

Responsible Accounting and Its Role in Achieving Competitive Advantage

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One of the management accounting tools is responsible accounting. In this system, the organisation is divided into responsibility centres that help to connect an individual performance responsible to perform through a combined system of reports according to the implementation of the mechanism of exception tools which gives assistance in planning. The exploitation of the organisation's available resources is achieved through the application of responsible accounting. Also, the best exploitation will lead to the provision of low-cost products through the disposal of all types of waste or loss during the cost centres. By providing products at a lower cost and satisfying the wishes of the needs of customers, the result reflects the competitive advantage of those organisations and leads to an increase of market share and long-term products. Therefore, the implementation of responsible accounting in organisations will lead to the competitive advantage of those organisations.

Key words: *Responsible accounting , competitive advantage.*

Introduction

The role of accounting is now relevant to the recording of historical events while its role has multiplied to become the major contributor in the process of preparing and presenting future plans for the company. The development of mechanisms and tools have also been extended to the field of accounting through which performance can be assessed and the extent of establishment deviation. Scientifically, these aspects are examined through the provision of financial information provided by the managers of organisations in order to determine future goals by applying financial information to help them make good decisions and develop future plans. Therefore, this study considers one of the components of management accounting, namely responsibility the primary goal of which is the result of the work of any

existing facility within the workers' centres. Another objective is to examine the level of harmony with the performance plans and objectives which have been prepared in advance (Faisal, et al., 2016; Hussain, et. al., 2018; Iqbal, et al.2017; Shabbir, 2009; Shabbir, et al., 2016; Shabbir, et al, 2018; Shabbir, et al. 2018).

Responsible accounting is a detailed and scientific system that connects accounting system and administrative organisation through project division into responsible centre that supports performance connection of those personally responsible for the performance through integrated reports in accordance with the implementation of the principle of monitoring, performance evaluation and exception control. The implementation of responsible accounting will lead to the exploitation of the business organisation and its available resources. The exploitation of the organisation's available resources is achieved through the application of responsible accounting. In addition,, the best exploitation will lead to the provision of low-cost products through the disposal of all types of waste or loss for cost centres. By providing products at a lower cost and satisfying the needs of customers, the result reflects the competitive advantage of those organisations and leads to an increase of market share and long-term products (Imran et al., 2018; Muhammad Irfan Afzal, Shabbir, & Faisal, n.d.; Shabbir, et al., 2019; Ul-Hameed, et al., 2019)

The issue is surrounded by the fact that there is a failure to use responsible accounting and the division of organisation into groups of centres represented investment centre, cost centre, profit centre and revenue centre. These failures have led to the inability of many organisations to exploit their resources for optimal use. Similarly, the failure has led to the organisation achieve competitive advantage of products and services to be provided for the customer.

The focus of this study is to clarify the importance of responsible accounting and its relationship with competitive advantage . The implementation of responsible accounting is also considered as it draws the attention of companies concerning the importance of using the accounting system of responsibility centres which allow institutions to be better controlled and the division of labour in a manner that helps to stimulate internal competition within the enterprise as a whole. Thus, the study aims to achieve competitiveness at the external level of these companies; to achieve profits above competitors' own and to show the importance of the business organisation.

The aim of this study is to show the importance of economic units in order to achieve competitive advantage for companies through the identification of successful and failed centres and cost centres using profit centres. Also, the study attempts to show the rate of return on investment through investment centres in the company. The following clarifications are made by this study:

- Knowledge of important concepts of responsible accounting;
- Understanding responsible accounting for competitive advantage;
- Knowledge of standards that contribute to competitive advantage;
- The relationship between responsible accounting and competitive advantage.

The implementation of responsible accounting in an organisation will lead to the ability of the organisation to exploit its available resources in a manner of best exploitation and in a way that helps in achieve competitive advantage of products and services provided by these organisations to the customers (Faisal et al., 2016; Iqbal et al., 2017; Jabarullah et al., 2019; Shabbir et al., 2019; Shabbir, et al., 2018)

Literature Review

The Concept of Responsible Accounting

The diversity, function and size of a company can lead to a large number of decisions and interpersonal relationships where seniors alone cannot take all administrative decisions centrally when there is need for decentralisation. The business organisation is divided into independent and manageable semi-units as part of the respective economic resources and delegates the authority and responsibility to control these resources. Decentralization and full responsibility of the heads of decentralised units are achieved through the implementation of so-called responsible accounting with a view to focusing on evaluating and monitoring the performance of the heads of semi-independent administrative units directly through performance accountability and detecting deviations in the analyses of organisations (Meda, 2003:243).

