Research on Computer Simulation of Cost Accounting based on Excel Software

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Abstract: Cost accounting process involves the collection and distribution costs, product costing and be completed late in the product cost, finally to calculate the cost of goods sold. The traditional cost accounting training is still in the manual calculation, which is time-consuming and cumbersome. With the development of computer technology, the trend of cost accounting information becomes more and more obvious. The Excel table can be used to calculate and analyze the cost, so that the whole calculation process is simple and easy to operate. Therefore, in this paper, the current situation of cost accounting practice, based on the EXCEL software cost accounting information training design ideas.

Keywords: Cost accounting; Simulation training; EXCEL software; Promotion of information technology;

1. Introduction

The more developed the economy, the more intense the competition, the more prominent the cost. Cost leadership strategy is widely concerned with the application is the most direct evidence. Cost accounting, as a theoretical, systematic and operational discipline, which is an effective way to improve students' operating skills and improve their ability to analyze and solve problems. At present, the research of accounting practice mainly focuses on the practice of comprehensive accounting training and financial accounting training. The research on cost accounting training is relatively small, therefore, this paper puts forward some suggestions to improve the cost accounting practice.

2. Current Situation of Cost Accounting Simulation Training

2.1. Cost accounting simulation training has not been fully valued

Cost accounting is theoretical and practical. The system of cost accounting is very important in training students' creative thinking and improving their ability to operate and make decisions. Although the cost accounting is more important in accounting, the cost accounting simulation training has not been paid enough attention to. Even if some schools have set up cost accounting training courses, they are mainly concentrated in the end of the cost accounting theory. The main emphasis is on the understanding and mastering of the various methods of cost allocation. Students are often faced with a large number of data, which allows students to the actual cost accounting and reporting process can not form a perceptual knowledge. At present, the school cost accounting training content is mainly reflected in the integrated ac-

counting practice of product cost calculation, which makes it difficult for students to form a complete understanding of cost accounting and management.

2.2. The practice teaching is in the manual cost calculation stage

Although most colleges and universities have set up a cost accounting training courses, but the main use of manual experiment. Manual calculation method not only takes time, but also easy to breed students' irritability. Most of the cost calculation process is similar, and repeated cumbersome calculation is not the main purpose of cost accounting training. Even if some of the practice with the aid of Excel cost calculation, but it is also mainly stay in the simple digital operations, and did not take full advantage of the function of computer software tools. However, in practical work, the cost allocation of enterprises is mainly handled by Excel. To this end, the combination of theoretical teaching and practical needs of the use of Excel cost accounting practice teaching, which can not only improve the efficiency of teaching, but also the theory into practice. This helps to improve the students' basic skills and practical ability, and enhance their employability.

2.3. Training content too much emphasis on cost calculation

At present, the comprehensive practice of cost accounting is too much emphasis on cost calculation, while ignoring the cost analysis, decision-making, assessment and so on. Cost accounting training content is mainly limited to cost accounting. Due to the practice of time, understanding of the differences in understanding, the level of the teacher's business or other reasons for the practice of training into a simple operation of the cost

calculation. Students simply according to a cost accounting method of the collection distribution costs, while ignoring the cost analysis and control and other aspects of training. This is not easy to cultivate students' management and decision-making ability, but also make the training effect is not ideal.

2.4. Cost accounting practice teaching materials do not meet the needs of practical teaching information

Different training objectives, teaching materials will be different. At present, the cost accounting practice is mainly based on manual accounting, and the cost accounting teaching material also focuses on the manual calculation of product cost. In practice, a large number of cost accounting is not only cumbersome, but also difficult to meet the actual needs of cost accounting. Even some of the cost accounting training materials with the help of the information technology, but there are two problems: on the one hand, the cost accounting and make full use of the database information management method, the computer technology requirements are relatively high. For example, some textbooks based on ACCESS, VFP, MySOL and other technologies for cost accounting. This is not a strong computer information processing ability of accounting students in terms of the actual operation of the more difficult. On the other hand, although some of the materials based on Excel cost accounting business skills training, but it is too simple, only stay in the basic Excel cost allocation table, it is usually suitable for higher vocational students in colleges. As for accounting majors, it fails to give full play to the role of Excel in cost accounting and management.

