

Correlation between Conventional and Modern Methods of Accounting

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Abstract

The particular article shades light on the concept of conventional accounting and modern accounting methods. Conventional accounting refers to the traditional way of recording accounting information where any type of technology is not used whereas the modern accounting method refers to the use of modern technologies and software. The study includes brief discussion about both of these methods of accounting but it majorly focuses on the correlation between conventional accounting and modern accounting methods. Cash book and ledger are the instruments of conventional accounting methods whereas asset, liability, revenue, capital, drawings and expenses are the instruments or methods of modern accounting. There are vital differences between conventional accounting and modern accounting methods. In regard to this, specific sources and methods are used for gathering data and evaluating them.

It is important to maintain a proper structure while evaluating findings and data for making it meaningful to the readers. Primary quantitative design has been adopted and a survey has been conducted among 51 accounting managers of different companies. Furthermore, SPSS software and Excel are used as the instruments which help in generating graphs and statistics from the collected numerical data and findings. Using these instruments and primary sources was appropriate for conducting a quantitative study with genuine data discussing the correlation between conventional accounting and modern accounting methods.

Keywords

Conventional Accounting, Financial Management, Modern Accounting Methods, Modern Technologies, Transaction Management.

INTRODUCTION

Background of the study

Conventional accounting and modern accounting methods are the major focuses of this study which are used for keeping the records of business transactions. Business organisations have to spend expenses on different activities and operations and it is important for the companies to record the transaction history for financial management. It is identified that the conventional accounting method is the oldest and traditional accounting system in which transactions are recorded with less details and is useful for tracking incomplete business transactions [1]. Apart from that modern method of accounting refers to the use of modern technology and applications for completing the accounting processes without repetitive tasks and human errors. Comparatively modern accounting methods are more capable than conventional accounting methods. There are severe differences between conventional accounting and modern accounting methods but the study emphasises the core relation between these two methods of accounting.

Aim and objectives

The study reveals the connection between conventional methods and modern methods of accounting which is a very important part of business organisations. Considering this goal particular objectives of the study are,

- To understand the concept of conventional accounting and the significance of conventional accounting methods in financial management

- To demonstrate the modern methods of accounting widely used in business organisations and its crucial role in financial management
- To identify the correlation between conventional accounting and modern methods of accounting in recent times

Significance of the study

There are many previously published journals and articles which tell about conventional accounting methods and modern accounting methods but there are specific descriptions for both of these methods and their significance in the accounting process. A few of the articles discuss the differences between these two types of accounting methods whereas the articles do not include the connection between these two accounting methods. Hence the particular research article briefly discusses the correlation between conventional accounting and modern accounting methods which builds the significance of this study. Apart from that the use of SPSS software for specifically generating statistics and graphs are also capable of sustaining the significance of this study.

METHODS

Research design

Using a particular research design is important for contacting the research study with a specific structure. Qualitative and quantitative are the two categories of research designs that are widely used in research studies with different purposes. Both of the designs are specifically significant and relevant for being used in a research study.

Although there are many articles which emphasise the modern methods of accounting and conventional accounting methods which can be reviewed through qualitative design, the *quantitative design* has been chosen for this study in order to use original data only. In regard to this quantitative design refers to the collection of numerical data and evaluating them quantitatively [2]. Particular methods and sources are used for conducting the study in quantitative design which are discussed below.

Data collection technique

Choosing a particular source for data collection is based on the design that has been chosen as there are different sources for gathering different types of data. Quantitative research design has been chosen for this particular study which supports two types of data such as primary data and secondary data. *Primary quantitative data* can be collected by conducting a survey whereas secondary quantitative data can be collected by observing specific reports [3]. It is more relevant to *survey* accounting managers of different companies for gathering relevant information about conventional accounting and modern accounting methods than reviewing company reports. Therefore, a survey has been conducted and a *questionnaire with 10 questions* was used as the instrument for this study.