Responsible accounting is an administrative control system which relies on the principles of assigning responsibility and delegating authority. The aim of responsible accounting is to evaluate the performance of managers responsible for responsibility centres and to provide reports and information on the performance of senior management positions. Responsible accounting is a tool for cost control. It can be controlled while cost cannot. Under responsible accounting, costs control is only dealt with and reflected on the division of the organisation to different responsibility centres for the purpose of evaluating each centre (Biswas,2017:202).

The economic unit is divided into a number of centres under responsible accounting(Safa,2012:4) (Horngren et al.,2009:223) :

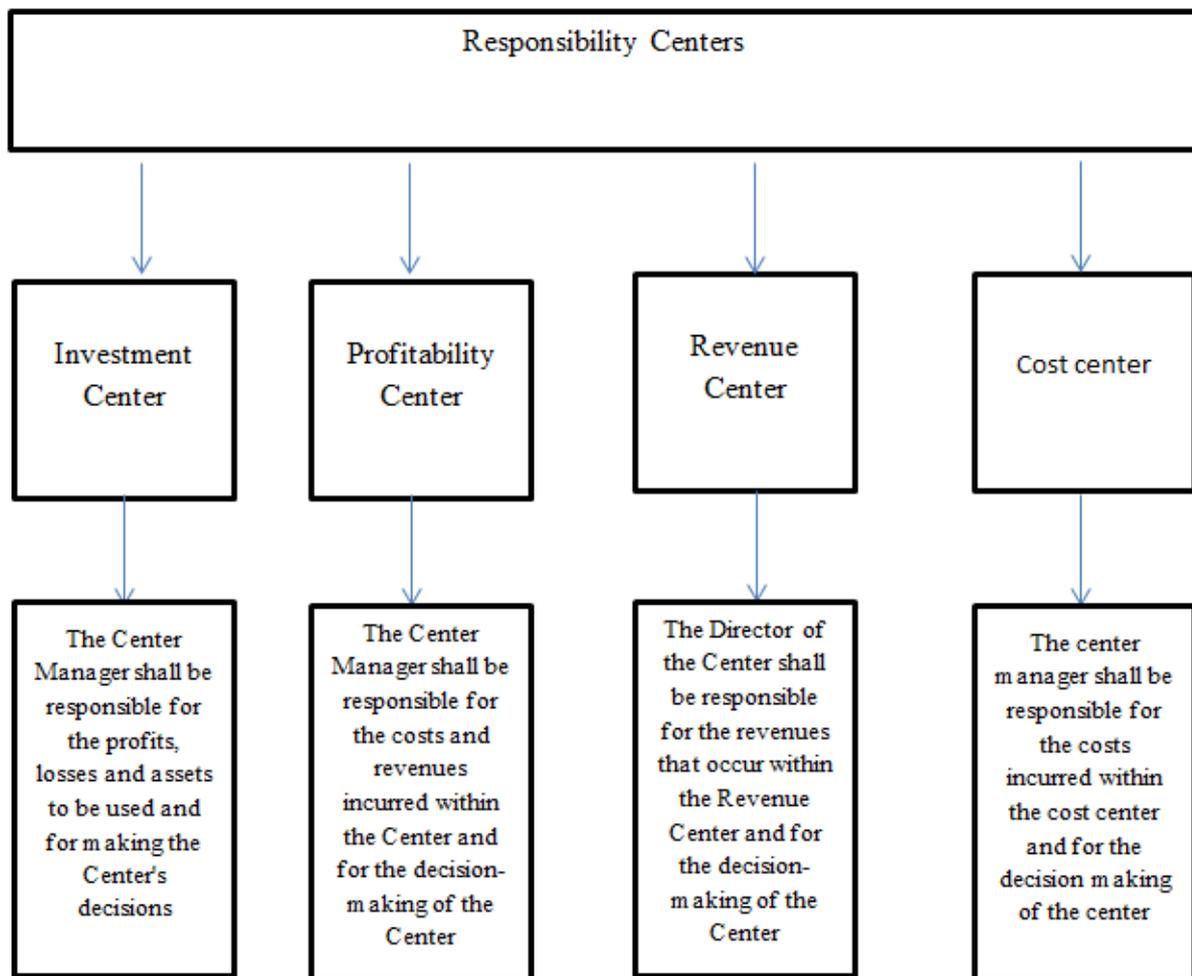
1. The Investment Responsibility Centre is an administrative unit whose directors are empowered with the authority to take control of expenses and revenues and propose

projects for investment tunnel. In this centre, the manager is expected to achieve the highest return on investment by optimising and utilising assets and balancing available economic resources. These centres are branch offices in different regions. The widest range of responsible centres are located in Investment centres and based on return on investment. Their performance can be compared with other liability centres or potential investments. Within the centre, the manager is responsible for costs, investments and revenues.

