Kaluarachchi D G P (1) , Haleem A (2)
The Impact of Enterprises Resource Planning system on Capital Budgeting (Special Reference in Sri Lankan Organizations)

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ABSTRACT
Purpose – the purpose of this paper is to provide further investigation of the impact of Enterprises Recourse Planning System on Capital Budgeting. It aims at implementing ERP System changes the Capital Budgeting functions and discusses how the role of management accountants and their work tasks in ERP implementation.

Design/methodology - A survey was conducted to conduct to collect data on several aspects of Capital Budgeting and the role of management accountants and their work tasks in ERP implementation.

Findings - Results indicate that ERP system have had an impact on capital budgeting. System provides more real-time and accurate information to budgets and reports, and organizations have also introduced advanced management accounting techniques after the implementation.

As regards the time use of controllers the results exhibit that the respondents have used less time on budgeting after the ERP implementation. Finally, controllers in the study consider that the implementation of ERP system has made skills such as IT skills and knowledge of other functional areas more important.

Capital Budget, Managements Accounts

INTRODUCTION

Enterprise resource planning (ERP) is business management software that allows an organization to use a system of integrated applications to manage the business. ERP software integrates all facets of an operation, including development, manufacturing, sales and marketing.

ERP software consists of many enterprise software modules that are individually purchased, based on what best meets the specific needs and technical capabilities of each ERP module is focused on one area of business process, such as product development or marketing. Some of the more common ERP modules include those for product planning, material purchasing, inventory control, distribution, accounting, marketing and finance Capital budgeting is one of the most important areas of finance literature. The decision of capital budgeting, or the allocation of fund in assets for a long term, is obvious for both the large and small business. Existing theory of capital budgeting explains the investment decision-making pattern of large businesses very well.

Capital budgeting is one of the most important areas of finance models.

The major problem of this research is to investigate whether the ERP system will help to achieve the functions of Accounting and Finance special attentions to Capital Budgeting. How ERP implementation will effect to the Capital Budgeting functions. Investigate the effectiveness of ERP
implementation with Capital Budgeting. And also to, investigate whether the role of management accountant and their work tasks helpful to the Capital Budgeting in the organization. How the accountant role will affect to the Capital Budgeting functions and investigate the relationship.

The objectives of this study are to analyze the impact of using Enterprises Resource Planning System on Capital Budgeting in a Sri Lankan Organizations. Identify the environment of the ERP System in the organization and Capital Budgeting. Identify whether there is any significant relationship between ERP System implementation and Capital Budgeting. Identify whether there is any significant relationship between the role of management accountant and their work task with Capital Budgeting.

The information for this report was collected through direct interview and questionnaire with the accountants and other relevant operation level staff of companies listed below,

Unilever Company, Dialog Company, Hemas Group, Jhone keels, MAS Holdings, CBL

The questionnaire consists of three parts. The first part deals with the impact of ERP systems on management accounting and management accountants. The second part deals with the impact of ERP systems on management accounting and management accountants’ role. The third part consists of questions concerning Capital Budgeting.

Most of this study will be covered on Enterprises Resource Planning System with related to the Capital Budgeting function in Accounting & Finance of an Organization with the question of that "How the Enterprises Resource Planning System efficiently impact for Capital Budgeting in Sri Lankan Organization?"

THEORETICAL REVIEW

Enterprises Resource Planning System

Most importantly, ERP accounting software functionality is fully integrated with the entire Enterprises application, including inventory management, warehouse management, purchasing, order processing, manufacturing and planning, CRM, business intelligence, and e-Commerce, Eliminating the need for duplicate data entry in multiple software packages and streamlining the organization’s financial management and accounting operations.

Within an ERP system, the accounting modules manage the recording and processing of accounting transactions within functional areas such as accounts payable, accounts receivable and payroll. These functional areas and their corresponding sub-ledgers will feed transactions into the general ledger where financial reports are generated for management and external stakeholders. Regardless of the transaction or function, it will ultimately lead back to the general ledger for financial review and analysis. As such, selecting an ERP solution with functionality rich accounting software functionality is vital to the project’s overall success.