Inclusion and exclusion criteria

Some exclusion and inclusion criteria have been followed while gathering data and collecting samples in order to maintain the relevance of this article. Opinions of the accounting managers who have been working in companies at least for more than 4 years were only collected for ensuring the validity and reliability of collected data. This particular criterion ensures that all the participants who have provided their opinions have adequate knowledge about the methods of accounting.

Sample selection

Based on the specific criteria samples are collected from a total of 51 respondents. managing time for the accounting managers was quite difficult but these participants had adequate knowledge about conventional methods and modern methods of accounting. Hence the opinions and answers of the participants have been collected as samples for this study.

Data analysis technique

Data analysis is one of the critical factors of research studies and it is important to adopt appropriate methods and techniques for evaluating all the collected findings in a proper and meaningful way. Choosing a method for data analysis is based on the research design. Quantitative design has been chosen and numerical data are collected by the survey therefore the *statistical analysis process* is accurate for evaluating all the findings quantitatively. Statistical analysis is all about evaluating the main statistics, regression statistics, correlation statistics and others for achieving the objectives of the research study [4]. *SPSS software and*

Excel are the two main instruments that are used for generating the statistics from the collected raw data which also help in generating graphs. Therefore, statistical analysis with the presentation of the graph not only enhances the understanding of the findings but also sustains the significance and relevance of this study.

RESULTS

Frequency analysis

		Statistics									
		Age	Gender	Financial transactions pertaining are better in both conventional and modern accounting processes.	The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations	Following the specific rules under the accounting process it is necessary to maintain consistency	The modern accounting process has made the transaction system easy and flexible	The main difference between conventional and modern management accounting is its reporting speed and accuracy	The main aim of both conventional and modern management accounting is to analyse, summarise, and record expenses	Accounting sectors are following the customer-seeking behaviour to serve the accounting process	Modern management accounting has a sustainable competitive advantage compared to conventional management accounting
N	Valid	51	51	51	51	51	51	51	51	51	51
	Missing	0	0	0	0	0	0	0	0	0	0
	Mean	1.37	.63	2.98	3.39	2.94	2.71	3.53	2.47	3.16	2.61
	Median	1.00	1.00	3.00	4.00	3.00	3.00	4.00	3.00	4.00	3.00
	Mode	1	1	4	4	4	4	4	4	4	4
	Std. Deviation	.999	.599	1.288	1.115	1.223	1.375	1.007	1.433	1.206	1.218
	Variance	.998	.358	1.660	1.243	1.496	1.892	1.014	2.054	1.455	1.483
	Minimum	0	0	0	0	0	0	0	0	0	0
	Maximum	3	2	4	4	4	4	4	4	4	4
	Sum	70	32	152	173	150	138	180	126	161	133

Figure 1: Frequency analysis (Source: SPSS)

In the SPSS analysis, the “frequency analysis” table basically highlights the frequency that exists between the research variables. In this table, “mean value” and “median value” are the main components that help to identify the frequency among research variables [5]. According to the research variables of this study the “mean values” have become *1.37, 0.63, 2.98, 3.39, 2.94, 2.71, 3.53, 2.47, 3.16, and 2.61* in the above table. Along with this, the “median values” of the existing research variables are *1, 1, 3, 4, 3, 3, 4, 3, 4, and 3*. Based on these values it can be analysed that among the research variables, there is an optimistic connection and the frequency is also accurate which defines the authenticity of using the values in the research process.

Descriptive analysis

The “descriptive statistics” table is another valuable table that is engaged in analysing the interconnection between the existing research variables of the particular research study. This table is associated with the process of summarising the entire collected data and information to present a comprehensible study paper [6]. Following the “standard deviation” value basically, the interpretation of the descriptive table has been done to state the level of relationship between research variables. According to the above table, the “standard deviation” values of the research variables have become *0.999, 0.599, 1.288, 1.115, 1.223, 1.375, 1.007, 1.433, 1.206, and 1.218*. These values highlight that among the existing research variables, an optimistic relationship has been maintained which is supportive of analyses the data in a better way.