2. Cost Centre: the sole responsibility of this unit is for the department to control costs. In the organisation, these centres are the smallest responsibility centres. At the same time, in terms of the ability to connect the cost of outputs to elements, the centres differ from each other. Examples include accounting, finance, management, clients and human resources while the managers are only responsible for the costs of that centre.
3. Profitability Centre: This is the centre with administrative units the directors of which are delegated to control the expense and revenue of such units like retail fair. Thus, the managers are required to evaluate the products to be handled and the geographical areas and prices covered by the sales activities. The degree at which success is achieved through the budget of planned profits is used to measure the success of the centre managers.
4. Revenue Centre: This is the administrative unit, the director of which has the authority to control revenues only.

The types of responsibility centres are illustrated in Figure 1 as follows:

Figure 1. Types of Responsibility Centres



(Source: Zimmnicki,2016:223)

Responsible accounting is defined in several ways as stated below:

According to Fowiza (2011), administrative control system is defined based on the principles of delegating and assigning authority to managers of responsibility centres within an organisation. It is a system designed to collect reports on revenues and costs for each centre of responsibility Fowiza,2011:53-54).

Hansen and Mowen (2007) added that an administrative control system is a system in which the organisation is divided into smaller units and each unit is assigned a specific responsibility. Each department and units (such as sections, sectors, branches and production lines) are responsible for performing specific administrative tasks. Also, the results for each centre are measured based on the management information under responsible accounting as needed from each centre of responsibility (Hansen and Mowen, 2007:418).

Furthermore, responsible accounting can be defined through accounting as a regulatory system where the organisation is divided into investment an centre, revenue centre, profit centre and cost centre and each centre is operating under the responsibility and management of the centre manager in a manner that helps in optimising and utilising the organisation's resources.

Mojgan and Safa state that using an area of responsibility, the accounting system collects revenue and cost data reports. The system is based on the assumption that managers should be responsible for their actions, their subordinates' work, and any activities they take as the centre of their responsibility. The workers within the organisation should also be held accountable for their actions and for the actions of those under their responsibility. It is also called an accounting activity as a liability accountant in profit accounting (Mojgan and Safa, 2012: 2).

The contribution of responsible accounting is an important aspect of the internal control system over the resources used in an organisation to achieve effectiveness and efficiency and to evaluate departmental performance while knowing which accounting tool will help management to identify the rate at which each centre is responsible for achieving organisational objectives as a whole (Alraze, 2007:22).

The Objectives of Responsible accounting

The objectives of responsible accounting can be achieved by the following steps (Fowzia,2011:54) (Alkalde,2015:19-20):

1. A direct relationship should be established between revenue and cost and the personnel responsible for them using control and controllability to track the liability of these revenues and costs.
2. Classification, analysis and compilation of the cost and revenue components for liability units where the problems of deviation and administration can be identified for each responsible administrative level and individual in order to take corrective action.
3. Responsible accounting system is a supervisory method that is used to support the implementation of operations and the control of such operations effectively.
4. The relationship between the activities of the managers and the financial results of these activities should be found.

The Advantages of Applying Responsible accounting

Responsible accounting consists of sets of benefits achieved from the implementation of planning budgets, cost accounting, reports and management systems in order to allow the

lowest level of management in the organisational structure of control revenue and costs. The advantages of responsible accounting are summarised below (Ibraheem,2014:383):

1. Several levels of administration in organisations are able to take care and identify their responsibilities;
2. It explains to the department the appropriate supervisors to participate in the decision-making and to assume greater positions and responsibilities.
3. At the most basic level of supervision, it creates a sense of consciousness in the organisation as many of the cost items can be lowered in a better position for control.
4. The Department can make various decisions about the concept of cost and profit analysis, purchase or manufacture, or continue to operate the centre or dispense with it or purchase its services from abroad.
5. By shedding light on the deviations, there is possibility of controlling the various processes and items of costs and revenues which makes it possible to take appropriate corrective action.
6. It assists in the development of reward systems, incentives and wages
7. It assists in the delegation of authority and responsibilities and discovery of leadership personalities
8. There is an increase in the desire to examine and analyse the product cost in each centre as a result of the availability of a lot of financial and quantitative information generated at different administrative levels by the organisation.

The Concept of Competition

When Adam Smith's book "The Wealth of Nations" in 1776, issues of competition issues were addressed in the literature. At that time, there was no scientific study on the theoretical framework for analysing and improving the competition of different countries or industries. The books of the strategy began to analyse competition and competitive advantage after 1980. At present, competition has become an important part of business issues. According to Porter, the relative position and attractiveness of those organisations in industry determine their profitability (Hosseni et al., 2018:1). According to Sachitra, competition refers to the comparison of performance measurement with the external environment or with organisations within the same industry (Sachitra, 2016:2).