Many researchers had discussed of ERP system in various ways. According to, Sanjay Agarwala, (2010), had published about the ERP System, expressing that, An ERP system will bring the best business practices that are embedded in the way the ERP software operates to the organization, and those business practices will become the basis for the future growth of the organization.

In addition to that Prakash Gopalani (2010), explained the ERP System as, “ERP selection is a crucial decision for any organization. And to come to this decision, the foremost task is the ERP evaluation. What you need to prepare for is the turbulence, which any new process implementation undergoes, in this case, till the time you are Live on the ERP System.

Companies may sometimes disregard the importance of the ERP selection process, something which should brace them well to see some ERP implementation pitfalls, at best, no change in productivity, and at worst, a complete implementation failure." Prakash Gopalani (2010)
Introduction to Capital Budgeting

Capital budgeting is one of the most important areas of finance literature. The theory of capital budgeting supports Net Present Value (NPV) method most, which involves discounting all relevant cash flows at a market determined discount rate such as the cost of capital. Determination of cost of capital requires the separation principle that requires that the investment decision can be made independent of shareholders’ (owners’) tastes and preferences. Since the ownership is not readily marketable, separation principle, and thus the market-determined discount rate are inappropriate for closely held and small businesses.

The capital budgeting process of small business is likely to be different from that of a large business. The size and availability of capital, investment opportunities, and the nature of the decision makers being different for small businesses may partially explain this difference.

Capital Budgeting Practices

One of the good one was presented in 1969 by Mao. He compared capital budgeting in theory and practice. In his survey, among eight companies which questioned about most used capital budgeting techniques, he explained, “Payback period is primarily a risk measure. Accounting profit is especially important if the company is widely held and relies on external sources of financing. Internal rate of return is most likely to be the major criterion in closely held firms which are less worried by erratic patterns in their per share earnings, which finance themselves and which make many small investments so that the risk in any one investment is not critical.

Traditional approach to the Capital Budgeting

Traditional approach errors that has occur in Capital Budgeting by Maral et al. (2012), has discussed as, Traditional approaches to strategic investment appraisal, payback, accounting rate of return, return on investment (ROI), residual income, and discounted cash flow have been criticized on a number of grounds. Some of the chief criticisms are a too narrow perspective, exclusion of nonfinancial benefits, overemphasis on the short term, faulty assumptions about the status quo, inconsistent treatment of inflation, and promotion of non-value-adding behavior.

The integration of ERP systems into management accounting

An ERP system has a common data structure that permits data to be entered and accessed from anywhere in the world. An activity based costing system is an integral part of an ERP system, and thus managers have information about present and future activities at operational levels when making decisions. Kaplan and Cooper (1998), stated that “the integration with ERP systems allow all managerial processes, including budgeting, what-if analysis, and transfer pricing to be also based on activities rather than only dollars. Activity-based budgeting gives companies the opportunity to authorize and control resources based on accurate demand information. Accuracy increases because activity-based budgeting is based on facts, and less upon power, influence, and negotiating ability. Furthermore, the activity-level focus of budgeting leads to more accuracy in forecasting the demands for all direct and, especially indirect activities.

Conversely, Kaplan and Cooper (1998) and Davenport (1998) suggested that “ERP systems will change companies, but these researchers do not specify the nature of these changes. They certainly do not explicitly specify how ERP systems will impact on management accounting. Nevertheless, it is possible to infer that changes will occur to management accounting from the integration among cost management, financial reporting, performance measurement, and all other systems.

The practical application of ERP systems – capital budgeting

Although none of the recent studies on the impact of ERP systems have indicated changes to management accounting systems, there have been some studies that indicated effects on the work of management accountants.
In a field study of a single company, Burns and Baldvinsdottir (1999) observed that SAP centralized the accounting function and decentralized control to many people in the company who became "hybrid accountants”. The traditional core activity of management accountants, posting the books, was delegated to others in the company. They cite the director of finance saying: “They may post the odd correctional entry. In fact some analysts aren’t allowed to post. They generally are analytical people rather than analytical accountants. Management accountants have become analysts.