In this survey process, four different age groups were created to help to recognise which age group has considerable knowledge regarding conventional and modern methods of accounting. The first group contains *19.61%* of people under

the “18-25 years age group”. The second group contains **41.18%** of people under the “26-35 years age group”. The third group contains **21.57%** of people under the “36-45 years age group”. The fourth group contains **17.65%** of people under the “up to 45 years age group”. It indicated that the “26-35 years age group” people had a greater idea regarding conventional and modern methods of accounting. Contradictory, among the “up to 45 years age group” people had less knowledge regarding this matter.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Age	51	0	3	1.37	.999
Gender	51	0	2	.63	.599
Financial transactions pertaining are better in both conventional and modern accounting processes.	51	0	4	2.98	1.288
The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations	51	0	4	3.39	1.115
Following the specific rules under the accounting process is necessary to maintain consistency	51	0	4	2.94	1.223
The modern accounting process has made the transaction system easy and flexible	51	0	4	2.71	1.375
The main difference between conventional and modern management accounting is its reporting speed and accuracy	51	0	4	3.53	1.007
The main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses	51	0	4	2.47	1.433
Accounting sectors are following the customer-seeking expense behaviour to serve the accounting process	51	0	4	3.16	1.206
Modern management accounting has a sustainable competitive advantage compared to conventional management accounting.	51	0	4	2.61	1.218
Valid N (listwise)	51				

Figure 2: Descriptive statistics (Source: SPSS)

Pie graph analysis

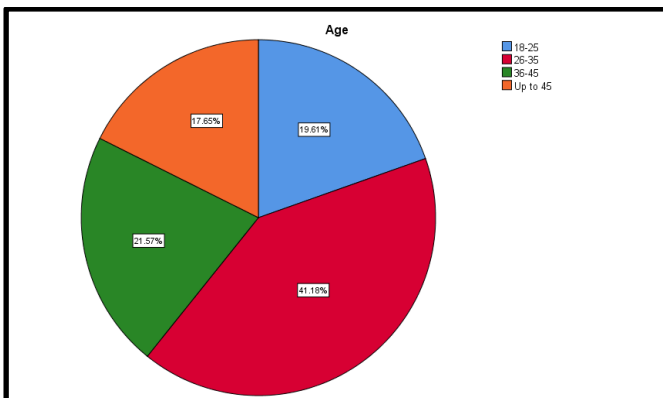


Figure 3: Age (Source: SPSS)

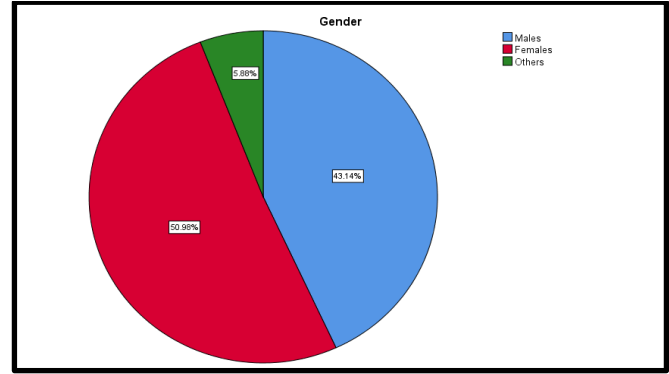


Figure 4: Gender (Source: SPSS)

The researcher also has subdivided the gender into three different groups to understand which gender group has considerable knowledge regarding conventional and modern methods of accounting. In the survey, **43.14%** of the population was male participants whereas **50.98%** of the population was female participants. Contradictory, the other gender group contains only **5.88%** which indicated that they had little knowledge regarding the subject. The result has shown females had a greater idea about conventional and modern methods of accounting compared to the other groups. This gender group has also highlighted that the researcher has allowed all the genders to participate in the survey process, which showed protect against the gender discrimination process.

