

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Background to the Study**

Road transport is a flexible mode of transport, however, management of road transport companies is faced with technical, legislative and economic problems (Sukalvoa and Ceniga; 2014). Management is usually compelled to adopt different methodologies and techniques in order to manage costs rather than to reduce them (Siyanbola; et al, 2013). In many cases, managers try to simply cut costs without considering the organizational or operational effects associated with those reduced costs (McDermott; 2011). Such strategic cost cutting must be designed cautiously since not all cost reduction techniques give up the same benefits (Sim and Killough; 2009). At Pathfinder, management tried to cut costs, but the company continued to report losses during the period 2011 to 2013 as shown in the table below. The revenue from ticket sales could not breakeven with the costs as shown in the table below. This problem was attributed to the improper cost management system of just “cost cutting without care” rather than a well management or control of costs on the company`s operations (Pathfinder management meeting minutes 23 December 2013).

**Table 1.1 Comparison of revenue earned against total cost incurred at Pathfinder**

Item	2011 (US\$)	2012 (US\$)	2013 (US\$)
Revenue	1 499 020	1 450 170	1 389 990
Total costs	1 523 203	1 535 622	1 581 200
Loss	( 24 183 )	( 85 452 )	(191 210 )

**Adapted from Pathfinder Costing Sheets (2013)**

In 2011, management forecasted a 52% margin of safety however, the company reported a loss of US\$24 183 because its revenue could not breakeven with its total costs of US\$1 523 203. In 2012, the loss increased by US\$61 269 (253%) because of increased costs of repairs and maintenance, rent, tollgate fees, fuel, rates and passenger on board refreshments. In 2013, the loss rose again by US\$105 758 (124%) and according to Pathfinder Marketing Report (2013), increases in costs and competition from City Link, Eagleliner and Bravo Tours were the major causes. According to the Ministry of Transport Reports (2013), Pathfinder, Bravo Tours, City link and EagleLiner had a market share of 11%, 39%, 26% and 24% respectively. In analyzing the market share percentages, it can also be noted that Pathfinder had the least market share and this could also be the reason for it not reaching breakeven points. (Surendra; 2009) informs that the problem in maximizing profits is competition and it causes companies to become weaker. The table below compares the financial performance of Pathfinder, EagleLiner, City Link and Bravo Tours.

**Table 1.2 Comparisons of profit or loss between Pathfinder, EagleLiner, City Link and Bravo Tours.**

<b>Company</b>	<b>2011-Profit/(loss) (US\$)</b>	<b>2012-Profit/(loss) (US\$)</b>	<b>2013-Profit/(loss) (US\$)</b>
Pathfinder	(24 183)	(85 452)	(191 210)
EagleLiner	10 564	(10 500)	94 456
City Link	12 045	145 589	214 452
Bravo Tours	310 120	300 909	350 213

**Adapted from stated companies` Financial Statements (2011-2013)**

From the table above, Pathfinder reported recurring losses from 2011 to 2013 whilst Eagliner, City Link and Bravo Tours reported profits in all the years. According to Pathfinder Passenger Manifests of 2011 to 2013, Pathfinder anticipated a total of 289 080 passengers, but the actual number of passengers was 111 595 (38% of the expected passengers). This was also the reason why Pathfinder did not generate adequate revenue to breakeven with the costs incurred.

At Pathfinder, the management had been worried about the losses and the ever-increasing costs reported and how to prevent them. (Covell; 2008) says, “this problem is not new and managers have grappled unsuccessfully with overhead for decades.” In a world of non sustainable competitive advantage, costs should be managed in an aggressive and intelligent manner (Hanid; 2010).

According to (Chan; 2003), accurate cost information is essential for management to make appropriate strategic decisions. Thus, accurate cost information would be an important aspect at Pathfinder in order to improve its financial performance. According to (Cooper and Kaplan; 2009), cost management systems used by some managers are outdated. For the last three decades, new costing methodologies have been introduced for devising improved cost management systems. (Baykaso and Kaplano; 2007). At Pathfinder, a new costing methodology like ABC costing has to be implemented in order for improved performance. According to management meeting minutes of 20 December 2013, management at Pathfinder learnt to improve its cost management system lately in December 2013. According to Brinkler (2009) the objective of cost management of a company is to maximize its profits. Thus, therefore, this research will focus on the importance cost management system at Pathfinder.

### **1.1 Statement of Problem**

A business needs an effective cost management system in order to maximize its profits; however this is in contrast with the situation at Pathfinder where recurring losses have been reported from 2011 to 2013. In view of the extreme competition from Bravo Tours, City Link and EagleLiner, the ever-increasing costs and declining revenue at Pathfinder need to be paid attention to with the help of a proper cost management system. The use of effective cost management system is required to hold the situation and this is what the research aims to achieve.

## **1.2 Main Objective**

To analyze the cost management at Pathfinder Luxury Coaches.

### **1.2.1 Objectives**

- To review and analyze the cost structure at Pathfinder.
- To identify the relationship between profitability and cost management in an organization.
- To identify challenges faced by management in the cost management practices at Pathfinder.
- To find out strategies to improve Pathfinder`s financial performance through cost management.
- To identify and analyze the appropriate costing and accounting systems that can be used in the cost management system at Pathfinder.

## **1.3 Main Research Question**

How cost management enhance the financial performance of Pathfinder?

### **1.3.1 Sub-research Questions**

- What is the nature of cost structure at Pathfinder?
- Is there a relationship between cost management and profit in an organization?
- What are the challenges faced by management in cost management at pathfinder?
- What strategies or measures can be implemented to improve the financial performance of Pathfinder through cost management?

- What appropriate costing systems can be used to improve the cost management system at Pathfinder?

#### **1.4 Significance of the study**

- **To the researcher**

This research dissertation is part of the requirements of the Bachelor of Accounting Honours Degree at Midlands State University. The completion thereof will enable the researcher to graduate after also passing other required modules by the university.

- **To the university**

This study will provide a basis for future researchers on the same subject. The study will also be a reference for other students at Midlands State University and other universities who wish to carry out a study on cost management.

- **To Pathfinder Luxury Coaches (Pvt) Limited**

It is important to provide managers with remedies to the problems of cost management in the bus transport industry in Zimbabwe. The outcomes of this research will help managers understand the costs of running a bus transport business and also provide a basis on which business owners and managers make financial and non-financial decisions to manage costs.

#### **1.6 Assumptions to the Study**

The researcher made the following assumptions before conducting the research:

- The revenue of Pathfinder would keep decreasing and costs rising;
- The cost management system would not be revised during the course of the researcher's study;
- The company's management structure would not be restructured.

### **1.7 Delimitations of the study**

This study related to the period from January 2011 to December 2013 and focused on Harare and Bulawayo branches. It also dealt with the management of costs and the costing system; information being collected from 29 employees who were interviewed and asked to fill in questionnaires.

### **1.8 Limitations of the study**

The study is expected to have a number of challenges below.

#### **1.8.1 Confidentiality**

Some of the respondents will be unwilling to reveal information that they feel is private and confidential thereby limiting the researcher to conduct his research to his best. The researcher however will reassure the parties involved that the findings are to be held in confidence and be used for academic purposes only.

#### **1.8.3 Finance**

Funds are the major limiting factor in the completion of the project. The researcher will try his best to find the least cost methods of research without compromising the quality of the research. One of the methods is of using by use of emails to contact the intended person with the information required than to travel to a particular location.

## 1.9 Definition of terms

**Cost management:** a broad set of cost accounting methods and management techniques with the aim to improve business cost efficiency, by lowering costs or at least restricting their rate of increase (Anthony, et al; 2009).

**Cost reduction techniques:** Nussje (2004) defined it “as ways and means of cutting existing costs yet maximizing earnings”

**Overheads:** entails costs and or the whole of functions aimed at steering and supporting the organization’s primary processes (Helden and Huijben; 2014).

**ABC Costing:** the compilation of financial and operation performance tracing the important activities of an entity-to-product or service cost (Jong No and Brian; 2007).

## 1.10 Summary

This chapter covered the background to the problem, statement of the problem, research questions and objectives. Delimitations, limitations and assumptions of the study were also discussed.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter explored all literature on hand with regard to the cost management as a tool in achieving profitability. It helped in identifying the thesis that has been presented by various researchers and or scholars and this gave a starting point in establishing the analytical framework of this research study. It focused on adopted and alternative cost management practices to Pathfinder, control environment and challenges in the administration of cost management system. The research made use of related literature, electronic journals, websites and publications which provided up-to-date account and discussions of literature on the matters relevant to the topic.