**Capital Budgeting**

The financial modules of most ERP systems provide financial functionality and analysis support to thousand of business in many countries across the globe.

The role of management accountants are also changing. Pierce and O’Dea (2003) suggest that "in the future, management accountants should become a business partner by bringing themselves closer to the production level and cooperating with other functional areas". Burns and Baldvinsdottir (2005) talk about of “hybrid” accountants which emerged in a British pharmaceutical manufacturing division after dismantlement of the old functional area thinking. According to the researchers, there are two types of hybrid accountants – finance managers and finance analysts. Where finance managers work with strategy related issues finance analysts support the day-to-day operational issues closely with the operation managers.

More recent research in the area suggests also that the role of management accountants is changing. Pierce and O’Dea (2003) have "questioned managers’ opinion concerning the future role of management accountants. The major elements include: partnership, physical location, teamwork and understanding the business.

Hansen and Van der Stede (2004) identified the "four most important reasons including: operational planning, performance planning, communication of goals and strategy formation and studied the reasons in different organizations. The results indicate that the four reasons-to-budget are not entirely independent or mutually exclusive.

**ERP Implementation**

According to Shahin Dezdar and Sulaiman Ainin "ERP implementation success depends on the viewpoint from which people evaluate it. ERP implementation consultants and ERP project managers often identify ERP project success in terms of finishing the project within budget and on time. ERP system users usually judge ERP success by having smooth operations with the system. Finally, top managers believe that ERP system successful when the company achieves business improvements and other predetermined goals.

**RESEARCH METHODOLOGY**

Implementation of an ERP system is complex process including a great many factors and conditions which can potential influence successful implementation. These factors might have a positive or negative effect on ERP implementation project outcome, where the lack of these conditions could create trouble through ERP implementation. The aim of this research is to ERP implementations result in improved or not in capital budgeting with cash management, fund management and invest management.

The role of the management accountant and their work task will influence the after the influence the ERP system where the organization reach to achieve the functional objectives. The aim of this research to investigate whether the role of management accountant including there, IT knowledge, knowledge of other functional areas, teamwork and other financial and management practice have positive or negative relationship with them.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERP Implementation</td>
<td>Capital Budgeting</td>
</tr>
<tr>
<td>I. ERP Implementation</td>
<td></td>
</tr>
<tr>
<td>II. The role of</td>
<td></td>
</tr>
<tr>
<td>management account</td>
<td></td>
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</tbody>
</table>
### Conceptual Model

<table>
<thead>
<tr>
<th>ERP Implementation Factor</th>
<th>H1</th>
<th>H2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERP implementations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The role of management accountants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business planning &amp; Capital Budgeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invest Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ERP Implementations

Organizational impact consists of the impacts of an ERP system implementation on the company's operating cost, customer service level, overall productivity gains, and the realization of particular ERP implementation objectives. Implementing ERP software assists companies with standardized data formats, better customer service and retention, and enhanced management decision-making. Moreover, Al-Mashari et al. (2003) noted that the general goal of an ERP system is basically to advance business performance by integrating a variety of business processes across the diverse functional departments and beyond enterprise boundaries. This integration allows for well-organized information flow within the firm as well as between the company and its customers and suppliers.

### The role of management accountants

Major tasks of management accountants are score-keeping and maintenance of financial records for internal and external users. In the future management accountants would be involved in formulating and implementing corporate strategy and designing organization's management information systems.

Management accountants have to lose their traditional accountant role and fulfill the role of a business partner as they are more and more involved with people in other functional areas such as production and sales.

Future management accountants need not only knowledge of accounting and finance but also knowledge of the company's business especially understanding of production and sales activities.

The role of management accountant and their work task will vary from one by one. Then it should be investigate one by one.

### Capital Budget

The financial modules of most ERP systems provide financial functionality and analysis support to thousand of business in many countries across the globe.

