

Accounting data in productivity measurement and strategic decision- making

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Executive summary

The report titled 'Accounting Data in Productivity Measurement and Strategic Decision-Making' provides an analysis and evaluation of how accounting data is used by companies to promote their profitability and to improve their productivity. Most of the data and information has been collected from online journals. The journals collected were written by renowned professors and researchers from established universities. The journals dealt with not only the importance of data collection for promoting profitable segments but also on the recent change in accounting practices around the world with primary focus on developing countries.

Results of the report suggest that data mining is an essential activity for firms who are committed to advance their productivity. The findings also suggest that such information allows for firms to obey their budgets. The report finds that more and more firms have recognized the importance of data collection for their organization and are finding new ways to promote efficient accounting practices. The report also investigates certain limitations of the journals used. The journals are often much generalized rather than using information about a certain organization.

Moreover the data provided in the journals ranges over long periods of time through many different firms in many nations. Thus the findings may not be applicable for all firms.

Introduction What is managerial accounting?
Managerial accounting is concerned with the provisions and use of accounting information to managers within organizations, to provide them with the basis to make informed business decisions that will allow them to be

better equipped in their management and control functions. In contrast to financial accountancy information, management accounting information is:

- primarily forward-looking, instead of historical model based with a degree of abstraction to support decision making generically, instead of case based
- designed and intended for use by managers within the organization, instead of being intended for use by shareholders, creditors, and public regulators
- usually confidential and used by management, instead of publicly reported
- Computed by reference to the needs of managers, often using management information systems, instead of by reference to general financial accounting standards.

According to the Institute of Management Accountants (IMA)-Management accounting is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy.

Managerial accounting as practice extends to the following three areas:

- Strategic management—advancing the role of the management accountant as a strategic partner in the organization.
- Performance management—developing the practice of business decision-making and managing the performance of the organization.

- Risk management—contributing to frameworks and practices for identifying, measuring, managing and reporting risks to the achievement of the objectives of the organization.

The Institute of Certified Managerial Accountants (ICMA), states " A managerial accountant applies his or her professional knowledge and skill in the preparation and presentation of financial and other decision oriented information in such a way as to assist management in the formulation of policies and in the planning and control of the operation of the undertaking". Managerial accountants therefore are seen as the value-creators amongst the accountants.

They are much more interested in forward looking and taking decisions that will affect the future of the organization, than in the historical recording and compliance aspects of the profession. Managerial accounting knowledge and experience can therefore be obtained from varied fields and functions within an organization, such as information management, treasury, efficiency auditing, marketing, valuation, pricing, logistics, etc. (Managerial Accounting, 2011, para: 1-2) Importance of Managerial accounting for firms in general

Managerial accountants record financial information for their companies that is used by the organization's management team to aid in the decision-making process. Managerial accountants develop budgets, perform asset and cost management, and create important reports used by the management team. Managers depend greatly on the information provided by managerial accountants to develop effective business strategies. Small business owners make most of the decisions within their company.

The information presented by managerial accountants affects the owner's ability to make sound business decisions. The two primary functions of managerial accounting in a firm are planning and controlling. Both of these help managers accomplish decision making. Managerial accountants have a dual reporting relationship. As a strategic partner and provider of decision based financial and operational information, managerial accountants are responsible for managing the business team and at the same time having to report relationships and responsibilities to the corporation's finance organization.

The activities managerial accountants provide inclusive of forecasting and planning, performing variance analysis, reviewing and monitoring costs inherent in the business are ones that have dual accountability to both finance and the business team. Examples of tasks where accountability may be more meaningful to the business management team vs. the corporate finance department are the development of new product costing, operations research, business driver metrics, sales management score carding, and client profitability analysis.

Conversely, the preparation of certain financial reports, reconciliations of the financial data to source systems, risk and regulatory reporting will be more useful to the corporate finance team as they are charged with aggregating certain financial information from all segments of the corporation. In corporations that derive much of their profits from the information economy, such as banks, publishing houses, telecommunications companies and defense contractors, IT costs are a significant source of uncontrollable

spending, which in size is often the greatest corporate cost after total compensation costs and property related costs.

A function of management accounting in such organizations is to work closely with the IT department to provide IT cost transparency. Managerial accountants help drive the success of the business while strict financial accounting is more of a compliance and historical endeavor. The goal of managerial accounting in a firm is to provide information for internal decision making, primarily for planning and control purposes. The types of decisions made by managers rely substantially on accounting information.