#### **2.1 Cost structure**

Cost structure is also termed operating leverage and is measured in terms of proportions of fixed costs and variable costs present in the cost, volume, profit (CVP) equation of an entity (Tunji and Mojeed; 2013). Public transport cost structure is complicated since it involves the direct interaction between the public transport demand and supply, however, from the economic point of view, the public transport cost structure include passenger's costs and operator's costs (Sirait and Parikesit; 2001). This is also noted by (Jara-Diaz and Gschwender; 2005), that it is important to analyze the total cost structure in public transport, classifying it into two categories which are operators` cost and users` cost. To analyze and interpret all the relevant costs, it is useful to

divide them into three categories, namely fixed costs, variable costs and labour costs (Proost; 2008). According to Victoria Transport Policy Institute Paper (2013), vehicle costs can be divided into fixed (which are unaffected by the miles a vehicle has moved) and variable (also called operating, marginal or incremental, which increase with vehicle mileage). In terms of service cost for conventional buses, (Schonfeld; 2012) considers bus operating costs, user in-vehicle cost, user waiting cost, and user access cost. In respect of the studies carried out by the aforementioned researchers, an analysis of fixed and variable costs which formed part of Pathfinder cost structure for the period from 2011 to 2013 is of discussion in the ensuing paragraphs.

### **2.1.2 Coach repairs and maintenance**

Maintenance is one of the components of direct operating costs and considering all other factors constant, higher values of maintenance (in terms of man hours or number of maintenance men per vehicle) mean higher direct operating costs per bus-kilometre (Kockelman; 2013). Operations and maintenance expenses include compensating bus drivers and maintenance personnel, and procuring replacement parts and supplies from vendors (Blonn; 2006). At Pathfinder, repairs and maintenance costs have been noticeably high from 2011 to 2013. According to the company's accounting department annual report (2013), increasing repairs and maintenance of coaches have also been blamed for the poor performance of the company. It is noted (Blonn; 2006 and Kockelman; 2013) just described the repairs and maintenance as cost directly attributable to the bus itself, and unfortunately, many studies have lost interest in deep analysis of repairs and maintenance of coaches or buses. This research has picked up this gap and it would be covered in the following chapters.

### **2.1.3 Fuel**

According to the Energy Sector Management Assistance Program Report (2011), fuel makes up a considerable large fraction of total bus operating expenses, especially when labour and bus costs are low, like in developing countries. Fuel is a huge expense for transit fleets, representing nearly \$700 million per year, or nearly 3% of operating costs (Ranganathan; 2009). In Africa, the cost of fuel and lubricants is the main variable expense and makes up at least 40% of the total vehicle operating costs (Raballand; 2008). According to (Kockelman; 2013), the fuel consumption of a large air-conditioned coach with sixty seats operating long distances in flat terrain is typically 40 to 60 liters per 100 km. From the above, it can be noted that Pathfinder is not an exception since it operates in a developing country. It has coaches with 60 seats and the buses` interior is air-conditioned. At Pathfinder, expenditure on fuel (diesel) is a major cost which according to the Pathfinder Accounting Department cost sheets (2013) constitutes 26% of the total costs. This shows that the researchers` works above were clearly reflected in line with what was at Pathfinder.

### **2.1.4 Crew costs**

Crew costs are drivers and conductors allowances. Labour costs are reported separately for drivers and administrative personnel (Dalen and Lobo; 2003). According to (Kockelman; 2013), the number of staff employed per bus is usually two or three depending on the duty roster (two drivers are assigned to one bus and if necessary a conductor is employed. In Zimbabwe, bus companies like Pathfinder employs two individuals per buses which are the driver and the so

called `host` who would be the conductor in this case. At Pathfinder, monthly allowances such as trip allowance, uniform allowance, festival allowance, food allowance, if any, fall under the crew costs.

### **2.1.5 Wear, Tear and or Depreciation**

Kockelman (2013) posited that depreciation is an inevitable cost of asset ownership and is estimated at \$0.062 per added kilometre of passenger vehicle use. In other words, more use implies faster depreciation of the vehicle. According to (Litman; 2009), depreciation is often considered a fixed cost because vehicle owners make the same payments regardless how many kilometres a year a vehicle has moved; but a vehicle operating life and residual value are affected by how much it is driven, so depreciation is also partly variable. The Victoria Transport Policy Institute Paper (2013) confirms that some costs that are categorized as fixed are actual fact partly variable as they increase to some degree with vehicle use and decline when vehicle travel is reduced. In order to calculate the “variability and fixed component” in depreciation (Proost; 2008) it can lead the study to go far, however, more details are in the book: Transport Economics by (Blauwens et al; 2006).

### **2.1.6 Overhead Operating Costs**

These include all other operating costs not included in the other costs above, such as scheduling, supervision, depot related costs, head office costs and human resources, among others (Tirachini et al; 2009). In respect of Pathfinder overhead operating costs would include toll gate fees, weigh bridge charges, minor repair charges, parking charges and other incidental charges such as road

police fines and or penalties. Given the elements of costs discussed above, the relationship between cost and profit will now be analyzed.

## **2.2 Relationship of Cost Management and Profit**

According to Tommey (2008), cost management and profitability relationship is not a new discipline and is at the centre of enterprise performance management, as it represents the objectives for every company. Khera (2007) pointed out that the aim of every transport business is to make profit. Cost and profit in business operations determines the financial position of a business entity (Tunji and Mojeed; 2013). According to Deloitte Research Paper (2010), every business should focus on cost management as a core competency whether the economy is down or up and companies that lose focus on cost discipline will eventually have to make get things back under control otherwise, they will underperform in the market. Brumbaugh (2008) suggests that businesses should watch the costs and the profits will take care of themselves. “This implies is that costs should be managed rather than focusing on unscientific cost reduction that may translate to lowering the service quality” (Tunji and Mojeed; 2013). In other words, management should conquer their costs, before they (management) are conquered by them (costs). According to Stock and McDermott (2009), management is faced with many options regarding where and how to apply their resources to address to problems and to improve their cost position.

This shows that cost management relationship with profit is very important and should also be applied to current bus transport businesses so as to exhaust the benefits brought about by cost management. Some of the examples of cost management practices are reduction of costs in a careful manner and profit planning, only to mention a few.

## **2.3 Challenges in cost management**

### **2.3.1 Lack of management know-how and slow implementation of modern methodologies**

Entities are slow in implementing new methodologies and there is broad agreement that current cost management systems do not provide accurate enough information (Garg, Ghosh et al. 2003). (Hanid; 2010) reports that businesses are reluctant to adopt new methodologies in management accounting to assist them resolve problems associated with cost management because it is hindered by economic realities, internal resource constraints and the difficulties associated with changing common practices. In practice, most business entities still use traditional accounting systems regardless that their drawbacks are well known (Innes, Mitchell et al. 2009). However, some researchers – among others – such as (Baykaso and Kaplano; 2007), (Tunji and Mojeed; 2013) and (Feinberg; 2008) suggested some solutions to that problem. The solution is to introduce Activity Based Management (ABM) as discussed, in detail, in Section 2.5.

### **2.3.2 Use of Traditional cost systems**

Limitations of traditional cost management have been of interest since the early 1980`s based on a number of research works on this subject issues (Hanid; 2010). The continuous use of obsolete costing system could be serious (Chan and Lee; 2003). Maskell (2009) said that traditional cost management produces irrelevant and damaging information to a business concern, however, on the other hand, Schawk (2009) outlined that entities may choose to implement a few traditional management accounting techniques when implementing cost reduction initiatives. This brings a

gap in the above researchers thinking. In the case of Pathfinder, traditional cost management methods could be used but has resulted in bad performance as highlighted in the previous chapter.

In (Hanid; 2010), Bicheno et al (2009) said that traditionally, accounting systems were essentially looking backward, that is, only reporting on past performance, but giving few real signs and symptoms on future improvement. In the view of the studies above, declining profits in bus transport industry is because of the traditional costs management practices which can described as a challenge in the related companies. According to (Maskell; 2009) cited in (Hanid; 2010), there are three principal limitations of traditional accounting systems: irrelevant and harmful to a company; expensive to maintain and they divert the accountant's attention from key issues. However, as in (Chan and Lee; 2003), it is hard to identify cost management system problems because the problems can be noticed only when the information given out by the system has led users to make inappropriate decisions. Here, a transport business like Pathfinder would not be an exception since it was hard to explain the profits for the period 2011 to 2013 as has been shown in the previous chapter.

### **2.3.3 Improper estimates, budgeting techniques and unrealistic budgets**

The Project Development Procedures Manual (2007) pointed out that cost estimates in overall sense are never concluded and they are not static, but have to be on review constantly to keep them up to date. Improper costs estimation and preparation of unrealistic budgets in bus transport has been identified by management as a challenge of cost management. According to the United States Government Accountability Office (2009), the management of cost estimates

involves a continuous update of the estimates with actual data as it becomes available, revising the estimates to reflect variances and analyzing those variances between estimated and actual expenses, for instance (in case of bus company), comparison of costs between budgeted fuel with actual fuel consumed. The ability to produce reliable cost estimates is a crucial element required to support the Office of Management and Budget's (OMB) capital programming process. However, according to (USGAO; 2009) without the ability, agencies risk to experience cost overruns, missed deadlines and performance shortfalls. This does not only apply to United States government but also in public bus companies where adverse variances between budgeted and actual costs were noted and this gave empirical evidence that there is use of improper implementation of budgeting techniques - a challenge in cost management.