ERP implementation success depends on the viewpoint from which people evaluate it. ERP implementation consultants and ERP project managers often identify ERP project success in terms of finishing the project within budget and on time. ERP system users usually judge ERP success by having smooth operations with the system. Finally, top managers believe that ERP system successful when the company achieves business improvements and other predetermined goals.

The researchers were investigated how these dependents variables are impact on Capital budgeting.

In this research, researcher has identified, Business Planning and Budgeting, Investment Management, Funds Management, Cash Management as sub variables and capital budgeting measure how these variables are consisting.

### Hypotheses

The hypotheses is conjectural of the relationship two or more variables. Hypotheses is usually decelerate from and they relate either generally or specifically variables to variables. Hypotheses in hand, we are prepared to undertake a study to test it.

After the study is designed and completed data are analyzed to determine whether the hypothesis is supported. If it not supported we have to find an alternative explanation. Following hypothesis is formulated for the purpose of this study,
**Hypothesis 1:** ERP implementation effectively changes in the capital budgeting function.

**Hypothesis 2:** The role of management accountants and their work tasks effectively change after the ERP implementation.

Managers are nowadays heavily dependent on computer-based information systems. This research will guide to get a picture about the impact of implementing the ERP for organizations. What correlation it have? What is the relationship between ERP and Capital Budgeting? To measure the degree of change in the management accounting function after the ERP implementation two independent variables are used.

The first independent variable studies whether ERP systems change or improve budgets and reports. The more specific questions are, The ERP system provides more real-time data to be used in budgets and reports. After the ERP implementation less time is needed for issuing reports and annual closing of accounts, The ERP system has increased flexibility in information acquisition and generation and Accuracy of reports has improved after the ERP implementation.

The second independent variable investigates whether organizations have introduced more advanced management accounting practices after the ERP implementation such as: Activity based costing (ABC), the balanced scorecard, benchmarking, customer satisfaction surveys, financial key performance indicators, non-financial key performance indicators, target costing and lifecycle costing.

Major tasks of management accountants are score-keeping and maintenance of financial records for internal and external users. In the future management accountants would be involved in formulating and implementing corporate strategy and designing organization's management information systems.

The role of management accountant and their work task will vary from one by one. The following measures are identifying to evaluate the management accountant role before and during the implementing ERP system.

Those are, IT skills, Knowledge of other functional areas, Teamwork with other functional areas, Understanding both financial and management accounting

The following measures study, if the time use in management accounting tasks has changed after the ERP implementation. Respondents are requested to estimate how much time (in percentage of whole work time) they have spent in the following tasks before and after the ERP implementation:

- Analyzing and interpreting data, Cost accounting, Performance evaluation and, Preparing budgets and reports

**Sample**

The information for this report was collected through direct interview and questionnaire with the accountants and other relevant operation level staff of companies listed bellow,

- Unilever Company, Dialog Company, Hemas Group, Jhone keels, MAS Holdings, CBL

In this study the population is controllers (management accountants) in Finance working in organizations that have implemented an ERP system. The sample will consists of private sector’s controllers working in large or medium-sized units because it is improbable that a systematic management accounting system would be used in smaller units with the special reference to the private sector in Sri Lanka. The questionnaires consists sets of questions to evaluate the ERP implementation, management accountant’s role and capital budgeting by comparing budgeted data and actual data.

**Questionnaire Development**

Collected data is the basis element to the researcher. The questionnaire consists of three parts. The first part deals with the impact of ERP systems on management accounting and management accountants. The second part deals with the impact of ERP systems on management accounting and management accountants’ role. The third
part consists of questions concerning Capital Budgeting

**Tab. 3.1 Operationlization of variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Focused area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERP implementation</td>
<td>Real Time</td>
<td>The ERP system provides more real-time data to be used in budgets and reports.</td>
</tr>
<tr>
<td>Issuing reports</td>
<td></td>
<td>After the ERP implementation less time is needed for issuing reports and annual closing of accounts.</td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td>The ERP system has increased flexibility in information acquisition</td>
</tr>
<tr>
<td>Management Accounting practice</td>
<td></td>
<td>How ERP adoption will effect to management accounting practice</td>
</tr>
<tr>
<td>Activity Based Costing (ABC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>balanced scorecard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benchmarking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The role of management accountants and their work task</td>
<td>IT skill</td>
<td>IT skills</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Knowledge of other functional area</td>
<td></td>
</tr>
<tr>
<td>Team work</td>
<td>Team work with</td>
<td></td>
</tr>
</tbody>
</table>