Because financial accounting information does not provide enough detail for internal decisions, it must be broken into more detail of the individual products or services provided by a company. Not only do managers need to know the cost of a product or service, they need the costs broken into smaller components so they are able to perform what-if analyses and forecasts for the future. Some types of decisions that managers often make include pricing products, dropping a product or product line, buying new equipment to replace old, evaluating the performance of managers or divisions of a company, or making rather than buying a part or product.

What is Cost Accounting? Cost accounting is a process of collecting, analyzing, summarizing and evaluating various alternative courses of action (Wikipedia, March 23, 2013, Revised Standard Version). It helps to find out the detailed information to the manager to control operation based on cost efficiency and capability. Managers made decisions for their own firm. So they need to manage the cost regarding productivity and strategic decision making. Cost accounting helps managers to control and manage resources. <https://assignbuster.com/accounting-data-in-productivity-measurement-and-strategic-decision-making/>

Strategic decisions based on cost reduction and rising costs are based on cost accounting. Basically the information is designed for managers as they take all the decisions for the organization. Important strategic decision making are made depending on the costs that the company can manage to pay for. Thus cost accounting is an important tool for the managers for productivity management and strategic decision making. Importance of data mining: Data mining is primarily used today by companies with a strong consumer focus.

The application of data mining is ever-increasing in today's business as it enables business to pull out hidden information from huge amount of data for better understanding of the consumers (Chopoorian et al. , 2001). The information is analyzed based on different perspective and summarize into useful data that can be used to increase revenue or cut costs. Although data mining is a relatively new term, but large companies are using it to find correlation among huge amount of data in large database. The importance's of data mining for modern business are given below: Data mining is used in restoration of hidden data which helps to extract the valuable information and construct practical analysis for decision making. * Data mining gives financial institutions information about loan and credit reporting (" Zentut", " n. d. "). * It also helps banks detect fraudulent credit card transactions to protect credit card's owner (" Zentut", " n. d. "). * It is being used ever more for understanding and forecasting consumer buying actions, buying tendency, customer profile and industry analysis (" Articlebase", July 18, 2009). Data mining can be used as decision making tools in market research, industry research and competitor analysis which made it more beneficiary

for the business industry. * It can manipulate large database swiftly and effectively accomplishes entire data analysis process. * Data mining helps government agency by excavating and scrutinizing records of financial transaction to build molds that can identify money laundering or criminal activities (" Wordpress", December 5, 2006). * It can be used in every sector like science, business and others and it is cost effective.

Limitation: Data mining has uncountable benefits and importance in today's modern business but it has some limitations. Most of them are based on technological advancement, which is considered as the foremost advantage of data mining. Additional limitations are discussed below: * Security concern: One of the major limitations of data mining is the security issue. Most of the businesses accumulate their customers' social security number, payroll etc. Hackers can easily go across their accounts and steal such sensitive data of the customers (" Zentut", " n. . "). Thus customers do not feel safe to share information through data mining. To avoid the unwanted security concern, companies ought to take several crucial precautions so that the customers can trust them with no trouble. * Privacy concern: The misuse of internet has threatened the privacy concern among its users. People are afraid to share any of their personal information as it can be collected and used in unethical ways. Customers' do not prefer to buy goods online in apprehension of getting any information revealed (" IT Law WIKI", " n. . "). As business has to collect many of the information, they must take care about the privacy policy so that the information cannot easily disclose. * Inaccurate information: Unethical businesses or people might use information that is given in data mining for some other purposes or can

inequity against some other people. Moreover the information or the assessment published in data mining is not absolutely accurate if the data has been entered wrong. Thus people cannot rely completely on data mining. Possible benefits:

Data mining is useful for modern business today as particular user will be looking for a pattern not for complete data in the database, it is better to read wanted data than unwanted data. There are some other benefits. They are: * Data mining technique is required pattern will be drawn from database with in short time * Data mining software is easy to use and does not require complicated statistical acquaintance and data preprocessing (Chen and Sakaguchi, 2000) * Data mining tools are programmed in such ways, it automatically present data analysis with visual charts and table to assist understanding

Importance of Accounting Data in Productivity Measurement: According to Kaydos (1991), " Productivity and subsequently performance measurement has become more important and has been regarded as a prerequisite for continuous improvement" (as cited in Phusavat & Photaranon, 2006). Accounting data is important for measuring productivity to provide a systematic and comprehensive explanation of changes in profitability. Productivity measurement is one of the criteria for performance analysis of a firm.

According to Sink (1985), " Productivity is simply the relationship between the outputs (goods and services) generated from a system and the inputs provided to create those outputs" (as cited in Phusavat & Photaranon, 2006).