Following the survey result it can be understood that **47.06%** of the population strongly acknowledged that financial transactions pertaining are better in both conventional and modern accounting processes. In this regard, **29.41%** of the population also acknowledged it. Apart from it, **5.88%** of the population was neutral as they did not find either benefit not barrier in these both kinds of transaction processes. **9.80%** of the population also denied whereas **7.84%** of the population also strongly denied it as they did not gain any kind of experience.

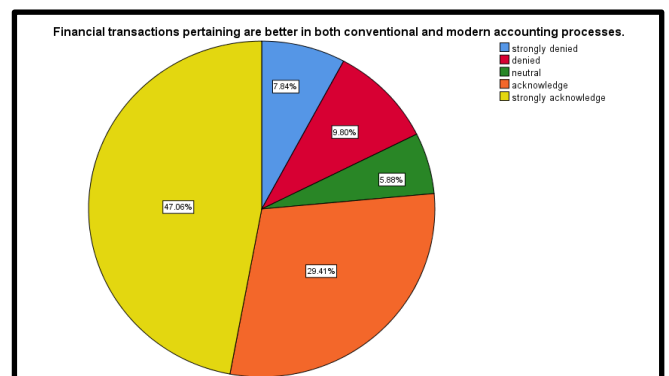


Figure 5: Financial transactions pertaining are better in both conventional and modern accounting processes (Source: SPSS)

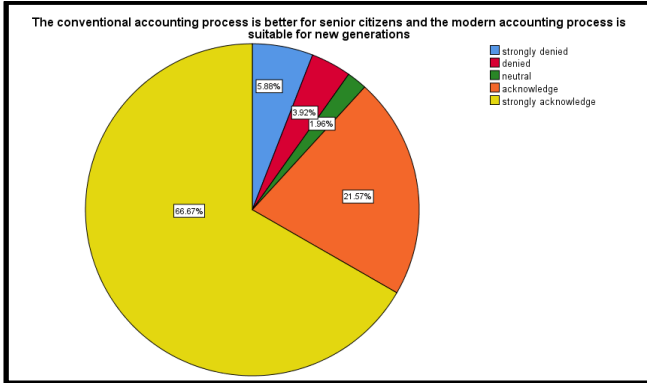


Figure 6: The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations (Source: SPSS)

Regarding the matter of conventional and modern accounting processes, **66.67%** of people have strongly acknowledged and **21.57%** of people acknowledged that conventional is better for senior citizens and the modern is suitable for new generations. **1.96%** of people did not decide what need to answer they remained neutral. **3.92%** of people denied and **5.88%** of people strongly denied it. As the majority of the population has agreed, it can be stated that operating a modern accounting system is difficult for senior citizens.

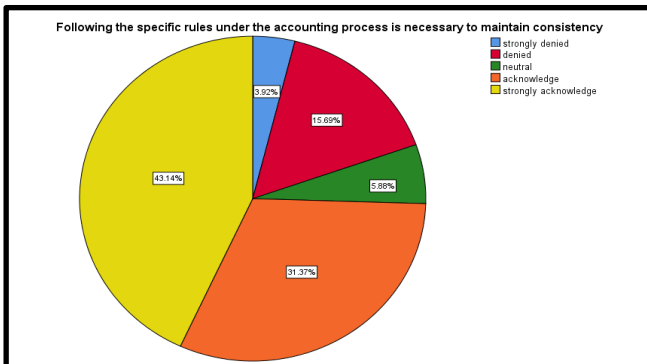


Figure 7: Following the specific rules under the accounting process is necessary to maintain consistency (Source: SPSS)

Based on the above pie chart, it has been observed that there are **43.14%** of respondents strongly acknowledged and **31.37%** of respondents acknowledged this statement positively. As **5.88%** of respondents did not determine what is right, they prefer to be neutral. Thus, **15.69%** of respondents denied whereas **3.92%** of respondents strongly denied it. It has become understood based on the maximum response that following the specific rules under the accounting process is necessary to maintain consistency. As rules are always maintain the path in a correct order, it has identified useful.