**DATA PRESENTAION AND ANALYSIS**

This chapter analyses how to effectiveness of capital budgeting functions are influenced by ERP system including, ERP implementation, the role of management accountants and their work tasks. 

Chi square test through the SPSS software: Pearson’s chi-square is used to assess two types of comparison: tests of goodness of fit and test of independences to find the satisfied level of the financial control effectiveness.

**Table 4.01 Research Sample**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Sample Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unilever Company</td>
<td>12</td>
</tr>
<tr>
<td>Dialog Company</td>
<td>10</td>
</tr>
<tr>
<td>Hemas Group</td>
<td>5</td>
</tr>
<tr>
<td>Jhon keels</td>
<td>7</td>
</tr>
<tr>
<td>MAS Holdings</td>
<td>1</td>
</tr>
<tr>
<td>Ceylon Biscuits limited (CBL)</td>
<td>5</td>
</tr>
</tbody>
</table>
Total analysis of ERP implementation

When we prefer the things regarding the ERP implementation, which was the variable to research, the given eight questions and statements have produced the natural possible answers and it has uncertainty been accepted. By this way it is seen that the ERP implementation variables are effectively impact on Capital Budgeting functions in the organization.

Table 4.02: Total analysis of ERP implementation

<table>
<thead>
<tr>
<th>Chi-Square Test</th>
<th>Total analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>173.406a</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

According to the above table 4.02, significant value is 0.000. It is lower than the 0.05 error value; therefore at 5% significance level we statistically conclude that the ERP implementation is at satisfactory level in Sri Lankan organizations.

Total analyses of role of management accountants

The researcher has identified four main sub variables under the variable of Role of Management Accountants. This will be analyzing the total analysis of Role of Management Accountants.

Table 4.03 Total analyses of role of management accountant

<table>
<thead>
<tr>
<th>Total Analyze</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>105.333a</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

According to the above table 4.03, significant value is 0.000. It is lower than the 0.05 error value; therefore at 5% significance level we statistically conclude that the role of management accountant variables are effectively impact on Capital Budgeting functions in organization.

Total analyses of Capital Budgeting

The researcher has identified four main sub variables under the variable of capital budgeting. This will be analyzing the total analysis of capital budgeting functions.

Table 4.04 Total analyses of Capital Budgeting

<table>
<thead>
<tr>
<th>Total Analyze</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>137.714a</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

According to the above table 4.04, significant value is 0.000. It is lower than the 0.05 error value in this question; therefore at 5% significance level we statistically conclude that the capital budgeting process is at significant level in Sri Lankan organizations.

Correlation analysis of the Variables

According to the correlation test, it is explained the relationship between independent variable and dependent variable. ERP implementation, the role of management accountant is the independent variables and Capital Budgeting is the dependent variable, All the variables have sub variable too.

Relationship between ERP Implementation and Capital Budgeting

There are five sub variables under ERP implementation and four sub variables under the Capital Budgeting

Table 4.05 Relationship between ERP implementation and Capital Budgeting

<table>
<thead>
<tr>
<th>In between</th>
<th>Correlation</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERP implementation and Capital Budg:</td>
<td>0.635</td>
<td>0.250</td>
</tr>
</tbody>
</table>
The above Table 4.05, shows that the relationship between ERP implementation and Capital Budgeting of companies in term of correlation coefficient. Correlation coefficient of ERP implementation and Capital Budgeting is 0.635 which describes the positive relationship between ERP implementation (independent variable) and Capital Budgeting (dependent variable) which means, if ERP implementation is increased by 1, Capital Budgeting will be increased by 0.635, on other hand, if ERP implementation is reduced by 1, Capital Budgeting will be reduced by 0.635. According to the table No 4.05, the significant level is 0.250. It is higher than 0.05 error value. The result doesn’t give strength position of the model since it is at a 0.250 significant level.