3. The Significance of Using EXCEL Software to Carry out Cost Accounting Information Training

3.1. Familiar with EXCEL operation is the premise of accounting cost accounting

The main task of the enterprise is the production and processing, and the main task is to carry out cost accounting personnel accounting. Many companies have their own distribution, and according to their own characteristics of the design of their own computing model. This means that the general purpose of the software purchased outside can play a very small role. And if the accounting personnel proficient in the design of EXCEL, you can combine the calculation model of the enterprise accounting cost calculation. Therefore, practitioners must master the EXCEL design.

3.2. Cultivate the logical thinking ability of accounting workers

It is the responsibility of accounting staff to have strong logical thinking. Practitioners must accurately calculate

the cost of the product, and to convey effective and accurate information to the enterprise. To do this requires practitioners to choose a correct calculation method, and the collection and distribution of scientific production cost. The use of EXCEL to design cost accounting training activities require practitioners to have a clear thinking, delicate mind and rigorous attitude. Through this kind of practice teaching activities can effectively enhance students' logical thinking ability, at the same time, it will be able to take responsibility in the future accounting work.

3.3. Ensure the accuracy of accounting cost accounting

Small and medium enterprises are characterized by small scale production, and limited funds and resources, the most important is the relative lack of talent. In the accounting cost, small and medium enterprises generally have their own characteristics and mode of production, and has its own training formula, which limits the accuracy and reliability of the information collection costs to a certain extent. However, these characteristics lead to the enterprise can not afford to spend too much money on non public facilities. Small and medium-sized enterprises are unable to purchase special software equipment, and the common software equipment can not meet their needs. If the accounting practitioners themselves have the ability to use EXCEL software, it can ensure the accuracy of accounting cost calculation.

3.4. Enhance the competitiveness of students majoring in accounting

In recent years, more and more students majoring in accounting, so the pressure of graduates to find work gradually increased. In order to strengthen their competitive ability, we should grasp the theoretical knowledge in the daily study, and constantly improve the practical ability and the ability of computer operation in all kinds of activities. Therefore, it is very important to design the teaching practice of accounting cost based on EXCEL application.

4. Design Thinking of Cost Accounting Training based on Excel

4.1. The construction of cost accounting simulation training mode based on the combination of internal and external, three layer double track and three abilities

For higher vocational accounting professional training skills, but also vocational school characteristics, based on summarizing the experience of cost accounting simulation training on the "internal and external integration, constructing the teaching mode of accounting training cost three track three". Figure 1 shows the system framework.

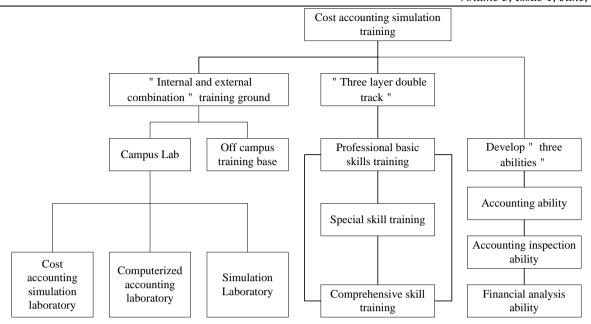


Figure 1. Cost accounting simulation training model

"The combination of internal and external, three layers of double track and three abilities" accounting practice teaching mode is a kind of professional skill training mode which runs through the whole process of talent training. Among them, the combination of internal and external refers to the "laboratory" and "off campus training base" two training venues. The three level is divided into the following stages: the basic skills, special skills, professional comprehensive skills, according to the dependence of curriculum content. "Double track" refers to the training of the accounting manual processing ability and the accounting computerization processing ability. "Three" refers to the practice teaching should cultivate students "accounting" (i.e., "Accounting) accounting check" (i.e. audit) and "financial analysis" (the account) and three accounting professional ability.

4.2. Improve the comprehensive practice of cost accounting based on Excel

Through the Excel based cost accounting training design can form a complete Excel based software cost accounting and management experiment outline. This can avoid the students because of the complexity of manual cost calculation and sometimes produce irritability. Based on the Excel, the content of cost accounting simulation training syllabus should be involved in variety method, batch method, step by step method, parallel method, cost report preparation and analysis. It should also cover the Excel in the cost accounting training in advanced applications, such as planning and solving, single variable solution, solution, data table and other functions.