Depending on the survey result most of the people who participated in the survey process strongly acknowledged become **37.25%** and acknowledged becomes **29.41%**. It emphasised that the modern accounting process has made the transaction system easy and flexible. Due to limited knowledge about it, **11.76%** of people prefer to be neutral in

this statement. Contradictory, there were **9.80%** of people denied it whereas **11.76%** people strongly denied it as they could not operate modern accounting processes.

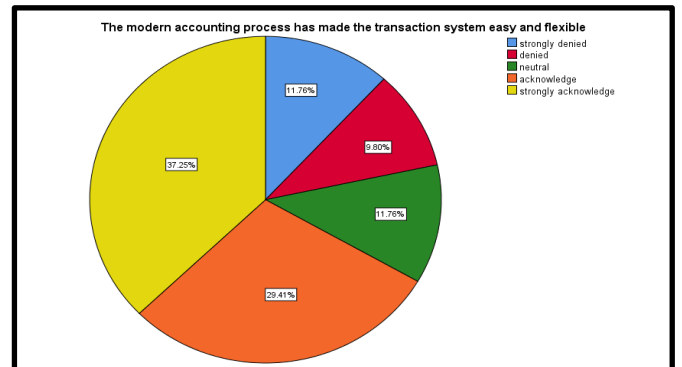


Figure 8: The modern accounting process has made the transaction system easy and flexible (Source: SPSS)

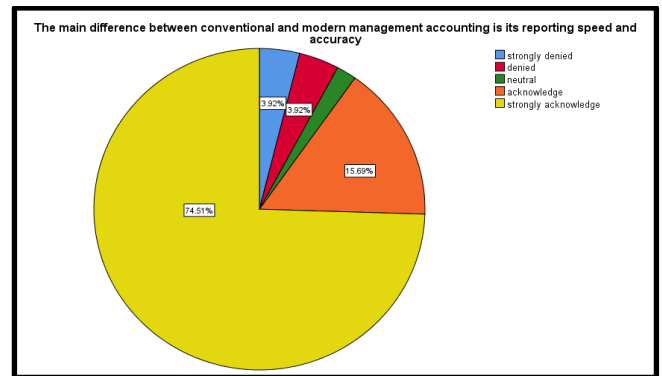


Figure 9: The main difference between conventional and modern management accounting is its reporting speed and accuracy (Source: SPSS)

Regarding the matter of identifying differences, **74.51%** of people have strongly acknowledged and **15.69%** of people acknowledged that there is a main difference in reporting speed and accuracy. **1.96%** of people did not decide what need to answer they remained neutral. **3.92%** of people denied and **5.88%** of people strongly denied it. As the majority of the population has agreed, it can be stated that reporting speed and accuracy is the main difference between conventional and modern management accounting.

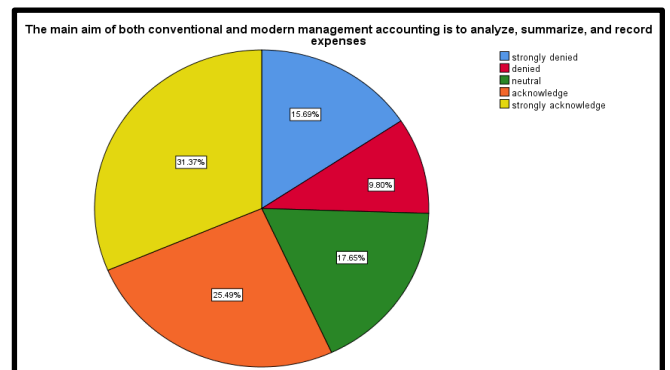


Figure 10: The main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses (Source: SPSS)

Following the survey result it can be understood that **31.37%** of the population strongly acknowledged that the main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses. In this regard, **25.49%** of the population also acknowledged it. Apart from it, **17.65%** of the population was neutral as they did not find either benefits not barriers in these transaction processes. **9.80%** of the population also denied whereas **15.69%** of the population also strongly denied it as they did not gain any kind of experience.