It is regarded as a system of economic relationship which comprises of a large number of sellers and buyers where each acts independently of the other to make it to the top. The organisation should constantly be pre-occupied with its competitive position in order to pursue, build, sustain and protect their business. Also, the organisation must determine its competitive position in order to achieve its goals effectively and efficiently at both the market level and as a whole at the level of the target market sector. It also needs continuity on the

work on the component and element development of the marketing and selling activities to go in line with these market segments. Similarly, it can be achieved by continuous monitoring of the vision of customers and the mental image of the products and projects of the organisational services at the headquarters with the competitor's projects, products and services. A distinctive mental image can also be drawn by the business organisation and by focusing on several key aspects for competitive positions characterised by the customers (Alastal 2010:26).

The heart of corporate failure or success comprises of competition. The appropriateness of the company activity is determined by the competition that can contribute to performance such as good execution, cohesive culture and innovations. Searching for a competitive position in a niche industry is a competitive strategy. It is the main aspect that occurs in competition. Its aim is the creation of sustainable and profitable centres over the forces that determine competition in the industry.

The main research questions is what are the choices of a competitive strategy? The first choice is an attractive industry for long-term factors and profit, Not all industries offer equal opportunities for sustainable profit. One of the key determinants of profitability is the inherent profit of industry. The determinant of relative competitive position within the industry is the second pivotal issue in competitive strategy(Porter, 1985:2) .

Competitive Advantage

When an organisation has the ability to deliver the same benefits offered by competitors at a lower cost or benefit than competitive products, then Competitive Advantage can be achieved. To achieve customer satisfaction, competitive advantage is necessary through the high value of products or services provided by the organisation which will reflect the increase in the organisation's profits and increase in market share (Wen-Cheng et al., 2011:100) .

Several definitions of competitive advantage can be illustrated as follows:

Competitive advantage is defined by Kotler as the ability of an organisation to perform in one or several ways that competing organisations can not follow. This definition focuses on exploiting the organisation's its internal strengths (Hasoon et.al.,2012:14).

In other word, Competitive advantage is defined as the characteristics and advantages of the products offered by an organisation to customers in comparison to the products and services provided in the same field of industry by the competitors (Hossen et al., 2018:3) .

The level at which an organisation succeeds in achieving their objectives to maintain competitive positions and build more of the positions between them and other organisations by minimizing the defects and line of production, innovation, sales growth, increased market share, interest and increased productivity is called competitive advantage (Alastal,2010:29).

The definitions of competitive advantage are summarised below through previous concepts of competitive advantage (Jaber et al., 2008:185) :

1. The ability of an organisation to distinctly accomplish a certain activity.
2. The potential of an organisation to impose its distinction on the rest of its competitors.
3. The emergence of an organisation on one side or aspect of its industry which makes it look different in status from other similar organisations. As a result, competitive advantage is an important factor in the work of an organisation.

In summary, the direct relationship between the expected value of customers and the value provided by the organisation is called competitive advantage. It can be said that an organisation achieves a higher competitive advantage than its competitors in the same field of industry if the values provided by the economic units are close to the expected value of the customers compared to the values provided by the competitors.

Importance of Competitive Advantage

The Importance of Competitive advantage can be summarised as below (Hasoon et.al.,2012:15):

1. It is widely known that strategic management is based on competitive advantage. Also, research shows that it is equivalent to competitive advantage.
2. The competitive strategy of an organisation is based on competitive advantage . The resources and capacities of organisations are developed in to support competitive advantage which are essential to survival .
3. It is an organisational tool to address the challenges of competitors and the market, supporting them to quickly respond to customers' needs.
4. Competitive advantage enables the organisation to get a greater market share than its competitors which increases both sales volume and profits.
5. Competitive advantage is the catalyst and engine of an organisation to strengthen and develop its capacity and resources and push for development and research to maintain and strengthen this feature.

Finding competitive advantage in comparison to what competitors offer is the essence of marketing strategy, as competitive advantage contributes to the following (Jaber et.al.,2008:186):

1. Market power is achieved by controlling the market share of goods and services in the targeted market.
2. Development of goods and services.
3. Creation of new and specialised markets.
4. Creation of new distribution outlets.
5. Development of new technology that reduces the cost of a commodity or brand.
6. Creation of new raw materials.
7. Development of strong financial centres for the organisation .