Relationship between the Role of Management Accountant and Capital Budgeting.

There are four sub variables under ERP implementation and four sub variables under the Capital Budgeting.

Table 4.06 Relationship between the role of management accountants and Capital Budgeting

<table>
<thead>
<tr>
<th>In between</th>
<th>Correlation</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The role of management accountant and Capital Budgeting</td>
<td>0.456</td>
<td>0.440</td>
</tr>
</tbody>
</table>

The above Table 4.06, shows that the relationship between the Role of Management Accountant and Capital Budgeting of companies in Sri Lanka. In term of correlation coefficient, the Role of Management Accountant and Capital Budgeting is 0.456 which describes the positive relationship between Capital Budgeting and the Role of management accountant which means, if the Role of Management Accountant is increased by 1, Capital Budgeting will be increased by 0.456, on other hand, if the role of management accountant is reduced by 1, Capital Budgeting will be reduced by 0.456. According to the table No 4.06, the significant level is 0.440. It is higher than 0.05 error value. The result doesn’t give strength position of the model since it is at a 0.440 significant level.

ANOVA analysis for Variables

According to the ANOVA analysis, it is explained the relationship between dependent variable independent variables. Capital Budgeting is the dependent variable, ERP implementation, the role of management accountant are the independent variables. All the variables have sub variable too.

Table 4.07 Relationship between the ERP implementation, and the role of management accountants and Capital Budgeting

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.03</td>
<td>2</td>
<td>.01</td>
<td>20.5</td>
<td>.04</td>
</tr>
<tr>
<td>Residual</td>
<td>.00</td>
<td>2</td>
<td>.01</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.03</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), AVER_ROLE, AVER_IMP
b. Dependent Variable: AVER_CB
Sig. value is 0.046.
∞ Value is 0.05
Sig value 0.046 < 0.05

Then we reject the Ho. Therefore, at 5% significance level we statistically conclude that they are positively impact the implementation of ERP system and the role of the management accountant on the capital budgeting in Sri Lankan organization

Regression Analysis

Regression analysis shows how to determine nature of relationship between two more variables. The known variables are called the independent variables. The variable that is to be predicted is the dependent variable. Regression analysis is the tool that would be used to develop the prediction equation to use the regression analysis must know the functional relationship between two variables
**Regression Analysis of ERP implementation and Capital Budgeting**

The simple linear regression model has been used in this analysis

- \( Y = a + bx \) (normal regression equation)

Where
- \( Y \) = Dependent variable i.e. Capital Budgeting
- \( a \) = Y- intercept of the line (constant) – i.e. the point at which the line cuts through the Y- axis. (regression constant)
- \( b \) = Slope of the line i.e. amount of increase (decrease) in the deterministic component of \( Y \) for every 1 – unit increase in \( x \) (regression coefficient)
- \( x \) = independent variables i.e. ERP implementation

**Table 4.08 Regression Analysis of ERP implementation and Capital Budgeting**

Following table shows calculation of regression analysis in between ERP implementation and Capital Budgeting

<table>
<thead>
<tr>
<th>In between</th>
<th>Intercept</th>
<th>Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERP implementation and Capital Budgeting</td>
<td>3.607</td>
<td>0.025</td>
</tr>
</tbody>
</table>

- We can drive the regression equation as

\[ Y = 3.607 + 0.025x \]

This simple linear regression equation shows that the value of “slope” = 0.025 i.e. slope of the regression line. This simply indicates that there is a positive relationship between the ERP implementation and capital Budget. This indicates that even though there is a positive relationship, change of the firm’s value due to the changes in Capital Budgeting to be small level.

The value of “intercept” is 3.607 i.e. intercept of the line. It suggests that when Capital Budgeting falls down to zero, the value of the ERP implementation goes to minus one.