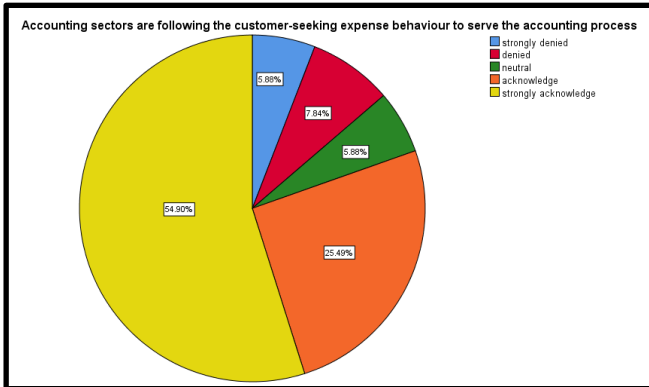


Figure 11: Accounting sectors are following the customer-seeking expense behaviour to serve the accounting process (Source: SPSS)

In the section on accounting sectors, the majority of the population who have participated in the survey process, strongly acknowledged that customers’ preferences are the main concern. It has proved as the greater percentage has become **54.90%** strongly acknowledged and **25.49%** acknowledged. Thus, **5.88%** of people remained neutral as they did not found any idea. In this similar statement, **7.84%** of people denied and **5.88%** of people strongly denied it. The maximum percentage has highlighted that depending on customers’ behaviour the accounting process can be changed.

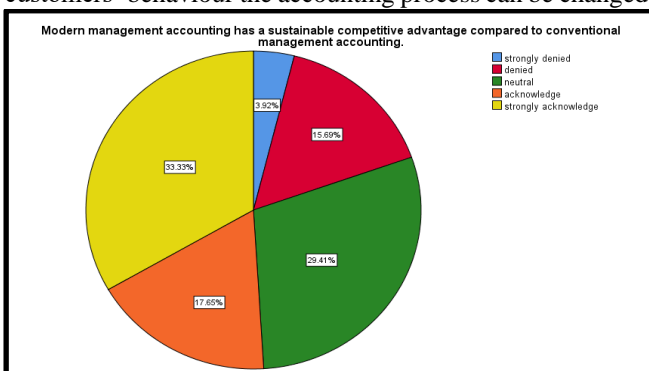


Figure 12: Modern management accounting has a sustainable competitive advantage compared to conventional management accounting (Source: SPSS)

Based on the above pie chart, it has been observed that there are **33.33%** of the population strongly acknowledged and **17.65%** of the population acknowledged this statement. It showed that really modern management accounting has a sustainable competitive advantage compared to conventional

management accounting. **29.41%** of the population did not determine what is right, they persisted neutral. As a large percentage of people remained neutral it showed that they had no proper knowledge. Thus, **15.69%** of respondents denied whereas **3.92%** of respondents strongly denied it. It has become understood based on the maximum response that the modern accounting process has become under demand.

Correlation analysis

	Age	Gender	Financial transactions pertaining are better in both conventional and modern accounting process.	The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations.	Following the specific rules under the accounting process is necessary to maintain consistency.	The modern accounting process has made the transaction system easy and flexible.	The main difference between conventional and modern management accounting is to analyze, summarize, and record expenses.	The main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses.	Accounting sectors are following the customer-seeking behaviour to serve the accounting process.	Modern management accounting has a sustainable competitive advantage compared to conventional management accounting.	
Age	1	.772**	.814*	.838**	.853**	.867**	.595*	.881**	.764*	.911**	
			.000	.000	.000	.000	.000	.000	.000	.000	
Gender		1	.716*	.583*	.734**	.763**	.500*	.836**	.720**	.811**	
			.000	.000	.000	.000	.000	.000	.000	.000	
Financial transactions pertaining are better in both conventional and modern accounting process.			1	.51	.51	.51	.51	.51	.51	.51	
				.000	.000	.000	.000	.000	.000	.000	
The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations.				1	.838**	.867**	.844**	.871**	.828**	.844**	
					.000	.000	.000	.000	.000	.000	
Following the specific rules under the accounting process is necessary to maintain consistency.					1	.853**	.851**	.851**	.851**	.851**	
						.000	.000	.000	.000	.000	
The modern accounting process has made the transaction system easy and flexible.						1	.867**	.867**	.867**	.867**	
							.000	.000	.000	.000	
The main difference between conventional and modern management accounting is to analyze, summarize, and record expenses.							1	.595*	.595*	.595*	
								.000	.000	.000	
The main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses.								1	.881**	.881**	
									.000	.000	
Accounting sectors are following the customer-seeking behaviour to serve the accounting process.									1	.877**	
										.000	
Modern management accounting has a sustainable competitive advantage compared to conventional management accounting.										1	
											.000

