version and the VVOB project document (2003), the Information Technology Unit (IT Unit), is a department that is overall in charge of all ICT related equipment and activities. Its major roles and responsibilities are: -

- Maintenance and troubleshooting of IT equipment.
- User support.
- Advising the PTF on usage, trends and income generating projects related to ICT.
- Planning and development of future IT projects.
- Assist in acquisition of ICT related equipment.
- Develop and or acquire, install and maintain software applications for the Polytechnic.
- Provide user training in any new software or hardware.
- Monitor and control usage of ICTs.

This researcher has noted, from the ICT policy document that the IT Unit deals with ICT issues institution wide. Any software developments or acquisitions of new hardware will be focused on the polytechnic as a whole. Technicians move around the institution servicing equipment or attending to user problems. When equipment is procured, it is distributed as advised by the PTF, with a deliberate intention to strike a balance between fairness and need. The IT Unit is a fully fledged department, led by the IT Manager. It has a Systems administrator, and ten hardware, software and network technicians. Given the size of the Polytechnic, there is adequate manpower to man the ICT infrastructure. This researcher had a chance to tour the polytechnic on the 25<sup>th</sup> and the 26<sup>th</sup> of March 2014, and only one department had problems with two desktop computers that required spares, which were said to be in the procurement process, otherwise the institute was up and running well, indicating total commitment and dedication to duty by the IT Unit. The duties and responsibilities of each member of the Unit are clearly spelled out in the policy document. So each member knows exactly what is expected of them. Any problems that arise from client departments and divisions are attended by the right person at the right time. According to their 2014 work plan, some jobs are routine and clearly specified when they should be done and by who. Some are periodical, and the dates and people to perform them are clearly specified. They have a job card on which every job attended is recorded, with a whole lot of details to describe the nature of problem and solutions. The IT Unit has a disaster recovery plan, which clearly state what is to be done, by who, using what resources, in the event of a disaster. They also have a maintenance plan which specifies activities, dates and times when such work is done. It was observed that the PTF has copies of the same documents, indicating total synergy, between IT Unit and the task force that regulate, measure, monitor and evaluate their activities.

### 4.2 The Polytechnic Task Force (PTF)

The PTF is a committee made up of polytechnic advisory council and heads of departments/divisions. It works as the IT steering committee. According to the ICT policy document (2011) version, this is the committee that worked together with the IT Unit to produce the same document. The major roles and responsibilities of the PTF are given as follows: -

- Making, adopting and revising ICT policies as they deem appropriate.
- Setting up terms of reference for the IT Unit.
- Identifying and recommending training requirements of the IT Unit and other ICT users in the institute.
- Planning and budgeting for future ICT projects.
- Measure, monitor and evaluate the performance of the IT unit.
- Advising polytechnic executive on current and future ICT requirements.
- Setting priorities and adjudicating conflicts.

The PTF meets twice every term to deliberate on ICT related issues. Much of the agenda comes from the IT Unit, but the committee adds on and evaluate IT Unit suggestions. It has been noted that no IT project can be embarked on without the PTF approval. Any suggestion made by the IT Unit will be analysed against cost, fairness, need, and whether it improves teaching and learning in the Polytechnic. Projects that unnecessarily benefit individual departments or individuals are discarded. Institutional wide projects that are meant to improve teaching and learning are prioritised. Every term the chairperson of the PTF writes a report to the Polytechnic executive on completed projects, those currently in progress, those that seem to take longer than anticipated. Future projects are also mentioned in such reports together with their budgetary requirements. The committee's Evaluation of IT Unit performance is also part of the report. It will be up to the executive to make decisions based on the information given. It is also important to note that the chairperson of the PTF is a member of the polytechnic advisor council. This researcher had the privilege to attend one of the termly meetings, held on the 1<sup>st</sup> April 2014. There was deliberation on second term projects. The following major projects were on the table:

- i) Procurement and installation of eGranary, which is a setup in which millions of eResources are put on a computer which is then installed on a network to be accessed by all students and staff.
- ii) Procurement twenty desktop computers to be used in the library internet café.
- iii) Installing of Closed Circuit Television (CCTV) to curb theft and vandalising of equipment in the college.

There were other minor issues, but the committee observed that all the three projects were important and adopted and prioritised them so that as funds are availed, the higher priority project will be funded first. This researcher witnessed a clear and formal meeting whose priority is given first to projects that improve teaching and learning in the institution, followed by need, coverage and fairness. The meeting also evaluated success of previous and current ICT projects and advised the IT Unit what to do and in what order.

### 4.3 IT Governance status and Alignment

IT governance status and alignment refers to how IT related activities and investments are currently being managed and how such activities are linked to business strategy (De Haes & Van Grembergen, 2006). Since 2003, there has been a marked improvement in IT governance, in terms of alignment of the IT strategy, with the overall Polytechnic strategy. Based on the survey conducted: On what best characterises IT governance in the polytechnic 75% of the respondents said it is managed, meaning IT governance processes are monitored

and evaluated. 12 % said it is defined, meaning processes are documented and communicated, while 13% said it is optimized, that is it follows best practices and there are provisions for amending processes. 100% of the respondents confirmed to existence of a documented plan that outlines strategic priorities and also 100% confirmed the existence of an IT strategic plan. All respondents agreed that the IT strategic plan addresses institution-wide IT issues and initiatives. However, no specific IT governance framework was identified to be in use within the Polytechnic.

#### 4.4 Drivers and barriers

Drivers are all the factors that promote good IT governance, while barriers are factors that inhibit good IT governance practices (Othman & Chan, 2013). According to the survey, 60% of the respondents identified the primary drivers for pursuing formal IT governance in the polytechnic as promoting an institution –wide view of IT, aligning IT goals with institutional goals and cost reductions/increased efficiencies. 30% identified transparency in decision making and empowering users/process owners, while 10% did not respond. On the primary barriers, lack of funding, Top-down/leadership driven institutional culture and difficulty developing campus policies and procedures was the response of 20% of the participants. 80% did not respond.