It is very important that accounting data collected should be correct and <https://assignbuster.com/accounting-data-in-productivity-measurement-and-strategic-decision-making/>

reliable otherwise productivity measurement would be inaccurate which will lead to incorrect forecast of cost and profitability data. Both technical and managerial aspects should be recognized in order to ensure successful and sustainable productivity measurement.

For this purpose, strong database management is essential in order to ensure timely provision of accounting data for productivity measurement. It is essential to timely collect production-related data and report performance information by the database management to ensure better performance-analysis. According to Harper (1984), “ It is vital for an organization to become continuously more productive in order to sustain its growth” (as cited in Phusavat & Photaranon, 2006). The productivity measurement based on accounting data divides production inputs into five categories such as capital, labour, energy, materials, and services.

Productivity also includes unit cost, price, factor proportion, cost proportion, product mix, and input allocation (Phusavat & Photaranon, 2006). Accounting data consisting of integration between productivity, financial performance (i. e. profitability) at the operational level, and features such as opportunity gain/loss is used for productivity and performance measurement. Management report on opportunity gain/loss is useful for future monitoring and evaluation. Accounting data such as concepts of the opportunity gain/loss and the dynamic/static ratios in both single and partial formats are essential for performance measurement.

Accounting information such as value-added labor productivity and ROA are also included in measurement technique. More comprehensive analysis of entity by measurements requires more accounting data to be aggregated <https://assignbuster.com/accounting-data-in-productivity-measurement-and-strategic-decision-making/>

(Phusavat & Photaranon, 2006). Importance of Accounting in Strategic Decision making: Accounting is essential in managing business performance and the accountants helps to improve decision making by offering strategic and practical advice, by managing risk, and by supporting key decisions at all stages of the decision making process for enhanced productivity and profitability measurements.

An accountant can help significantly in the areas of budgeting, investigating, interpreting and communicating results for use by both internal and external decision makers. For example, at the problem recognition stage, they may be the first to detect an opportunity or approaching threat. At the ideas stage, they can help to provide creative solutions (" Improving strategic decision making", n. d.). Profitability is consequence of adopting a market orientation and plays important role in decision making (as cited in Inglis & Clift, 2008).

Market orientations is composed of three behavioral components, such as customer orientation, competitor orientation and inter functional coordination, and two decision criteria, long-term focus and profitability (Narver and Slater, 1990). Customer orientation component of a market orientation and profitability acts as decision criterion (Inglis and Clift, 2008). There is an identified requirement for accounting information about the costs involved in providing a range of customer product-attributes which help businesses to choose most profitable market segment.

According to Gray and Hooley (2002), within the market-orientation, customer value, customer product-attribute needs and accounting information are interrelated conceptually from a managerial and economic <https://assignbuster.com/accounting-data-in-productivity-measurement-and-strategic-decision-making/>

perspective (Gray and Hooley, 2002). McNaughton et al. (2002) stated that accounting function develops a sense of those attributes of greatest value to customers and in this way they may provide link between customers, value and profitability (as cited in Inglis and Clift, 2008). According to Inglis and Clift (2008), creating value for customer through product attributes requires accounting information very much for decision making.

Function cost analysis and interrelated techniques of value analysis are integral to target costing (TC) which seeks to reduce the life-cycle costs of products while ensuring all customer requirements are met (Shillito and De Marle, 1992; Kato, 1993). According to Inglis and Clift (2008), the accounting function may interact with customers in managing payment procedures and terms for a richer understanding of how to differentiate its business in the market place and assist in creating value for the customer (Inglis and Clift, 2008).

Importance of using ABC Method to avoid the problems faced by firms providing financial services According to Hussain and Gunasekaran (2001), activity based costing (ABC) has become highly essential to overcome shortcomings faced by traditional accounting method, in terms of validity, accuracy, completeness, consistency, understanding and relevance. It helps management to make internal decisions and formulate plans to provide new services, improve existing services and measure performances in order to achieve overall competitive strategies and advantages of organizations.

The approach further provides a more factual basis for decisions by identifying truly profitable and truly unprofitable products, eliminating unnecessary costs, identifying and distinguishing between true value-add

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activities and non-value add activities, and pricing products so as to achieve acceptable margins. It is a powerful tool in achieving competitive advantages and in providing operational and discretionary project cost data (Hussain and Gunasekaran, 2001).

Activity based costing in service costs in bank demonstrated by Hussain and Kock (1994) showed unit time is a more complex calculation involving work measurement processes (as cited in Hussain and Gunasekaran, 2001). Once information obtained the bank can calculate the profitability of various segments, retain highly profitable segments and transform unprofitable segments into profitable ones through actions on pricing, product features, operating improvements and technology introduction (as cited in Hussain and Gunasekaran, 2001).