Figure 13: Correlation analysis (Source: SPSS)

Identifying the current status of the linear relationship among the existing research variables, the “correlation analysis” table is the most perfect table. This study is focusing on evaluating the correlation between “conventional and modern methods of accounting”. In this context, analysing “correlation analysis” is helpful. Based on the rule of this table, it has been found that the data will be justifiable if the values of this table have become greater than 0 [7]. Following the above table, it has been observed that there were a few numerical data which are less than 0 as well as large than 0. These values indicate that among the existing research variables of this study, an optimistic connection is present. It emphasises that all the collected data are accurate and applicable for interpreting in this study paper.

Regression analysis

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	79.595	7	11.371	144.441	.000 ^b
	Residual	3.385	43	.079		
	Total	82.980	50			

a. Dependent Variable: Financial transactions pertaining are better in both conventional and modern accounting processes.
b. Predictors: (Constant), Modern management accounting has a sustainable competitive advantage compared to conventional management accounting. , The main difference between conventional and modern management accounting is its reporting speed and accuracy. The modern accounting process has made the transaction system easy and flexible. Accounting sectors are following the customer-seeking expense behaviour to serve the accounting process. Following the specific rules under the accounting process is necessary to maintain consistency. The main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses. The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations

Figure 14: ANOVA analysis (Source: SPSS)

The identification of authentication and quantifying the data can be possible with the help of the ANOVA analysis table. According to the rule of this table, if the “significant value” becomes <0.001 , the data will be considered valid [8]. In the above table, the “significant value” becomes 0 which is less than 0.001 ($0 < 0.001$). It highlighted that there is existed all the data are valid and able to approve for leading further study. In addition, it also showed that the dependable variable can transform depending on the independent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.979 ^a	.959	.953	.281

a. Predictors: (Constant), Modern management accounting has a sustainable competitive advantage compared to conventional management accounting. , The main difference between conventional and modern management accounting is its reporting speed and accuracy, The modern accounting process has made the transaction system easy and flexible, Accounting sectors are following the customer-seeking expense behaviour to serve the accounting process, Following the specific rules under the accounting process is necessary to maintain consistency, The main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses, The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations

Figure 15: Model summary analysis (Source: SPSS)

The model summary table helps in the process of identification of errors and connections between research variables. In the above table, the “R square value” has become 0.959 and the “R-value” has become 0.979 . This has indicated that all the collected data are valid and they have maintained an accurate frequency [9]. It emphasises the research variables are following a positive connection between them and made the data interpretation and transaction system flexible and easy.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.280	.171		-1.640	.108
	The conventional accounting process is better for senior citizens and the modern accounting process is suitable for new generations	-.177	.203	-.153	-.875	.386
	Following the specific rules under the accounting process is necessary to maintain consistency	.349	.166	.332	2.110	.041
	The modern accounting process has made the transaction system easy and flexible	.216	.166	.230	1.301	.200
	The main difference between conventional and modern management accounting is its reporting speed and accuracy	.271	.173	.212	1.563	.125
	The main aim of both conventional and modern management accounting is to analyze, summarize, and record expenses	.012	.121	.014	.102	.919
	Accounting sectors are following the customer-seeking expense behaviour to serve the accounting process	.383	.137	.359	2.788	.008
	Modern management accounting has a sustainable competitive advantage compared to conventional management accounting.	.021	.109	.020	.194	.847

a. Dependent Variable: Financial transactions pertaining are better in both conventional and modern accounting processes.