#### 4.5 Input and Decision making in IT governance

An input is a contribution towards a particular subject or activity, while a decision is conclusion or resolution reached after consideration of various inputs and other information available. Based on the survey conducted at the Polytechnic, Input and decision making was viewed under such areas as IT principles, IT architecture, IT infrastructure strategies, Application needs, IT investment and prioritisation.

##### 4.5.1 IT principles

IT principles are high level statements about how IT will be used to achieve institutional goals. On issues pertaining IT principles: 100% of respondents noted that the polytechnic always seek advice or receive input from the senior management who are also members of the PTF. 100% of the respondents said final decisions on IT governance in the institution are always made by the principal and his advisory board (council).

##### 4.5.2 IT architecture

IT architecture concerns the technical guidelines and standards used to achieve a desired level of business/academic and technical integration and standardisation. Pertaining IT architecture, 100% of the respondents agreed that the polytechnic always seek advice or receive input from the senior management who are the members of the PTF. It was also noted that final decisions are always made by the principal and his advisory council.

##### 4.5.3 IT infrastructure strategies

IT infrastructure strategies address shared IT services used by multiple system applications, providing a foundation for institution-wide capabilities. Advice and input on infrastructure strategies always come from the PTF and to a lesser extent from middle management. 100% of the respondents alluded to this. 100% of the participants also said the final decision is always made by the Principal and his advisory council.

##### 4.5.4 Application needs

Application needs involve specifying the requirements of major IT applications and choosing applications to meet them. 80% of the respondents mentioned that input and advice on application needs come from IT personnel, while 20% said it comes from senior management, and as in the above the final decision is always made by the principal and his advisory council.

##### 4.5.5 IT investment and prioritisation

IT investment and prioritisation concerns how much the institution spends on IT Investment and how much competing needs are reconciled. 90% of the respondents said that advice and input on IT investment and prioritisation always come from the senior management, while 10% said it always come from IT personnel. On decisions, 100% said final decisions are always done by the principal. All participants agreed that there hasn't been any changes in the IT governance decision making process in the past two years.

#### 4.6 IT governance structures and processes

IT governance structure is about who makes a decision and process is about how the decision is made. IT governance structures and processes therefore specifies the person(s) responsible for making decisions about IT investments and how they should arrive at such decisions. According to the survey responses, the polytechnic has a Polytechnic Task Force (PTF) which act as the IT steering committee. The roles of the PTF include advisory role, setting policy, setting priorities and adjudicates conflicts. 100% of the participants alluded to this, but all disagreed with the aspect of the committee authorising funds. It was also agreed that the PTF addresses institution-wide IT issues and initiatives. All respondents said that the PTF is made up of advisory council, senior management and IT personnel. The polytechnic IT Manager does not chair the PTF and 80% strongly agreed that the committee contributes effectively to institutional IT governance, while 20% just agreed.

#### 4.7 IT Performance and Accountability

IT performance and accountability refers to the results from IT related activities, whether goals have been met or not and the associated benefits or repercussions for meeting or not meeting objectives. According to the survey, there are agreed, measurable goals for IT, the PTF reports on IT performance, decisions are made by the principal based on measured IT Results and performance. Measurements are also incorporated in IT governance processes and IT stakeholders are satisfied with IT services and operations. These facts were corroborated by 90% of the responses. The Polytechnic has institution-designed performance measures, and once in every five years they seek external review of the IT function.

#### 4.8 Assessing IT governance performance

Assessing IT governance performance refers to the measurement of IT results against set goals and targets. The set targets should always be measurable so that assessment can be done objectively. 95% of responses from the survey indicated that skills and personalities of key individuals, inclusion/participation of stakeholders and support of executive leadership are typically most responsible for IT governance outcomes at the Polytechnic. Absence or inadequacy of IT

governance frameworks was identified as typically most responsible for unsuccessful IT governance outcomes at the Polytechnic

## 5. CONCLUSION

Based on literature obtained in the form of the VVOB project document of 2003, the Polytechnic ICT Policy document revised 2011, ICT policy documents obtained from other Polytechnics, analysis of the results obtained from questionnaires issued as part of the research survey, meetings attended and tours conducted, it can be concluded that IT governance exists in Zimbabwe polytechnics in general, and at this Polytechnic in particular, where it has reached the Consistent level of the IT governance maturity model. At this level, there are formal IT governance process in place and practised consistently across the institution.

## 6. REFERENCES

- [1] De Haes, S., & Van Grembergen, W., "IT governance best practices in Belgian organisations", proceedings of the Hawaii international conference of system sciences, USA, 2006
- [2] Kark, K. (2013/11/20). The disruptive CIO. Retrieved April 29, 2014. [www.forrester.com](http://www.forrester.com).
- [3] Othman, MFI., & Chan, T. , "Barriers to formal IT governance practice--- Insights from qualitative study", hicss, pp. 4415-4425, 2013 46th Hawaii international conference on system sciences(HICSS), 2013
- [4] Rutsito, T. (2013/13/28). IT governance a time bomb. Retrieved April 28, 2014. [www.theindependent.co.zw](http://www.theindependent.co.zw).
- [5] Sister Polytechnic ICT and Security policy document (2009)
- [6] Sister Polytechnic ICT Policy document (2008)
- [7] Symons, C. (2005/03/29). IT governance frameworks: Best practices. Retrieved March 16, 2014. [www.UIC.edu](http://www.UIC.edu).
- [8] The Polytechnic ICT Policy document (2011)
- [9] VVOB Project Document (2003)