**Regression Analysis of the Role of Management Accountant and Capital Budgeting**

The simple linear regression model has been used in this analysis

- \( Y = a + bx \) (normal regression equation)

Where
- \( Y \) = Dependent variable i.e. Capital Budgeting
- \( a \) = Y- intercept of the line (constant) – i.e. the point at which the line cuts through the Y- axis. (regression constant)
- \( b \) = Slope of the line i.e. amount of increase (decrease) in the deterministic component of \( Y \) for every 1 – unit increase in \( x \) (regression coefficient)
- \( x \) = independent variables i.e. the role of management accountant

**Table 4.09 Regression Analysis of the role of management accountant and Capital Budgeting**

Following table shows calculation of regression analysis between the role of management accountant and Capital Budgeting

<table>
<thead>
<tr>
<th>In between</th>
<th>Intercept</th>
<th>Slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>The role of management accountant and Capital Budgeting</td>
<td>2.478</td>
<td>0.321</td>
</tr>
</tbody>
</table>

- We can drive the regression equation as

\[ Y = 2.478 + 0.321x \]

This simple linear regression equation shows that the value of “slope” = 0.321 i.e. slope of the regression line. This simply indicates that there is a positive relationship between the roles of the management accountant. This indicates that even though there is a positive relationship, change of the firm’s value due to the changes in Capital Budgeting to be small level.

The value of “intercept” is 2.478 i.e. intercept of the line. It suggests that when Capital Budgeting falls down to zero, the value of the role of management goes to minus one.
FINDING AND RECOMMENDATION

Objective Vs Findings

The main objective of this research is to investigate the impact of ERP system on Capital Budgeting in Sri Lankan organizations. One objective of this research is to identify the relationship between ERP implementation and Capital Budgeting. The research alternative hypothesis H1 represent the "ERP implementation effectively changes in the capital budgeting function." ERP implementation success depends on the viewpoint from which people evaluate it. ERP implementation consultants and ERP project managers often identify ERP project success in terms of finishing the project within budget and on time. Implementing ERP software assists companies with standardized data formats, better customer service and retention, and enhanced management decision-making.

Another objective of this research is to investigate the relationship between the role of management accountant and Capital Budgeting. The research alternative hypothesis H2 represent the "The role of management accountants and their work tasks effectively change after the ERP implementation." Management accounting is about providing users in organizations with useful information to make decisions. Unlike financial accounting whose objective is to provide information to external parties, management accounting information is meant for internal use.

Discussion and Findings

The research is based on the three variables which are discussed about the ERP implementation, the role of management accountant and their work task and Capital Budgeting.

Enterprises resource planning system implementation

According to the chi-squire analysis, all of the Real time, Issuing reports, and Flexibility and Management Accounting practice sub variables are at satisfied level to the effective Capital Budgeting in an organizations. Nevertheless, in total analysis of the independent variable's chi-square value is lower than the error value 0.05. It indicates the variable ERP implementation is in satisfied level to the Capital Budgeting in Sri Lankan organizations.

According to the Correlation analysis, the variable ERP implementation is express strong positive linear relationship between the ERP implementation and Capital Budgeting. Because of that, the correlation value (0.635) is much higher than the significant value 0.5. Correlation coefficient of ERP implementation and Capital Budgeting is 0.635 which describes the positive relationship between Capital Budgeting and ERP implementation. The significant level is 0.250. It is higher than 0.05 error value. The result doesn't give strength position of the model since it is at a 0.250 significant level.

According to the ANOVA analysis, the variable ERP implementation is expressed satisfied relationship between the ERP implementation and Capital Budgeting. Because of that, the significant value 0.046 is lower than error value 0.5. It indicates that ERP implementation and Capital Budgeting had satisfied relationship.

According to the regression analysis simple linear regression equation shows that the value of "slope" = 0.025 i.e. slope of the regression line. This simply indicates that there is a positive relationship between the ERP implementation. This indicates that even though there is a positive relationship, change of the firm's value due to the changes in Capital Budgeting to be small level.