Figure 16: Coefficient analysis (Source: SPSS)

The “coefficient analysis” is associated with the measurement that specifies the linear connection between the research variables. The value and authenticity of this table is depending on the “significant value” [10]. Generally, this table is showing the direction and size of the relationship of the research variables of this study. Every individual research variable is showing its inner relationship through the “significant value” of the above table. Based on the above values it has become identified that there is a positive connection between the existing research variables.

Reliability and validity test

Reliability Statistics	
Cronbach's Alpha	N of Items
.979	10

Figure 17: Reliability test (Source: SPSS)

In the process of SPSS analysis, the table of “reliability statistics” is the most valuable and important as it defines the validity and reliability of the collected data and existing research variables. Depending on the value of “Cronbach’s Alpha”, the reliability and validity of the data have been measured in this table. According to the rule, the collected data and existing research variables will be accepted if the value of “Cronbach’s Alpha” becomes maximum than “0.07 (Value>0.07)” [11]. In the above table, the value of “Cronbach’s Alpha” has become 0.979 which is larger than 0.07 . It indicated that all the collected data and existing research variables are reliable and the validity is also accurate. This has proven the accuracy of the result that has become through SPSS analysis.

DISCUSSION

The participants who are the accounting managers of different business organisations were asked several questions regarding conventional accounting and modern accounting methods. The managers have provided their personal opinions on the specific statements created on the features of these two accounting processes. Both of the accounting methods are capable of efficiently managing financial transactions but conventional accounting methods are better for senior citizens while modern accounting methods are more suitable for new generations [12]. The use of modern methods in accounting requires effective technology and skills which indicates that these accounting methods are more suitable for the new generation. About 65% of the accounting managers have opinionated that both of these are capable of managing financial transactions efficiently as well as more than 80% of the participants have opinionated that modern accounting processes are more suitable for the new generations and the senior citizens.

On the other hand, it is identified that modern accounting methods are more flexible and easier than the conventional

accounting method which is one of the major beneficial sides that business organisations in recent times are adopting. Furthermore, it is identified that there are several differences between these two accounting processes but the main difference is that accuracy and reporting speed of modern accounting is better than the conventional accounting process [13]. More than half of the accounting managers in the survey have stated that modern accounting methods are easier and more flexible than conventional accounting as well as more than 80% of the participants opinionated that higher reporting speed and better accuracy in modern accounting is the major difference between these two methods of accounting.

In contrast it is identified that the goal of the conventional and modern accounting methods is to summarise, record and analyse the expenses and transactions of business organisations. All there are many differences but the same goal of both of these methods is the major similarity between conventional and modern accounting. Along with that it is identified that modern accounting methods are highly sustainable and capable of enhancing competitive advantages in comparison with conventional accounting [14]. The ease and flexibility of modern accounting enhances the efficiency of accounting managers for managing financial transactions of business companies and that contributes to the development of competitive advantages. More than 50% of the accounting managers in the survey provided opinions about the similarity between conventional and modern accounting and stated that the goal of both of these methods is to record and manage expenses and that is the one major similarity between these processes. Moreover about 50% of the managers have stated that the modern accounting system has the capability of enhancing sustainable competitive advantages for business companies.

CONCLUSION

It can be concluded that modern accounting methods are more beneficial than conventional accounting methods as it enhances flexibility and ease of recording financial transactions. Along with that modern accounting methods are automatic methods which record all the transactions of business companies without any human error or repetitive tasks and that leads to efficient financial management. Conventional accounting is different from modern accounting as it includes different types of methods and processes for recording transactions but the motive of both of the systems is to enhance financial transaction management in business organisations. It is identified from the statistics that there is a positive relationship between conventional accounting and modern accounting methods but most of the business organisations in this digital era prefer to use modern accounting methods for its simplicity and easiness.

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