Kinds of Competitive advantage

Lower Cost Advantage

Cost-management strategy is in accordance with the ability of an organisation to produce products and services at a lower cost than its competitors. The fundamental assumption pivoting the least cost strategy is to obtain real cost advantage over competitors and their ability to achieve a higher return on profit than results of selling products at current market prices. Products or services provided under this feature are highly standardised but not to the standard of taste and needs of an individual customer (Bordes,2009:5) .

Excellence Feature

Differentiation strategy offers unique products and services to customers in comparison to other competitors in the same industry. The underlying assumption behind the excellence strategy states that customers want to pay high prices to buy unique or distinctive products. A product is of high quality as a result of the purchase of products or services. In many ways, the strategy of excellence is achieved through the production of products using high quality materials or creativity in product design. If the products are presented in a special or unique way, customers will usually pay higher prices (Bordes, 2009:5).

The Competitive Advantage Dimension

According to Porter (1980), excellence and low cost are two fundamental strategies to gain value and competitive advantage in an industry. According to the author, competitive advantage with high profit is achieved by organisations that can bring high value to the table. Reducing the cost of business and creating excellence in a product is the way to find this value and make the consumer willing to pay extra charges. The four dimensions of

competitive advantage are high innovation, quick response to customers, high quality and high efficiency. These dimensions are comprehensive enough to be employed. Any organisation can adopt these features irrespective of the industry in which it operates and the products and services provided for the customers.

The competitive advantage dimension can be illustrated by the following (Hasoon et.al.,2012:17-19) (Diab,2014:139-141):

High Efficiency

Efficiency is the ratio of output to input required for achievements; the means of converting inputs into outputs. Inputs are the major factors of production such as management, land, capital, technological know-how and human effort. The goods and services produced by the company are referred to as outputs i.e. the amount of inputs required to produce certain outputs is the simplest measure of efficiency. Worker productivity is the most important issue for efficiency, which concerns most organisations. It is measured by the number of units produced per worker.

High Quality

Reliable goods and services are quality products in terms of work performance which they are designed for. A product's high quality is the a result of competitive advantage from two perspectives: first, in the eyes of the consumer, the product is increased in value by the provision of a high quality product; second, the company can present a high price for a product and the customer will still buy the product due to its high quality.

High Innovation

Innovation is regarded as something unusual or new in a way a company works or in the production it provides. Innovation comprises of the strategies developed by a company, production process, product types, organisational structure and management system. It could be the most important sign of competitive advantage. Competition can be seen in the long-term as a process driven by innovations.

Quick Response to Customer

The organisation must be able to meet the needs of its customers effectively and perform better than its competitors in order to achieve high customer response. If this is duly followed by the organisation, the product will be evaluated higher by the consumers than other competing organisations; thus, the competitive advantage of the organisation is strengthened.

The key part of achieving high customer responsiveness is by achieving innovation and high quality. Manufacturing of goods and provision of services as requested by a group or individual is another important factor in responding to the customer.

Theoretical Framework Development

Responsible Accounting and Its Role in achieving Competitive Advantage

The Relationship between Responsible accounting and Competitive Advantage

In many organisations, responsible accounting has become an essential tool to improve the efficiency of an organisation to support its competitive position. Various organisations facilitate their tasks by dividing the organisation's department into responsible administrative units in order to control the huge amount of information necessary to manage it. The information is accurately documented to all levels of management in an appropriate and timely manner in order to make rational decisions that contribute to the achievement of objectives. Thus, competitive advantage from each unit is achieved.

One of the methods of contributing to achieving competitive advantage is the development of a responsible accounting system and the activation of its role in the management of all organisations. Responsible accounting system is a scientific and comprehensive system that connects the accounting system and administrative organisation through the organisational division into responsibility centres and the performance of people responsible for it.

In fact, responsible accounting is the development of cost accounting for the limitation of liability for uses. Its framework covers liability for resources of all types of organisations and their negative or positive consequences which automatically affect the efficiency of the functioning of any unit in a business organisation. It also affects the efficiency of the organisation as a whole and its competitive advantage.

As a result of the increasing competitiveness of organisations, modern strategies for the management of organisations are constantly evolving. Organisations that remain at the forefront are those incorporate administrative and strategy departments which are based on cost and quality. The organisation employing modern strategies is always at the forefront and achieves the following advantages:

- The prices of products or services provided by the organisation are always low as the cost centre focuses on reduced cost compared to other competing organisations.
- The Investment Centre monitors the continuous improvement of the organisation and the quality improvement.