#### **2.3.4 Competition**

Passenger transport is a highly congested segment in the road transport sub-sector (Ramolise; 2010). Competition has created efficient transport - a very important aspect that requires the removal of all challenges that affect the efficiency of passenger, road transport (Kumar; 2010). The transport industry is changing rapidly and an operator which does not move becomes increasingly challenged for relevance and should be attuned to the nature of change and comprehend how this affect its business (Transport and Logistics Insights; 2014). Competition ensures smooth functioning of the markets, guaranteeing a playing field which is level for each and every operator or potential operator. It works to ensure efficient utilization of resources in scarcity, innovation, and variety of choice, higher quality, lower prices and productivity in the entire economy (Ramolise, 2010).



According to the House of Commons Third Report of Session (2012), the Competition Commission published a report on 20 December 2011 which concluded that there was a lack of sustained head to head (on-the-road) competition between bus operators and that they avoided competing in other operators' main territories. Moreover, operators were also making huge profits and as a result there were adverse effects on competition. As noted by Cardos and Pete (2011), changes in the company's environment, caused by global competition and technological innovations led to innovations in the use of financial and non-financial information in business entities. Improved technology and intense competition have enabled and forced companies to expand their markets in the whole world. However, according to the Transport and Logistics Insights (2014), costs are also anticipated to rise and with continuous competitive pressure, net profits are also not expected to get better. The threat of competition forces firms to be efficient; continue to look for opportunities, innovate to maintain if not expand markets (Anthony; 2009).

The above studies (Cardos and Pete; 2011, Anthony; 2009) show that due to competition organizations find better ways to counter its effects however the House of Commons Third Session Report 2012-13 argues that lack of competition in bus operators make operators generate excessive profits. Ramolise (2010) supports that competition exists, however, it is important to remember the efficient use of resources and in this study, cost management would be the appropriate term to use.

## **2.4 Strategies to improve cost management**

### **2.4.1 Reduce costs to maximize profits**

Due to the unpredictable, dynamic business setting in road transport business, managers are requested to reduce expenses while maintaining or even increasing the service quality within a short period of time (Baykaso and Kaplano; 2007). According to the Directors` Briefing (2011), reducing company`s expenses is the simplest way to improve a company`s financial performance and can bring immediate cost savings and make sure that the business remain competitive in the long run. A business which fails to reduce costs as rapidly as its rivals will realize its profits squeezed and its existence threatened (Hanid; 2010). Companies which face current economic downturn launch cost reduction techniques overlook the need to secure employee commitment when making such cost reduction initiatives, which is one of the reasons why only 10% of companies sustain cost reductions after three years (Katzenbach and Bromfield; 2009). Furthermore, cost reduction is entirely within the control of an entity, whereas a revenue increase is not (Bragg; 2010). Moreover, Bragg (2010) explained that cost reduction and control provides a management accountants and financial managers with no nonsense, balanced and practical measure that are being targeted and used nationwide for managing costs by many organizations in areas such as, purchasing, outsourcing, human resources and use of consultants.

Pegman (2003) said that many companies started costs reduction strategies after failing to surpass their desired efficiency levels, henceforth the need to achieve defined efficiency levels gave maximum focus on effective resource allocation decisions through tactical planning. Mitchell (2005) highlighted that traditional cost reduction initiatives have focused on reducing cost of materials and cost of manpower. These two scholars agrees on the use of traditional cost reduction initiatives in achieving cost minimization however, (Maskell; 2009) argues that traditional cost management produces irrelevant and damaging information to a business concern. (Chan and Lee; 2003) supports (Maskell; 2009) that the continuous use of an obsolete cost management system could be serious. Furthermore, however, according to Buhehler and Pucher (2011), cutting costs through workforce reductions and limiting wages can be problematic.

#### **2.4.2 Practice budgetary control**

Budgetary control integrates the entity's strategic planning with budgets and cost management processes, comprehend the significance of balancing financial and non-financial aspects of the business, understand budgets and performance measurements as tools for communicating and lastly assist to think pro-actively beyond budgeting (Ecoman - Competency and Training ; 2011)

Since all activities can be expressed in monetary terms, the breath of control possible is very important and for this reason budgetary control is part of the whole system of responsibility accounting within any organization; as costs and revenues are analyzed in accordance with areas of personal responsibilities of the budget holders through allowing financial monitoring (Siyabola and Tunji; 2013). According to Lucey (2008), budgetary control sets a control

framework which helps costs to be kept within agreed limits and variances are noted all along for corrective actions. However Adongo and Jadongo (2013) say that existing literature has clearly indicated that budgetary control has innumerable difficulties that can sometimes be a challenge towards gaining the overall benefits of budgetary control. Undoubtedly, if bus companies implement a sound budgetary control, cost management would be improved, henceforth, increases profits can be realized.

### **2.4.3 Implement costs saving strategies**

Cost savings can be achieved through fuel saving, receipt of large trade discounts and removing or avoiding unnecessary costs, among others. According to the Energy Sector Management Assistance Program (ESMAP) report (2011), fuel costs can be saved by improving the driving style of bus drivers and through sound maintenance practices. This means that safe and economical driving style can lower variable costs, decrease down time due to repairs and maintenance. Moreover, the ESMAP Report (2011) said that properly maintained coaches that are tuned in a proper way and adjusted tend to be safer and consume lesser fuel than poorly maintained buses. This contrast with what Pathfinder did to its buses whereby there was irregular maintenance of the buses resulting in frequent breakdowns being noticed. Pathfinder management should also consider removing and avoiding unnecessary costs such as getting rid of obvious overcapacity for example unused telephone lines and avoiding heating premises at night which is notably costly.

Cost savings can also be earned through supplier development and relationship with management and can lead to mutual cooperation and trust between the organizations such that doors for large

discounts can be opened (Krause and Handfield; 2009). However the Directors Briefing (2011) said a switch to cheaper suppliers, or negotiates price reductions or higher discounts for early payment also works in cost management in order to save costs. These studies clearly show that cost saving is a good practice of cost management to solve related problems.

#### **2.4.4 Integrated sourcing strategies**

Integrated sourcing strategies aim to increase the level of purchasing control and compliance by increasing the involvement of the purchasing department in buying decisions. This can be a significant challenge, especially where other departments may see it as an intrusion (Stradford and Tiura; 2003).

According to Smeltzer and Ogden (2009), the purchasing department is much more likely to be bypassed when services are being paid for. This lack of purchasing compliance permits other individuals within an entity to make purchases that may not have the potential cost benefits of following logical processes of purchasing. When companies gain a clear understanding of who is purchasing what, when, where and how much, management can implement procedures to deter and control maverick spending (Carter; 2003). When purchases are done without the consultation of the purchasing division, an evaluation is necessary to determine if that is the most effective way to deal with them.

#### **2.4.5 Introduce the internal audit function**

Internal auditing makes greater contributions to the organization it serves (Fadzil; et al.; 2005). As noted by Arena and Azzone (2007), if companies invest efforts to develop internal auditing mechanisms, the investigation of their actual contributions can provide insights that are relevant on this matter. According to (Martinov; 2011), a number of studies (Carcello et al.; 2005; Arena and Azzone; 2007; Coram et al.; 2008) have directly called for further research to examine how internal audit function effectiveness is examined. In this present study, an analysis of the role of internal audit function to cost management is very important as the results would provide a better view of how cost management can be improved in the accounting system of Pathfinder.

The study by (Martinov; 2011) shows that in investigating the effectiveness of in house versus outsourced functions, Coram et al. (2008) found out that introducing a full or part time internal audit function increases the likelihood of detecting and self reporting fraud. Consequently, it can be derived from these researchers that internal audit function plays a critical role in mitigating challenges faced in cost management through detection of fraud which can be described as a cost in an organization. This study supports the previous researchers by evaluating the effectiveness of the internal audit function in cost management at Pathfinder.

According to Fadzil; et al.; (2005) internal auditors can be described as both a business partners and policemen because of their work as business partners with client management and also because they act as independent reviewers of management. Therefore, basing on the evidence given by the aforementioned researchers on internal auditing, it can be seen that an internal auditing function leads to a better cost management system in a company like Pathfinder which has been faced by challenges in cost management which have been discusses in the previous sections of this chapter. It should be noted that the research referred the cost management system

as part of the internal auditing. From the studies mentioned above, it cannot be argued that the introduction of an internal audit function at Pathfinder would be of paramount significance in cost management or control for enhancing profitability.