According to these four analyses, this variable is to be satisfied and suitable for effectiveness of Capital Budgeting in Sri Lankan organization.

The role of management accountant and their work tasks

Based on the role of management accountant and their work tasks (IT skill, Knowledge, Team work, Understanding), the analysis had pointed out that the role of management accountant and their work task of the Sri Lankan organizations are at satisfactory level. According to the chi-squire analysis, all the
IT skill, Knowledge, Team work, Understanding sub variables are in satisfied level to the effective Capital Budgeting in an organization.

Nevertheless, in total analysis of the independent variable’s chi-square value is lower than the error value 0.05. It indicates the variable of the role of management accountant and their work tasks is in satisfied level to the Capital Budgeting in Sri Lankan organizations.

According to the Correlation analysis, the variable the role of management accountants and their work tasks is express positive but lower linear relationship between the ERP implementation and Capital Budgeting. Because of that, the correlation value (0.456) is much lower than the significant value 0.5. Correlation coefficient of the role of management accountant and Capital Budgeting is 0.456 which we describes the positive relationship between Capital Budgeting and the role of management accountant. which means, if the role of management accountant is increased by 1, Capital Budgeting will be increased by 0.456, other hand, if the role of management accountant is reduced by 1, Capital Budgeting will be reduced by 0.456. The significant level is 0.440. It is higher than 0.05 error value. The result doesn't give strength position off the model since it is at a 0.440 significant level.

According to the ANOVA analysis, the variable the role of management accountant and their work tasks is expressed satisfied relationship between the ERP implementation and Capital Budgeting. Because of that, the significant value 0.046 is lower than error value 0.5. It indicates that the role of management accountant and their work tasks and Capital Budgeting had satisfied relationship.

According to the regression analysis simple linear regression equation shows that the value of “slope” = 0.0321 i.e. slope of the regression line. This simply indicates that there is a positive relationship between the roles of the management accountant. This indicates that even though there is a positive relationship, change of the role of accountant changes in Capital Budgeting to be small level.

According to the chi-square analysis, all the Business planning and budgeting, Investment management, Fund management, Cash management sub variables are at satisfied level to the effective Capital Budgeting in an organization.

According to the chi-square analysis, all the Business planning and budgeting, Investment management, Fund management, Cash management sub variables are at satisfied level to the effective Capital Budgeting in an organization.

According to the correlation, ANOVA, regression and chi-square analyzed the final finding is ERP implementation and the role of management accountants and their work tasks are positively satisfied with the Capital Budgeting functions in Sri Lankan organizations.

Conclusion and Recommendation

The findings of this study reveal that significant relationship was found between ERP implementation and the role of the management accountant and their work tasks on Capital Budgeting. The ERP implementation and Capital Budgeting have the strong positive relationship. But the role of management accountant and their work tasks and Capital Budgeting have positive relationship but not strong relationship, it is lower positive.

According to the ANOVA testing the two independent variables, ERP implementation and the role of management accountant and their work tasks are at satisfied with Capital Budgeting.

According to the view point of researcher based on the data collected form
questionnaires and the observation and direct interview, the ERP system will help to the organizations and find out and analyze the investment covering all the relative factors like real timing, issuing reports, flexibility and management accounting practice. And also it helps to analyze the defined variables. ERP system is easy to use for analyze other than manual work. In the other hand it can be use for sensitivity analysis in the organization and build up the economics of scale.

With the relationship with the role of management accountants, ERP will give the better decision making, accurate and comprehensive decision making. With the knowledge of the IT and the experience of the system, the relative accounting persons can do their capital budgeting exercise very quickly. The simulation of the system is very high. If the one variable will be change the system will automatically will change according to the new change.

Based on the analyzed data finally it can be concluding that the alternative hypotheses are accepted H1: "ERP implementation effectively changes on the capital budgeting function" and H2: "The role of management accountants and their work tasks effectively change after the ERP implementation" are at satisfied level. Finally the ERP system is typically impact for the changes in the Capital Budgeting and the role of management accountant and their work tasks in the organizations.

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