The Role of Responsible Accounting in Supporting Competitive Advantage

During the early 1980s and late 1990s, Japanese management played a crucial role in this paradigm by producing high quality goods that could be achieved with low costs. Success was therefore achieved due to its reliance on quality control units and the use of comprehensive quality management that is widely applied in various fields of service productivity. The strategic role of responsible accounting is recognised as it enhances the competitiveness of an enterprise where management is most effective in pursuing differentiation, concentration and cost-cutting methods through responsible centres.

The implementation of responsible accounting leads to several successes that show its importance as follow (Anter, 2008:178):

- Consumer complaints and quality costs are reduced, thereby contributing to customer satisfaction.
- Increase in profits and productivity, thereby resulting in higher market share.
- Accidents and problems at work are reduced which leads to raising administrative efficiency and productivity.
- Quality of products is achieved through multiple benefits and savings in the costs and deadlines of production processes.
- Improvement in communication between different levels of the organisation in order to ensure effective participation of all members in improving performance.
- TQM emphasises that responding and listening to customer desires is the most sustainable way for an organisation to achieve leadership and success. Its fundamentals are derived from the highest levels of customer satisfaction and the way existing customers are maintained.

The Role of Responsible Accounting in Supporting Competitive Advantage of Cost

Cost is the key element in all responsibility centres and one of the most important tools of responsible accounting. responsible accounting tools are elements of modern cost management that are used to achieve management objectives of planning, organisation, production and control. They are also used to enhance the competitiveness of the enterprise.

The cost of target is defined as a tool of cost management to minimise the cost of the product during the design, planning and development phase of product life cycle phases. In other words, it is defined as a tool used during the planning cycle that leads to a trade-off between alternative product designs and the production process. The tool is used to choose other options that can be produced at a cost that allows for a high level of profit in accordance with specific data namely: product target positions, the estimated market price of the product and the target sales volume.

The target cost is summarised below (Zarab, 2012:48) :

1. Reduction in the cost of the product before its occurrence which is the main objective of the target cost method.
2. Improvement and increase in product quality and its excellence through the provision of time. This will reduce the target time from the start of execution to produce the product to when it is finally submitted to customers.
3. Providing the benefits of belonging to the employees by improving the competitive position of the company while this effort leads to cost reduction
4. Considering the wishes and needs of the customer, the target cost method focuses on examining the external environment of the company. The potential circumstances of competitors and the specifications and characteristics of the product can determine the company's competitive advantage.
5. The management of product variety which determines the product's target cost is the competitive cost that is derived from the external market reality in comparison with product costs.

Performance Reports of Responsibility Centres and Competitive Advantage

Performance Report is a means of evaluating and measuring performance in terms of operations and finance to support the process of achieving competitive advantage. This is achieved through translating the company strategy into cost reduction and as a means of controlling, reducing and managing costs. Performance reports are based on important tools listed below (Zarab, 2012:46):

- The cause and effect of links through strategic maps to reflect how these links are strengthened and identified
- Translation of the company's strategy and vision into operational goals and plans
- Balanced benchmark which refers to previous performance and benchmarks that drive or motivate performance such as measuring complaints
- Balance objective measures such as financial standards that are subject to personal judgment such as customer satisfaction standards
- Clear definition of responsibilities for each department and its accountability
- An effective foundation for decision making as the information provided by the system helps management make the right decision
- Achieving the company's strategic objectives by working in parallel at all levels and between all activities
- Treatment of deficiencies by detecting weaknesses in the performance of various circuits
- Improving company capabilities by coordinating between different company departments and working together in parallel to achieving results and objectives.



- Creating balance between short-term and long-term measurements and internal and external scales.
- Ability to measure and analyse activities and processes.
- Connecting company objectives to the incentive system
- Achieving company objectives in the most efficient and effective way.

Result and Analysis

There are 60 representatives who are university professors and department managers of organisations and professionals working in the field of accounting. Questionnaire sections were divided into three parts:

Part 1: For the purpose of applying responsible accounting, the basic elements of the application of responsible accounting consist of a set of elements to be followed by the organisation. These elements include a set of questions showing the results of the respondents' opinion related to this dimension.

Table 1: Results of the statistical measures of questions for basic elements of the application of responsible accounting