#### **2.4.6 Introduce hybrid-electric buses into the fleet**

A hybrid electric bus is given power by an electric motor and a smaller than normal conventional internal combustion engine. According to East Yorkshire, a hybrid bus takes its power from more than one source and in the case of a diesel electric hybrid bus; the power comes from the traditional diesel engine and a battery. Hybrid-electric buses offer an option that is eye-catching and have the potential to lower operating expenses for transit agencies significantly (Hallmark, Qiu and Sperry; 2012). Diesel hybrid electric buses in 15% of the United States transit fleet could reduce fuel consumption by approximately 50.7 million gallons of diesel per year (Wayne et al. 2009). In addition, according to Ranganathan (2009), the hybrid buses are anticipated to have low maintenance costs due to reduced stress and maintenance on mechanical components such as brake linings, which may extend brake life by 50-100%. Moreover, the electric drive has fewer parts; as a result it requires lesser maintenance than a traditional one. However, the costs of adopting hybrid buses can be a major constraint and these costs consists of both capital costs, such as vehicle costs and infrastructure costs and operating costs, including fuel costs and maintenance costs (Mattison; 2012).

### **2.5 Appropriate Proposed Costing System**

#### **2.5.1 Activity Based Costing**

According to Cardoso and Pete (2011), Activity Based Costing was developed as an approach to resolve problems associated with traditional cost management systems, which tended to have the inability to accurately determine the costs of service or provide useful information for operating decisions. ABC method as a fundamentally different view on the cost in the transport business, helps to find the reasons of cost and thereby influences their levels to make better use of resources (Sukalova and Ceniga; 2014). However, Activity Based Costing did not receive a significant attention from small companies, which is the reason why efforts have been made to study the application of ABC in such companies as well (Bokor; 2012). Cohen et al (2005) thought that ABC promotes efficiency, rationality and ultimate profitability. However, as noted by (Ellstrom et al; 2007) many companies abandon ABC because the method is perceived as too complex. Service sectors including logistics companies are not concerned and have not dealt with their costs and this lack of concern results in distortions of their cost of services (Baykaso and Kaplano; 2007). Based on these studies, the actual financial performance of bus transport companies like Pathfinder can have misleading results due to these cost distortions.

According to Fernie et al. (2001) the objectives of ABC are either to act as a tool for measuring performance in general or to measure impact of anticipated changes in activities. From the above researcher's suggestions, it can be derived that, ABC resolves problems linked with challenges faced in cost management systems that do not determine actual production and or service costs accurately, or give useful information for operating decisions. ABC can be very useful for public bus transport companies to determine cost of their operations with higher correctness and realize higher profit margins (Baykaso and Kaplano; 2008)



In an overall sense of the above researchers, ABC is cost management tool to maximize profit, hence, it should be applied to bus transport companies as the advantages outweigh the disadvantages as has been noted by the aforementioned scholars.

## **2.6 Summary**

This chapter reviewed the cost structure at Pathfinder; identified the relationship between cost management and profitability; identified challenges faced by management in cost management; sought out strategies that Pathfinder can implement in order to improve its financial performance through cost management and identified and analyzed the appropriate proposed costing and accounting systems that can be used at Pathfinder. Moreover, supporting and arguing literature brought various variables in the chapter and the research bridged the gaps, if it was necessary to bridge them (gaps).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY AND DESIGN**

#### **3.0 Introduction**

This chapter is provided a description of how data was gathered. It gave the background against which the findings of the study were evaluated. In essence, it addresses to the reader various methodological aspects such as the research design, sources of data, research instruments and data collection techniques, data presentation and analysis.

#### **3.1 Research Design**

The research study was conducted using a descriptive case study approach on the basis of time-series. In this case, data was gathered just at once for a period of one week so as to answer the research questions in form of a snap shot or one shot research. Both qualitative method and

Memory || T. ShumbacR111529Z Honours Accounting Year 2014

quantitative method were used so as to enable triangulation of data. Proponents of mixed methods research, particularly triangulation of qualitative and quantitative data, appreciate the value of both quantitative and qualitative worldviews to develop a deep understanding of a phenomenon of interest (Venkatesh, Brown and Bala; 2012). In this study, qualitative method was used so as to draw information from management regarding cost management. This qualitative method facilitates exploration of a phenomenon within its context using a variety of data sources (Baxter and Jack; 2008). This gave the researcher a chance to measure the attitude options of his respondents towards cost management. According to Harwell (2010), quantitative research methods try to maximize objectivity, generality and replicability of findings and are typically interested in prediction. For this study, the researcher examined the data for the period from 2011 to 2013. Consequently; the research used stratified sampling technique with specific emphasis on staff members of Pathfinder Luxury Coaches Private Limited.

### **3.1.1 Descriptive Case Study Design**

This design provided the researcher with a chance to employ various data collection techniques used since it provided an accurate description of the variables in cost management at Pathfinder. Descriptive research design was used in order to describe the characteristics of the population or phenomenon being studied.

This design collected as much information as possible instead of making guesses to predict the future. Questions of 'what' and 'how,' were used rather than the 'why.'

### **3.2 Research Population**

The research population consisted of 45 employees who were grouped into the following departments: Reservations, Administration and General, Mechanics and Operations, ICT services department and the Accounting Department. Different categories of staff were selected and this enabled the researcher in finding out how various departments carried out their cost management practices and to get varied notions on how cost management is essential on the entity's performance. It is important to note that the target population comprised of the top, middle and lower management in Harare, Bulawayo and Victoria Falls branches.

### **3. 2.1 Sampling Frame**

The researcher was able to establish the list of staff members in the selected departments from which the sample was drawn. A staff member from the departments chosen was listed once and this was conducted through the use of a staff register. To determine a sample size of a research study, Sim and Lewis (2012) recommended at least 50 participants and Julious (2005) recommended 24 participants. According to Hooper (2013), a researcher who would like to justify a feasibility study of 40-50 participants in total, might reasonably say in justification that "sample sizes between 24 and 50 have been recommended", and give these references ( Sim and Lewis; 2012, Julious; 2005).

**Table 3.1 Population and Target Population**

<b>Department</b>	<b>Target Population</b>	<b>Sample Size</b>	<b>Sampled Population (%)</b>
-------------------	--------------------------	--------------------	-------------------------------

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

---

Ticket Reservations	11	8	73
Administration and General	5	5	100
Mechanics and Operations	14	10	71
ICT Services	5	4	80
Marketing	4	4	100
Accounting	6	5	83
<b>Total</b>	<b>45</b>	<b>36</b>	<b>80</b>

### 3.3 Sampling and Sampling Size

#### 3.3.1 Sampling Method

The population was departmentalized as shown in Table 3.1 above. The researcher used the stratified random sampling method where the population was categorized into non-overlapping departments called stratum. A sample was selected from each stratum on random basis and each respondent was given a questionnaire to answer questions on it. This method was used since no single employee belonged to two or more departments (stratum) and they had a maximum homogeneity within each stratum and maximum heterogeneity between the stratum (departments).

#### 3.3.2 Sample Size

The total sample size consisted of 36 employees. A confidence level of 95% and a margin of error (degree of accuracy) of 5% were provided by this sample size.

### **3.4 Sources of Data**

For the purposes of this research study, both primary and secondary sources of data were used. Primary sources of data (Bajpai; 2011) is mainly collected by a researcher to address the research problem. Primary sources of data were obtained from the questionnaires and interviews. Secondary data sources were mainly used to supplement primary data to enable the researcher to get as much information as possible concerning the study. These included data collected magazines, newspapers and some literature on cost management.

### **3.5 Research Instruments**

#### **3.5.1 Interviews**

Interviews provide a useful way for researchers to learn about the world of others, although real understanding may sometimes be elusive however, if done cautiously, well planned interviews can provide rich sets of data (Qu and Dumay; 2011). Fox (2009) said that interviews range from being completely unstructured in which the interviewee is permitted to speak freely about whatever they want, to highly structured in which the interviewee responses are limited to answering direct questions. The researcher used both structures. This research also made use of personal, telephone and focus group interview types.

### **3.5.2 Questionnaires**

The researcher distributed questionnaires to the employees of Pathfinder. The questionnaires were designed according to the research objectives and questions. It asked the respondents in writing and required them to tick on the suggestions given by the questionnaire. The questionnaires included both closed ended and few open ended questions. The researcher gave respondents a period of one week to fill in the questionnaires before collecting them in person for analysis of data provided. In this case, questionnaires were self administered in order to allow further probing and clarification of unclear issues.

### **3.6 Measurement of Variables**

In the questionnaires, the researcher used the Likert Scale to measure attitudes, knowledge, perceptions, values, and behavioural changes of the respondents about cost management at Pathfinder. The researcher also used the Likert scale because it was simple to construct, likely to produce a highly reliable scale and easy to read and complete for respondents. A typical scale would have “Strongly disagree, Disagree, Neutral, Agree, Strongly agree (Losby; 2012). Respondents would tick where applicable their level of agreement or disagreement would match. In this way, the researcher sought the number of people who would respond and thus a quantitative method. Open ended questions were also included in order to encompass the qualitative method.