West and West (1997) demonstrated the need of activity-based costing implementation in services . . . for financial survival without which managers cannot make effective decisions involving long-term captivated contract profitability (as cited in Hussain and Gunasekaran, 2001). Harr (1990) reports activity-based accounting approach for budgeting and financial performance reduces the costs without losing either the timeliness or the quality of its services.

In spite of the advantages, however, ABC costing does not solve all the problems involved in decision making as management might overlook basic analysis needed for customer adaptation, flexibility and economies of scope (Hussain and Gunasekaran, 2001). It is important to constantly focus upon customers' total perceived service quality and to maintain relationships to profitable customers. ABCM can then be accepted as a real tool for <https://assignbuster.com/accounting-data-in-productivity-measurement-and-strategic-decision-making/>

management to make strategic decision, formulate plan and operate control (Hussain and Gunasekaran, 2001)

Using Target costing to identify profitable segments and maintaining productivity: In the journal 'Target Costing' (1995) the authors have stated that 'product innovation is one of the keys to a company's survival and competitiveness' (p. 1). Thus Management accounting and cost accounting play an important role as they help in the creation of new products which attracts customers while maintaining low costs and ensuring profitability. As the effects of globalisation becomes more apparent companies are forced to reconsider their accounting practices, more specifically there management accounting practices.

This is where target costing comes in. Target costing has been defined in the book Managerial Accounting (2012) 'the process of determining the maximum allowable cost for a new product and then developing a prototype that can be profitably made for that maximum target cost figure' (p. 763). In other words a desired profit margin is deducted from the selling price and a new target cost is determined for the new product. Implementing Target Costing: The different departments of the firm run a cost analysis to develop a target cost for the new product.

If the manufacturing cost for the new product is equal or below the target cost then the product can be introduced in the market. Finally the target cost is deducted from the selling price. Thus target costing not only helps find a profitable segment in the market but also makes sure that product is being produce in its most productive capacity. The target profit process has been

summarised in Figure 1 (see appendix). The journal further states that the companies that benefit the most from Target costing (p. 6) are:

1. Firms involved in assembly production style.
2. Firms involved in product diversification thus need target costing to determine a profitable market segment.
3. Firms whose product life cycle is relatively short (less than 3 years).
4. Firms wanting to reducing costs during the planning, design and development stages of a product's life cycle.

Managerial Accounting Changes: Research shows that Managerial Accounting has undergone changes in the last decade. According to the journal 'Managerial Accounting Change in South Africa' (Waweru, Jan 2004) this is especially true for developing nations. The case study considers four retail firms in South Africa.

This helped them to find out the exact changes in Management Accounting Practices and the reasoning behind such changes. The journal reports that the main reason for such transformations can mainly be attributed to three main reasons. They are:

1. Increased Globalisation-This has made sure there is increased competition between the countries of the world. Thus necessitating for changes to take place in the managerial accounting world.
2. Huge variations in Information Technology-Technological advancements in the last decade has revolutionized the way world does business. The introduction of supercomputers has made sure that

decision making process is faster and also made information more freely available.

3. Recent economic recession-The recession which has gripped the world since 2007 has made businesses reassess their managerial practices. Thus the journal has found that in order to deal with such challenges the businesses have evolved and so has their accounting practice. In developed nations more and more firms are now involved in Target Costing, Activity Based Costing (ABC), Product Life-cycle costing and finally Quality Costing.

It should again be mentioned that these changes has only been noticed in developing nations and not so much in developed nations around the world. However the paper cautions regarding such changes by stating that no one accounting system is universally appropriate for all firms. But rather that it varies from company to company. Thus the factors a firm should consider are (Waweru, 2004):

1. Size and type of the firm
2. Foreign competition
3. Economic restrictions
4. Technological advancements
5. Political and Social Considerations

Hence we can conclude from this journal that Management practices evolves slowly in developing countries where it is greatly aided by government reforms/deregulations and globalisations and technological improvements.

Conclusion

Thus we can say that accounting data has a strong effect on productivity and strategic decision making for firms. Since the data's collected, both time series and cross sectional data, provides an insight into what has increased output for firms over the years and all the possible actions firms can make to engage in efficient production. Data's are also used to make important decision.

Time series accounting data gives a good understanding of the profitable segments of the firms and the different sectors the firm can further expand into. Hence we can conclude by saying that accounting data are extremely vital for management accounting practices.

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