Item No	Measures	Measure	Strongly agree	Agree	Not sure	Not agree	Strongly not agree	Mean	Standard deviation	Difference coefficient%	Relative importance %	Conclusion
1	Organisational structure clarifies the powers and responsibilities of each centres of responsibility	frequency	1	15	15	24	5	2.7	1	36.6	54	Not sure
		Percentage	1.7	25	25	40	8.3					
2	Defining responsibility centres and classifying them into investment centre, cost centre, profit centre and revenue centre	frequency	4	34	11	10	1	3.5	0.9	26	70	Agree
		Percentage	6.7	56.7	18.3	16.7	1.7					
3	Revenue and cost are linked to the responsibility centre	frequency	7	24	15	11	3	3.4	1.1	32	68	Not sure
		Percentage	11.7	40	25	18.3	5					
4	Classification of costs into: unconscionable costs and controlled costs	frequency	2	25	14	17	2	3.1	1	31.4	62	Not sure
		Percentage	3.3	41.7	23.3	28.3	3.3					
5	Use of supervisory means such as planning budgets and standard costs for	frequency	9	33	10	6	2	3.7	1	26.2	74	Agree
		Percentage	15	55	16.	10	3.3					

	each responsibility centre				7							
6	Collecting data on the actual performance of the centres of responsibility by designing an accounting information system	frequency	8	31	12	5	3	3.7	1	28.5	74	Agree
		Percentage	13.6	52.5	20.3	8.5	5.1					
7	The direct use of budget data and periodic reports by the president in follow-up and decision-making	frequency	9	33	10	6	2	3.7	1	26.2	74	Agree
		Percentage	15	55	16.7	10	3.3					
8	Determine fair prices to convert products between different responsibility centres	frequency	5	27	14	12	1	3.5	1.1	30.9	70	Agree



Part 2 : This section covers the competitive advantage and the procedures followed in creating it. The organisation must follow these procedures in order to achieve competitive advantage in providing products and services. The procedures that must be followed to achieve competitive advantage with a set of questions are shown in the following table which shows the results of opinions from respondents :

Table 2: Results of statistical measures of questions the procedures that must be followed to achieve competitive advantage

Item No	Measures	Measure	Strongly agree	Agree	Not sure	Not agree	Strongly not agree	Mean	Standard deviation	Difference coefficient%	Relative importance%	Conclusion
1	Determine customers' expectations in the context of characteristics and performance of products offered by the organisation	frequency	8	29	12	11	0	3.6	0.9	26.5	72	Agree
		Percentage	13.3	48.3	20	18.3	0					
2	Analyse competitor capabilities, product costs and components	frequency	14	29	12	5	0	3.9	0.9	22.6	78	



	Determine grade between all products or services of similar functions with which the organisation wishes to compete	Percentage	23.3	48.3	20	8.3	0					Agree
3	Identify product specifications that match product features and international quality standards	frequency	9	26	13	10	2	3.5	1	30	70	

	Focus on the quality of product design when measuring the overall quality of the product	Percentage	15	43.3	21.7	16.7	3.3					Agree
4	Produce products at low cost	frequency	8	26	16	5	5	3.5	1.1	31.8	70	Agree
		Percentage	13.3	43.3	26.7	8.3	8.3					
5	Analyse competitor capabilities, product costs and components	frequency	7	28	10	9	6	3.4	1.2	35.1	68	

	Determine the grade between all products or services of similar functions that the organisation wishes to compete with	Percentage	11.7	46.7	16.7	15	10					Unsure
6	Identify product specifications that match product features and international quality standards	frequency	9	33	10	6	2	3.7	1	26.2	74	



	Focus on the quality of product design when measuring the overall quality of the product	Percentage	15	55	16.7	10	3.3					Agree
7	Produce products at low cost	frequency	13	29	11	4	3	3.8	1	27.6	76	Agree
		Percentage	21.7	48.3	18.3	6.7	5					



Part 3: This section covers Responsible Accounting and its role in achieving Competitive Advantage. It is concerned with the implementation of accounting in an organisation to achieve competitive advantage of their units. The section includes a set of questions related to the implementation of responsible accounting in an organisation and their role in achieving competitive advantage of products and services provided to customers. Table 3 presents the items of the questions.

Table 3: Results of statistical measures of questions related to Responsible Accounting and its Role in Achieving Competitive advantage

Item No	Measures	Measure	Strongly agree	Agree	Not sure	Not agree	Strongly not agree	Mean	Standard deviation	Difference coefficient%	Relative importance%	Conclusion
1	Calculation of actual performance of each centre of responsibility	frequency	7	32	11	9	1	3.6	0.9	26.3	72	Agree
		Percentage	11.7	53.3	18.3	15	1.7					
2	Calculate of deviation and evaluate the performance of each centre of responsibility by comparing planned performance with actual performance	frequency	8	33	14	4	1	3.7	0.8	22.8	74	Agree
		Percentage	13.3	55	23.3	6.7	1.7					



3	Comparing actual costs with standard or planned costs for each responsibility centre to reduce production cost	frequency	8	27	15	6	4	3.5	1.1	30.6	70	Agree
		Percentage	13.3	45	25	10	6.7					