### **3.7 Validity and Reliability**

In order to ensure the validity of this study, the instruments were subjected to criticism by experts in the areas of cost management. The reliability of the instruments was obtained through a test-retest technique to analyze the data collected. As has been argued (Bapir; 2012) that to achieve validity in a qualitative research the gap between reality and representation has to be reduced and the more data and conclusions are, the more a piece of qualitative research is valid. The research study encompassed data validity so as to assess whether the data was relevant or appropriate or not to the research questions. Reliability was also assessed so as to ensure that data was dependable, authentic, reputable, trustworthy, genuine, sure and unflinching. Without reliable measures, a quantitative study is also rendered invalid (Straub et al. 2004). Therefore, reliability is a pre-condition for validity of a quantitative research (Venkatesh, Brown and Bala; 2012). From the above discussion, it can be seen that validity and reliability help in guaranteeing the best quality of the research.

### **3.8 Data Presentation and Analysis**

After collecting data, analysis and presentation was done by using computer programs like Microsoft Word and Excel. Data was systematically presented following the chronology of the research objectives and questions so as to easily interpret the results. Data interpretation was done through comparison of primary data, secondary data and the researcher's views. In presenting the data, pie charts, graphs and tables were used so as to enable easier understanding of the findings. Qualitative data analysis encompassed explanation of information obtained from



the empirical literature and financial reports of Pathfinder. Quantitative analysis involved the use of numeric measures such as the number of respondents in order to establish the scores of responses provided.

### **3.9 Summary**

This chapter provided the way in which the research was conducted (research design), population to be involved, sources of data and data collection instruments used. Reasons for the choice of the research design were also mention in this chapter. Data presentation and analysis will then be discussed in the following chapter.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.0 Introduction**

This chapter`s focus is on the presentation and analysis of data collected from interviews, questionnaires and observations. It presents the data in form of tables, graphs and charts. It also

Memory || T. ShumbacR111529Z Honours Accounting Year 2014

describes, analyzes as well as interpreting the data in form of percentages and measure of central tendency so as to get a meaning of the research findings. The collection of data from secondary and primary sources was done to give answers to the research questions.

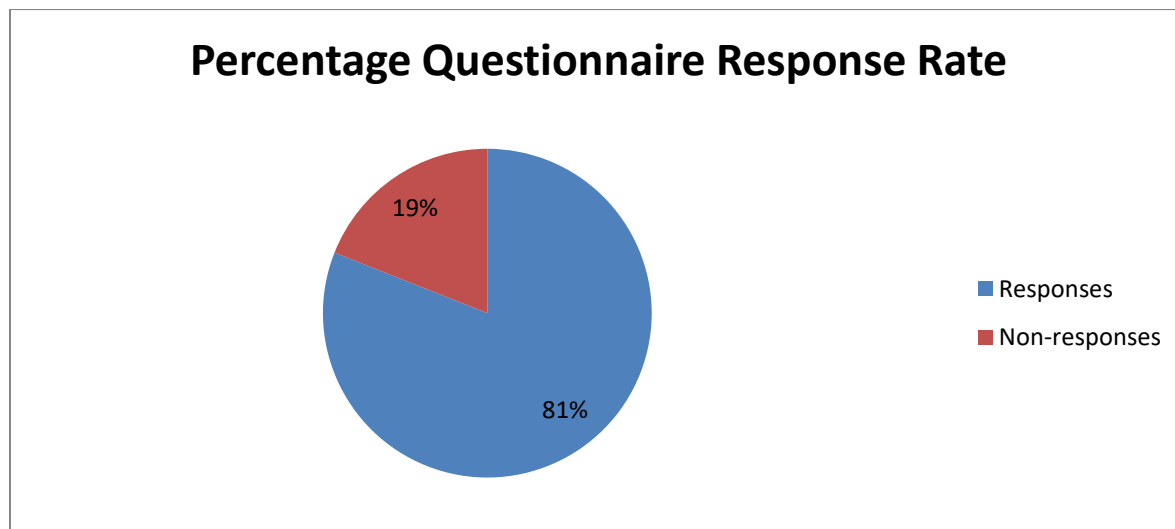
#### 4.1 Questionnaires Response Rate

**Table 4.1 Questionnaire distribution**

<b>Targeted Department</b>	<b>Targeted Respondents</b>	<b>Actual Respondents</b>	<b>Response Rate (%)</b>
Ticket Reservations	8	5	63
Administration and General	5	4	80
Mechanics and Operations	10	9	90
ICT Services	4	4	100
Marketing	4	3	75
Accounting	5	4	80
<b>Total</b>	<b>36</b>	<b>29</b>	<b>81</b> (average response rate)

As has been noted (Venkatesh, Brown and Bala; 2013) that a response rate above 50% is adequate enough (Mugenda; 2003) to accomplish study objectives. This research attained a response rate greater than 50% hence adequate enough to support the objectives of this study.

**Figure 4.1 Pie chart showing percentages of questionnaire response rate**



Out of the 36 questionnaires distributed, only 29 (81%) participants gave responses whilst 7 (19%) provided no responses. The researcher observed that the no-response participants (19%) could have been as a result of some senior managers who would not be available at work (maybe attending strategic meetings or workshops) during the questionnaire distribution time. Some respondents misplaced the questionnaire and others procrastinated for the response. As a result, this brought an average response rate of 81%. With regard to interviews, 4 respondents were interviewed. The response rate was 4/4 (100%) hence eliminating the room for bias and as a result the presentation, analysis and conclusion of the research became more reliable.

#### **4.2 Presentation and Analysis of Findings**

Charts, graphs and tables were used in the display of data. The researcher then analyzed the data by way of percentages and regression analysis, only to mention a few. It should be noted that the researcher self-administered the findings from the questionnaires and interviews (research instruments) in order to present and analyze the findings.

### 4.3 Questionnaires

#### 4.3.1 Costs or expenses that mostly affected the company`s profits

##### 4.3.1.1 Repairs and Maintenance

**Table 4.2 Responses on the effect of repairs and maintenance on profits**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	18	6	5	0	0	29
<b>%</b>	62%	21%	17%	0%	0%	100%

18/29 (62%) strongly agreed that repairs and maintenance mostly and badly affected profits at Pathfinder and 6/29 (21%) agreed the same. 5/29 (17%) were neutral and finally no respondent disagreed. Overall, 24/29 (83%) agreed with Brah and Chong (2004) that an analysis of maintenance management in buses is an important issue and should not be ignored. 5/29 (17%) were in agreement with Montaldo (2009), maintenance is a component of direct operating costs and affects profits at large. It should be noted however, that 0/29 (0%) disagreed and this is supported by Tirachini et. al (2009) who is of the opinion that repairs and maintenance of buses do not affect profits but the management of those repairs is the one which affect profits.

##### 4.3.1.2 Fuel/ Diesel

**Table 4.3 Responses on the effect of fuel or diesel costs on profits**

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

---

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	15	9	4	1	0	29
<b>%</b>	52%	31%	14%	3%	0%	100%

15/29 (52%) respondents strongly agreed, 9/29 (31%) agreed, 4/29 (14%) were neutral, 1/29 disagreed and 0/29 (0%) strongly disagreed. In total, 24/29 (83%) agreed that fuel had an effect on the company's profits and this is supported by the Energy Sector Management Assistance Program Report (2011) that said that fuel makes up a considerable large portion of total bus operating expenses, especially when labour and bus costs are low, therefore profits are affected greatly. 4/29 (14%) who were neutral were supported by Pirzada (2013) who regards fuel as just a normal operating expense which can be described as a huge expense. It should be noted that Raballand (2008) concurred with 1/29 (3%) respondents who disagreed that fuel is not an expense to worry about.

#### 4.3.1.3 Crew costs

**Table 4.4 Responses on the effect of crew costs on profits**

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	6	9	11	3	0	29
<b>%</b>	21%	31%	38%	10%	0%	100%

6/29 (21%) respondents strongly disagreed, 9/29 (31%) agreed that the same, 11 (38%) were neutral, 3/29 (10%) disagreed while 0/29 (0%) respondents strongly disagreed. 15/29 (52%) respondents who agreed concurred with ESMAP (2011) which clearly stated that crew costs are inevitable costs which are included in the administration costs of any company and therefore should be watched out as they will have adverse effects on profits. Raballand (2008) said that crew costs should be fair expenses of no effect and concurs with 11/29 (38%) who were neutral. Kockelman (2013) was in consent with the 3/29 (10%) respondents (total of strongly disagree and disagree) who thought that costs related to staff per bus do not form a considerable part of total expenses which affect profits.

#### 4.3.1.4 Wear and Tear or Depreciation

**Table 4.5 Responses on the effect of wear and tear or depreciation on profits**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	5	12	9	2	1	29
<b>%</b>	17%	41%	31%	7%	3%	100%

5/29 (17%) strongly agreed, 12/29 (41%) agreed, 9/29 (31%) were neutral, 2/29 (7%) disagreed and 1/29 (3%) strongly disagreed. A total of 17/29 (58%) respondents concurred with Kockelman (2013) who posited that depreciation is an inevitable cost of asset ownership and is estimated at \$0.062 per added kilometre of passenger vehicle use. In other words, more use

implies faster depreciation of the vehicle. 31% of the total respondents were in agreement with (Litman; 2009 that depreciation is often considered a fixed cost and this means that they are unavoidable whether the company is making loss or profit. On the other hand, 3/29 (10%) in total of the respondents disagreed and Victoria Transport Institute paper (20 ) agreed with them that wear and tear of buses is major cost driver of bus transport companies.

#### 4.3.1.1 Other operating overheads

**Table 4.6 Responses on the effect of operating overheads on profits**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	27	2	0	0	0	29
<b>%</b>	93%	7%	0%	0%	0%	100%

27/29 (93%) respondents strongly agreed, 2/29(3%) also agreed the same whereas none (0%) were neutral and disagreed. In total, 29/29 (100%) agreed with Tirachini et al (2009) that other overhead operating costs include all other operating costs such as scheduling, supervision, depot related costs, head office costs and human resources, among others which constitutes more than 60% of total overheads. 0/29 (0%) respondents were neutral and disagreed that operating overheads. This is supported by Kockelman (2013) who is of the opinion that every business has operating overheads and should make profit anyway.

#### 4.3.2 The relationship between cost management and profit at Pathfinder

**Table 4.7 Responses on the relationship between cost management and profit**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	22	4	1	1	1	29
<b>%</b>	76%	14%	3%	3%	3%	100%

22/29 (76%) of the respondents strongly agreed, 4/29 (14%) agreed, 1/29 (3%) were neutral, 1/29 (3%) disagreed and also 1/29 (3%) disagreed. An overall of 26/29 (90%) agreed and this is supported (Tunji and Mojeed, 2013) that cost management and profit in business operations determines the financial position of a business entity and also according to Tommey (2008), profitability and cost management (PCM) is not a new discipline and is at the core of enterprise performance management, as it represents the major goals for every company. Only 1/29 (3%) neutral respondent was supported by (Tunji and Mojeed; 2013) who said that management should conquer costs before they are conquered. Brumbaugh (2008) supports the 2/29 (6%) total respondents who disagreed by saying that business should watch costs and profit will take care of itself.

#### **4.3.4 Factors affecting the implementation of cost management**



#### 4.3.4.1 Use of traditional cost management methods

**Table 4.1.4 Responses on the effects of use of traditional cost management methods in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	7	0	19	0	3	29
<b>%</b>	24%	0%	66%	0%	10%	100%

Table 4.14 above shows that 7/29 (24%) respondents strongly agreed, 0/29 (0%) agreed, 19/29 (66%) provided neutral answers, 0/29 (0%) disagreed and 3/29 (10%) respondents strongly disagreed. The total of 7/29 respondents who agreed agree with Maskell (2009) that traditional cost management produces irrelevant and damaging information to a business concern. However, on the other hand, Schawk (2009) agree with the 19/29 (66%) respondents who were neutral that it is hard to identify cost management system problems because the problems can be noticed only when the information given out by the system has led users to make inappropriate decisions. It should also be noted that an overall of 3/29 (10%) respondents disagreed were supported by Chan and Lee (2003) who said that companies have an option to implement few traditional management accounting techniques when implementing cost control initiatives.

#### 4.3.4.2 Improper estimates and unrealistic budgets

**Table 4.15 Responses on the effects of use improper estimates and unrealistic budgets in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	12	17	0	0	0	29
<b>%</b>	41%	59%	0%	0%	0%	100%

From **Table 4.15** above, 12/29 (41%) strongly agreed that improper estimates and the use of unrealistic budgets affect cost management and 17/29 (59%) agreed the same. Neither of the respondents disagreed nor provided a neutral answer. The total respondents who agreed are 29/29 (100%) and they concur with (USGAO; 2009) in that improper costs estimation and preparation of unrealistic budgets in bus transport has been identified by management as a challenge of cost management. 0/29 (0%) respondents who were neutral and disagreed were of the same opinion with the Project Development Procedures Manual (2007) which pointed out that cost estimates in overall sense are never concluded and they are not static, but have to be on review constantly to keep them up to date.

#### 4.3.4.3 Lack of management know how and slow implementation of modern methodologies

**Table 4.16 Responses on the effects of lack of management know how and slow implementation of modern methodologies in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	14	0	1	0	14	29
<b>%</b>	48%	0%	3%	0%	48%	100%

As shown by the Table 4.16 above, there was an equal response rate between those who strongly agreed and those who strongly disagreed of 48%, however only 1/29 (3%) remained neutral. Those who agreed that lack of management know how and slow implementation of modern methodologies is a challenge in cost management were in agreement with (Hanid; 2010) who reports that companies are reluctant to adopt new methodologies in management accounting to help them resolve problems associated with cost management because it is hindered by economic realities, internal resource constraints and the difficulties associated with changing common practices. 1/29 respondent who was neutral was of the same mind with (Ghosh et al 2003) that most business entities still use traditional accounting systems regardless that their drawbacks are well-known. It was also noted that a total of 14/29 (48%) also disagreed and consent with (Feinberg; 2008) who said slow implementation of modern costing methodologies is not a challenge because many solutions are readily available.

#### 4.3.4.4 Competition

**Table 4.17 Responses on the effects competition in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	29	0	0	0	0	29
<b>%</b>	100%	0%	0%	0%	0%	100%

In the **Table 4.17** above, all the respondents 29/29 (100%) strongly agreed that competition was a hinderance in the company`s cost management. This was supported by ramolise (2010) who said that passenger transport is a highly congested segment in the road transport. The respondents who were neutral and who disagreed were supported by Antony (2009) who opined that the threat of competition forces firms to be efficient; continue to look for opportunities, innovate to maintain if not expand markets and therefore is not a challenge. The Transport and Logistics Insights (2014) concurred with those 0/29 (0%) respondents who disagreed that costs are also anticipated to rise and with continuous competitive pressure, net profits are also not expected to get better.

### 4.3.3 Measures that are necessary in enhancing profitability at Pathfinder

#### 4.3.3.1 Reduction of costs

**Table 4.9 Responses on the effectiveness of cost reduction in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	14	7	4	3	1	29
<b>%</b>	48%	24%	14%	10%	3%	100%

14/29 (48%) strongly disagreed, 7/29 (24%) agreed, 4/29 were neutral, 3/29 (10%) disagreed while 1/29 (3%) strongly disagreed. The respondents who agreed in total - 21/29 (72%) are supported by Baykasi and Kaplano (2007) who said that due to the unpredictable, dynamic business setting in road transport business, managers are requested to cut costs while maintaining or even increasing the service quality in a short period of time. 4/29 (14%) who were neutral are in harmony with Katzenbach (2008) who stated that many companies ignore the critical need to secure employee commitment when making cost cuts or reductions and do not know the benefits of that cost reduction. Out of the 29 respondents, a total of 4 disagreed about the reduction of costs as a measure to improve cost management and this was supported by Buhehler and Pucher (2011) who said that cutting costs can be problematic in an entity.

#### 4.3.3.2 Budgetary Control

**Table 4.10 Responses on the effectiveness of budgetary control in cost management**

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	20	8	1	0	0	29
<b>%</b>	69%	28%	3%	0%	0%	100%

As shown in the **Table 4.10**, 20/29 (69%) respondents strongly disagreed that budgetary control is an effective measure to improve cost management at Pathfinder, 8/29 (28%) also agreed, 1/29 was neutral whilst 0/29 (0%) disagreed. Lucey (2008) agreed with 28/29 (97%) respondents and said that budgetary control sets a control framework which helps costs to be kept within agreed limits and variances are noted all along for corrective actions. It should be noted, however that only 1/29 (3%) was neutral on the issue of budgetary control and the reason might be that the respondent was new to the organization (Ecoman-Competency and Training). Adongo and Jadongo (2013) supported those who disagreed 0/29 (0% in total) as they said that budgetary control has numerous difficulties that sometimes can be a hindrance towards achieving the overall effects of budgetary control.

#### 4.3.3.3 Employee Involvement and Training

**Table 4.11 Responses on the effectiveness of employee involvement and training in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	15	6	5	1	2	29
<b>%</b>	52%	21%	17%	3%	7%	100%

15/29 (52%) respondents strongly disagreed, 6/29 (21%) agreed, 5 (17%) were neutral, 1/29 disagreed and 2/29 (7%) strongly disagreed that employee involvement and training is effective in cost management. Totalling those who strongly disagreed and agreed, 21/29 (83%) respondents were in consent with Martinov (2011) who said that employee involvement and training is an imperative in cost management. The total respondents who disagreed (10%) were in harmony with Katzenbach (2008) who posited that the task of securing employee involvement to cost management is not easy, and it rarely depends on money alone and rather, it needs paying great attention to a set of principles through an approach termed Motivating Cost Discipline (MCD), which facilitates fast and sustained cost control in a way that involves and motivates company's staff.