4	Compare actual sales with planned sales for each center by increasing sales of revenue centres and accounting of centre managers for any decrease in sales for each centre	frequency	8	33	8	8	3	3.6	1	29.2	72
		Percentage	13.3	55	13.3	13.3	5				
5	Increased profitability in profit centres due to increased market share of organisation	frequency	9	26	16	8	1	3.6	1	27	72

	sales	Percentage	15	43.3	26.7	13.3	1.7					Agree
6	Further improvement in product quality manufactured at the centres of responsibility and deliver those products on time	frequency	10	34	9	6	1	3.8	0.9	24.1	76	Agree
		Percentage	16.7	56.7	15	10	1.7					



7	Improving the competitive position of the organisation through the managers of economic responsibility centres of the organisation to reduce cost	frequency	9	24	15	11	1	3.5	1	29.2	70	Agree
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The following table shows the total statistical measures for each of the three sections:

Table 4: The total results of the Statistical Measures of the questionnaire Items for the three Sections

Item	Sections	Mean	Standard deviation	Difference coefficient%	Relative importance %	Conclusion
1	Responsible Accounting	3.4	0.6	17.8	68	Not sure
2	Competitive advantage	3.6	0.8	23	72	Agree
3	Responsible Accounting and its Role in achieving Competitive Advantage	3.6	0.8	23.5	72	Agree

Table 4 shows following results:

1. From the first measurement, the total results of the arithmetical mean is the basic components of the application of responsible accounting with a value of 3.4. This indicates that there is an agreement on the basic elements to be followed by the organisation to conduct responsible accounting and the relative importance of the results of this questionnaire (68%).
2. For the second measurement, the total value of competitive advantage and the procedures of construction has an arithmetic mean of 3.6. The result shows that there is agreement in the research sample on the procedures to be followed by the organisation for the purpose of achieving competitive advantage.
3. For the third measurement, the total value for responsible accounting for achieving competitive advantage has an arithmetic mean of 3.6. This shows that, there is a purpose to apply responsible accounting within an organisation in order to achieve competitive advantage for the product and service of units.

To achieve competitive advantage, the impact of using responsible accounting can be calculated through the following table:

Table 5: The Impact of Responsible Accounting in Achieving Competitive advantage

Independent variables	The value of influence		Conclusion	F statistic		R ²
	β	Sig		F	Sig	
Responsible accounting	0.95196	0.0091	Significant	52.79	0.015	0.51

The following points are noted by observing Table 5 above:

1. The coefficient of β is 0.95196, which means that there is a positive relationship between the impact of responsible accounting and its role in achieving competitive advantage
2. The level of significance is 0.0091. this value shows that the effect is significant between the Responsible Accounting and its role in achieving competitive advantage
3. The R-squared is 0.51 which indicates that the model for the relationship between responsible accounting and competitive advantage is correct.

Conclusion and Recommendation

Conclusion

According to the above results this study derived the following conclusions:

1. Responsible accounting is a regulatory system that is based on the principles of delegation of powers and responsibilities to the centre managers within an organisation by dividing the organisation into a revenue centre, profit centre, cost centre and investment centre.
2. Responsible accounting allows the management of an organisation to make short-term decisions such as accepting or rejecting an offer, allocate scarce resources, add or exclude an operational line and decisions regarding purchasing manufacturing .
3. Increase in the quality of products or services provided by the organisation is achieved by the application of responsible accounting. This is done through the concentration of responsibility centres to achieve quality in the manufacture of products based on the wishes of customers.
4. An organisation is helped to achieve competitive advantage by the application of responsible accounting through the following: the Investment Centre shall monitor continuous improvement within the organisation and improve the quality of manufacturing of products and services to customers; the concentration of cost centres regarding manufacturing at low cost is reflected in the supply of products at low prices that have the ability to compete with existing products in the market.

Recommendation

From the conclusions highlighted above, this study recommends the following points for future study and for organisation to follow:

1. Within all organisations in Iraq, there is a need to conduct training courses at all level of the industrial and agricultural sector. The officials and managers of those units should be educated regarding the concept of Responsible Accounting and the importance of implementation .



2. Necessary requirements should be provided for the restructuring of organisation to be managed by the responsibility of the revenue centre, profit centre, cost centre and investment centre.
3. The powers and responsibilities of each centre should be well-defined. Centre managers should be aware of responsibility and accountability and try to comply with these plans by using each resource .

Changes in the taste of customers and developments in the environment should be followed up through provision of an information network between the centres of responsibility and the external environment in such a way that leads to responsibility centres. The centre for the production of goods and the cost centre are meant to satisfy the desires and needs of customers at a low cost with continuous improvement of products and services in such a way that leads to the competitive advantage of the organisation to increase market shares.



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