#### 4.3.3.4 Internal Audit Function

**Table 4.12 Responses on the effectiveness of internal audit function in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	5	7	0	7	10	29
<b>%</b>	17%	24%	0%	24%	34%	100%

17/29 (17%) of the respondents strongly agreed, 7/29 (24%) agreed, 0/29 (0%) were neutral, 7/29 (24%) disagreed and 10/29 (34%) strongly disagreed. Fadzil; et al. (2005) agreed with the agreeing respondents (41%) that internal auditing makes greater benefits to the organization it serves. 17/29 (58%) however, did not agree that the introduction of an internal audit function is a good measure in improving cost management and were in consent with Pirzada (2013) who is of the view that it is very difficult to develop an effective and affectionate internal audit in which a business is expanding in width and scope.

#### 4.3.3.5 Introduction of hybrid-electric bus into the existing fleet

**Table 4.13 Responses on the effectiveness of the introduction of hybrid-electric buses into the existing fleet in cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	24	5	0	0	0	29
<b>%</b>	83%	17%	0%	0%	0%	100%

24/29 (83%) respondents strongly agreed, 5/29 (17%) respondents agreed whereas 0% were neutral and disagreed that the introduction of hybrid buses into the existing fleet would be a measure to reduce costs as shown in the [Table 4.13](#) above. A total of 29/29 (100%) respondents were supported by Hallmark et. al (2012) that a hybrid-electric bus offers an eye-catching option and has the potential to lower operating expenses for transit agencies significantly. However neither respondent was neutral nor disagreed. Mattison (2012) concurred with the disagreeing respondents when the scholar said that the costs of adopting hybrid buses can be a major constraint and these costs consists of both capital costs, such as vehicle costs and infrastructure costs and operating costs, including fuel costs and maintenance costs.



### 4.3.5 Appropriate proposed costing and accounting systems

#### 4.3.5.1 Activity Based Costing

**Table 4.18 Responses on the benefits of Activity Based Costing as part of cost management**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
<b>Number of respondents</b>	23	5	0	0	1	29
<b>%</b>	79%	17%	0%	0%	3%	100%

As shown in [Table 4.18](#) above, 23/29 (79%) strongly agreed, 5/29 (17%) respondents agreed, 0/29 (0%) were neutral and disagreed whilst only 1/29 (3%) strongly disagreed that activity based costing is one of the appropriate costing system that should be implemented at Pathfinder so as to enhance profitability. The 97% respondents who agreed were concurred with Cohen et al., (2009) and Hooper and Major (2007) who said that ABC promotes rationality, efficiency and ultimate profitability. However, as noted by (Ellstrom et al; 2007) many companies have abandoned ABC (Geri and Ronen, 2005) because the method is perceived as too complex. These authors supported those respondents who were neutral and disagreed.

## **4.4 Interview Analysis**

### **4.4.1 What is the nature of cost structure at Pathfinder?**

3 out of 4 interviewees stated that the major costs at Pathfinder were fuel, repairs and maintenance, crew costs and other administration overheads. These interviewees agree with the Energy Sector Management Assistance Program Report (2011) that reports that fuel makes up a relatively large fraction of total bus operating expenses, especially when labour and bus costs are low, like in developing countries (in this case, Zimbabwe). Furthermore Ranganathan (2009) said that fuel is a huge expense for transit fleets, representing nearly \$700 million per year, or nearly 3% of operating costs. Moreover, in terms of service cost for buses, Schonfeld; (2012) considers bus operating costs, user in-vehicle cost, user waiting cost, and user access cost. Notably, the three interviewees concurred with Schonfeld (2012).

However, the Chief Accountant respondent that capital costs and other operating costs and other related finance charges were the major cost drivers and were straining the company's financial position to the extent that the company relied on short term loans from banks like CBZ and BancABC in order to survive. Kockelman (2013) who agrees with the Chief Accountant highlighted that in bus transport business, capital costs implies fixed capital costs for facilities such as purchase of a bus, roadway construction and mobile capital costs for vehicle whereas operating costs are incurred for goods and services used to maintain and run a facility, vehicle, or service for example fuel, maintenance and labour. He further adds that accounting techniques effectively merge capital and operating costs by including depreciation of capital goods within operating expenses.

#### **4.4.2 Is there a relationship between cost management and profit in your organization?**

4/4 (100%) respondents highlighted that there is a positive relationship cost management and profit. They said that with better or improved cost management, large profits are undoubtedly the result. The interviewees clearly stated in order to recognize the relationship, a review of annual financial statements and the cost management system is necessary. According to Tommey (2008), cost management and profitability relationship is not a new discipline.

Tunji and Mojeed (2013) also agree with these interviewees that cost and profit in business operations determines the financial position of a business entity and therefore there is a relationship. However, Brumbaugh (2008) suggests that businesses should watch the costs and the profit will take care of itself.

#### **4.4.3 What are the challenges faced by management in cost management at Pathfinder?**

Each of the respondents gave his or her answers to this question. The Operations manager explained challenges particularly related to his department. He explained that the use of traditional cost management systems by the company affected the performance of the company at large. Innes et al. (2009) agrees with the operations manager in that most business entities still use traditional accounting systems regardless that their drawbacks are well known. Maskell (2009) said that traditional cost management produces irrelevant and damaging information to a business concern, however, on the other hand, Schawk (2009) outlined that entities may choose to implement a few traditional management accounting techniques when implementing cost management techniques.

Administration and Finance manager complained about the operating overheads and other variable costs which could not be estimated with realistic figures. The use of improper estimates and unrealistic budgets was the major challenge which the Administration and Finance manager blamed. This is supported by Garg et al (2003) that entities are slow in implementing new methodologies and there is broad agreement that current cost management systems do not provide accurate enough information.

The Chief Accountant blamed the management that it lacked know how on the benefits of implementing modern cost management methodologies. The chief accountant stressed that the management is hesitant and slow in accepting the new cost management practices he was suggesting. Pathfinder Chief Accountant agrees with (Hanid; 2010) who reports that businesses are reluctant to adopt new methodologies in management accounting to assist them resolve problems associated with cost management because it is hindered by economic realities, internal resource constraints and the difficulties associated with changing common practices

Lastly, competition from Bravo Tours, City Link and Eagleliner was mentioned as a major challenge by the Head of Ticket Reservations and the interviewee explained that a decrease in number of tickets sold was noted while on the other hand the competitors' financial statements reflected better performance. According to the Transport and Logistics Insights (2014), costs are also anticipated to rise and with continuous competitive pressure, net profits are also not expected to get better. On the other hand, the threat of competition forces companies to be more efficient, continue looking for opportunities, innovate to maintain if not expand markets (Anthony; 2009) and it should be noted that passenger transport is a highly congested segment in the road transport sub-sector (Ramolise; 2010)

#### **4.4.4 What strategies or measures can be implemented to improve the financial performance of Pathfinder through cost management?**

Out of the four interviews, 2 (50%) - Operations Manager and Administration and Finance Manager - mentioned the strategies that Pathfinder could implement in order to improve its financial performance or profitability. Budgetary control, introduction of the hybrid electric buses which (Wayne et al. 2009) save up to 50.7 million gallons of diesel annually, introduction of the internal audit department and some other cost reduction initiatives among others were mentioned by the interviews as measures to improve profitability at Pathfinder. The Chief Accountant and The Head of Ticket Reservations Officer also mentioned agreed to the benefits of the measures, but on the other hand, they gave additional views. The interviewees here agree with Hanid (2010) who advocates for cost cutting; Lucey (2008)-budgetary control; ESMAP Report (2011) - cost savings and Martinov (2011) who suggests the introduction of an internal audit function. The Head of Ticket Reservations emphasized on the gaining of better market share through marketing. The interviewee stated that in order to gain the required 65% market share by the company, intensive and diverse marketing methods should be implemented. The Chief Accountant stressed a point that only if a merger could be sought, losses at Pathfinder could be history.

#### **4.4.5 What appropriate costing systems can be used to improve the cost management system at Pathfinder?**

All of the four interviewees said that Activity Based Costing or Management is the first costing system to consider if cost management system needs improvement. The interviewees are in

consent with (Sukalova and Ceniga; 2014) that ABC is a new cost management method that remove the traditional cost system and this modern method can be applied also in terms of transport enterprises, dominated by the classical method. Moreover, the interviewees mentioned other costing methods and accounting systems for the improvement of cost management at Pathfinder. Among them were target costing, kaizen costing and variance analysis. Swetlitz (2004) viewed target costing as an initiative for considering broad actions to reduce spending as well as streamlining organizational processes whilst in view of the services sector, kaizen costing aims to reduce costs of service processes (Baykaso and Kaplano; 2007). The interviewees made it clear that if those systems are implemented together, profitability can be enhanced with great heights.

#### **4.5 Summary**

This chapter focused on the data analysis and presentation of the research. Raw data was processed into meaningful information, which was then analyzed and interpreted. It was found that improved cost management practices enhance profitability in an organization. From the findings, it is can be noted that the above analyzed data is enough to make conclusion and recommendations which will be discussed in chapter five. Chapter five summarizes the whole research study, states the major outcomes of the research and makes some recommendations.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 Introduction**

Summary of all chapters of this research, conclusions and some recommendations on the concept of cost management at pathfinder are going to be part of this chapter. The chapter also suggests further research areas for future.

#### **5.1 Summary of Chapters**

**Chapter 1** of this research began by introducing the chapter and the background of the study followed. In the background of the study, some problems regarding cost management were noted and various authors were cited bringing the some gaps of the study. The chapter also indicated the revenue and the costs incurred by Pathfinder from year 2011 to 2013. The financial performance was then compared with other players in the market such as City Link, Bravo Tours and EagleLiner. The concept of breakeven and market share were also discussed in the chapter.

The chapter also highlighted that the statement of the problem was that that Pathfinder cost management system was inappropriate as the company reported losses in the three consecutive years (2011, 2012 and 2013). The main objective to analyze the cost management system at Pathfinder branches of Harare and Bulawayo was also stated.

**Chapter 2** explored the literature on hand regarding the concept of cost management as a tool in enhancing profitability. The major authors in this chapter included (Baykaso and Kaplano, 2007; Tunji and Mojeed, 2013; Kockelman, 2013, Tirachini et al, 2009; Hanid, 2010; Brumbaugh, 2008; Maskell, 2009; Cardos and Pete 2013; Fadzil, 2005; Adongo and Jadongo, 2013; Sukalova and Ceniga, 2014 and Martinov, 2011). These scholars differed in the relationship between cost management and profitability in a business concern. Some authors like Tunji and Mojeed (2013) said that cost and profit in business operations determines the financial position of a business entity, however others like Brumbaugh (2008) and Adongo and Jadongo (2013) suggested that businesses should watch the costs and the profits will take care of themselves. Authors like (Maskell; 2009) and (Hanid; 2010) outlined three principal limitations of traditional cost accounting systems: irrelevant and harmful to a company; expensive to maintain and they divert the accountant's attention from key issues however, on the other hand (Chan and Lee; 2003) said that it is hard to identify cost management system problems because the problems can be noticed only when the information given out by the system has led users to make inappropriate decisions. These were the major gaps of the study in the thought of the aforementioned authors.

**Chapter 3** provided a descriptive case study way of gathering data. It made use of both qualitative and quantitative method so as to enable triangulation. A population of 45 employees was considered and a sample size of 29 employees was selected and departmentalized into



stratums. Questionnaires and interviews were used as the research instruments in order to collect data. Both primary data and secondary data were used and finally, the validity and reliability of the data was also an important part of the chapter as it emphasized that if research data is invalid and not reliable, the research results are meaningless and not crucial for the reader.

**Chapter 4** focused on the presentation and analysis of data collected from interviews, questionnaires and observations. It presented the data in form of tables, graphs and charts. In this way, raw data was processed into meaningful information, which was then analyzed and interpreted in form of percentages and measures of central tendency so as to get a meaning of the research findings. The collection of data from secondary and primary sources was done to give answers to the research questions.

**Chapter 5** summarizes the whole research study, states the major outcomes of the research and makes some recommendations. In this chapter, major findings highlighted are included, for example, that improved cost management practices enhance profitability in an organization.

## **5.2 Major Findings**

After data collection, some findings were observed and recorded.

The recurring losses that Pathfinder reported were caused by the unimproved cost management. The then cost management system created an environment of high costs thereby notably; the research found out that the cost structure needed a review in order to implement better cost management practices.

The researcher also found out that there is a positive perfect relationship between cost management and profit. According to the Pearson's coefficient of correlation, an answer of +1 after calculations means a positive perfect relationship and this was the answer of the case in this research.

Some challenges of cost management at Pathfinder which included competition, use of traditional cost management methods and slow implementation of modern cost management methodologies were also noted. The strategies to control or counter these challenges were also part of the findings.

As measures to control or manage costs, Pathfinder implemented budgetary control, cost reduction and saving strategies and introduced an internal audit function, only to mention a few. These techniques worked well, however due to other factors such as competition and slow implementation of modern cost management methodologies, losses were inevitable.

It was also found out that if Activity Based Costing, Target Costing and Kaizen Costing are implemented together, organizational profits can be improved. It was noted that these costing systems were in use, however, lack of management know how and the reluctance to continually improve the system were some of the hindrances to better financial performance of the company.

### **5.3 Conclusion**

Cost management should be directly aligned with and made part of entity growth strategies, the challenge is not just to reduce expenses but also to 'out invest' competitors on growth. The cost management system function in a business entity is much more than an accounting system. Cost

management involves both the cost accounting and the management accounting information systems. If an improved cost management system is implemented, findings have shown that there would be also a corresponding increase in profits. Profitability and cost management is a business imperative (Toomey; 2008).

#### **5.4 Recommendations**

There is a need to increase the level of sensitization among management and staff of Pathfinder on the significance of cost management in enhancing profitability. Cost management should not be viewed as the practice of just reducing or cutting costs without care as this might be dangerous to the entity as a whole. It should also be taken as a practical tool within which any company should use to enhance its profitability.

Pathfinder should adopt appropriate costing systems like Activity Based Costing in order to improve its cost management system. Thus, therefore this research recommends Pathfinder to implement the aforementioned ABC as the benefits would accrue in the long run.

#### **5.5 Suggestions for future research**

This research study mainly highlighted the importance of cost management in enhancing profitability at Pathfinder; however its importance or effects on service delivery and goodwill

were not included in the scope. Hence, the researcher therefore suggests that the importance of cost management on service delivery and goodwill should be areas of future research.

## 5.6 Summary

This chapter summarized chapter one to five, gave a conclusion and some recommendations to Pathfinder regarding the cost management system. Finally, it gave suggestions for future research.

## APPENDIX A



Private Bag 9055

Gweru

30 August 2014

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

---

The Administration Manager

Pathfinder Luxury Coaches

115 Nelson Mandela Avenue

Harare

Dear Sir/Madam

**RE: Request for Permission to conduct an academic research at your company**

I am a final year student at the above mentioned university studying a Bachelor of Commerce Accounting Honours Degree. I am carrying out an academic research on the topic: **An analysis of the effectiveness of cost management system in enhancing profitability at Pathfinder Luxury Coaches (Pvt) Limited.**

For my research to be a success, I kindly requests you to provide me with data by responding to questions in the questionnaire attached to this letter. Could you please note that the data obtained will be used for academic purposes only and data confidentiality shall be maintained to the highest level.

I would be glad and grateful if you respond positively and I am looking forward to replying to this letter.

Yours faithfully

Memory Tafara Shumba

## **APPENDIX B**

### **QUESTIONNAIRE**

#### **Instructions**

1. Please tick in the appropriate box.
2. Do not write your name.

#### **Questions on Cost Management**

Memory ||T. ShumbacR111529Z Honours Accounting Year 2014

---

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

---

**1. The company`s profits were mostly affected by the following costs.**

<b>Cost/Expense</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Coach repairs and maintenance					
Fuel (Diesel)					
Crew costs					
Wear and tear/ Depreciation					
Other overhead operating costs					

**2. In your opinion, is there a relationship between cost management and profit?**

Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

**3. Is the cost management system at your organization cost effective?**

Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

**4. In your opinion, do the following factors affect the implementation of cost management?**

<b>Factor</b>	<b>Strongly</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly</b>

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

---

	<b>agree</b>				<b>Disagree</b>
Use of traditional cost management systems					
Improper estimates, budgeting techniques and unrealistic budgets					
Lack of management know-how and slow implementation of modern methodologies					
Competition					

**5. Are the following measures necessary in enhancing profitability in your organization?**

<b>Measure</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Reduction of costs or implementation of cost saving ways					
Budgetary Control					
Introduction of an internal audit function					



An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

---

Employee involvement and training					
Introduction of a hybrid-electric bus					

**6. In your opinion, is the following costing system useful in cost management in enhancing the company`s profitability?**

<b>Costing system/Accounting system</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Activity Based Costing					

**Other Comments**

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

*Thank you for your cooperation*

**APPENDIX C**

**INTERVIEW GUIDE**

**Name of interviewee** .....

**Position held** .....

1. What is the nature of cost structure at Pathfinder?
2. Is there a relationship between cost management and profit in an organization?

An analysis of the effectiveness of cost management system in enhancing profitability at  
Pathfinder Luxury Coaches (Pvt) Limited

---

3. What are the challenges faced by management in cost management at pathfinder?
4. What strategies or measures can be implemented to improve the financial performance of Pathfinder through cost management?
5. What appropriate costing systems can be used to improve the cost management system at Pathfinder?