4.3. Optimization of cost accounting practice teaching based on Excel

Cost accounting requires a large number of operations, and the workload of digital computing is quite large, so that the cost accounting practice can use the computer to assist cost accounting. The cost calculation of different products is various and the accounting methods are various, which requires students to master the cost accounting and analysis in practice. The cost accounting practice information design mainly uses Excel software to carry on the cost accounting and the cost report analysis teaching practice, this involves the Excel function application, the cost expense allocation chart, the chart use and so on. For example, the use of the algebraic distribution method for auxiliary production cost allocation, when the auxiliary production car in three or more when you need to be more than three of the first equation to calculate simultaneously, as shown in table 1. If the use of manual cost allocation, then the solution of the simultaneous equations of more than three yuan a large amount of calculation, then you can use Excel's "planning to solve" function. It can quickly achieve the allocation of costs in order to achieve the goal of manual training is difficult to achieve, as shown in table 2. In the cost analysis, the basic production cost subject with direct materials, direct labor and manufacturing costs and other cost items, while the cost of sales subjects no direct materials, direct labor and manufacturing costs and other cost items. As a manager, particularly want to know the sales of products, artificial materials, manufacturing costs accounted for the proportion of sales revenue, which is conducive to the analysis of the enterprise cost factors accounted for the proportion of sales at the same time, the comparative cost

trends of products, as shown in table 3.

Table 1. Product Cost Calculation Table Based on Excel

1	A product carry over cost							
2	Direct material	Direct labor	power	Manufacturing cost	Auxiliary produc- tion	Total inventory of goods		
3	Production cost ledger!B5	Production cost ledger!C5	Production cost ledger!D5	Production cost ledg- er!E5	Production cost ledger!F5	SUM (A3:E3)		
5	Initial inventory period	End of inventory	Difference	Selling cost	sales revenue			
6	Inventory item!G2	Inventory item!G4	A6 — B6	F3+C6	Sales cost sheet!C2			

Table 2. Sales Cost Sheet

1	A product sales cost schedule						
2	Direct materi- al	Direct labor	power	Manufac- turing cost	Auxiliary produc- tion	SUM (A9: E9)	
3	A3/F3x D6	B3/F3x D6	C3/F3x D6	D3/F3 xD6	E3/F3 xD6		

Table 3. Sales Cost Rate Table

1	A product sales cost rate						
2	Ma- terial cost rate	Labor cost rate	Power cost rate	Cost of manufacture	Auxiliary produc- tion cost rate	F9/E 6	
3	A9/E6	B9/E6	C9/E6	D9/E6	E9/E6		

4.4. Enrich the teaching content of cost accounting practice based on Excel

The improvement of cost accounting practice teaching content mainly focuses on the cost accounting and management. On the basis of cost accounting, we should attach importance to cost management, including cost forecast, decision-making, control, assessment, etc.. In the actual work, the cost of the preparation of the report after the need for in-depth analysis of cost information, so as to optimize the cost of decision-making, and strengthen cost control and cost responsibility assessment. Only a comprehensive understanding of the work of accounting management to improve students' ability to analyze problems and management skills.

4.5. The development of cost accounting teaching materials based on Excel

The influence of practical teaching materials on the effective implementation of cost accounting training. In order to achieve the purpose of cost accounting comprehensive training, and meet the needs of teaching, the government should as soon as possible the development of accounting undergraduate level of knowledge, adapt to the cost accounting training materials the principle of development of cost accounting management based on. The design of practical teaching materials should consid-

er the cost accounting and management. Its design should embody the idea of "knowledge based, ability first". The design of cost accounting training materials should be prepared covering Excel cost allocation table, but also to emphasize the compilation and analysis of cost report, application programming, but also to be involved in Excel single variable solution function in cost accounting in practice. In order to improve the professional quality of modern cost accounting management personnel.

5. Conclusions

The comprehensive construction of accounting information system is the trend of the times, and accounting cost accounting is not only an important part of the accounting system. The accounting cost accounting provides the support for the enterprise managers, so it is very important to analyze the cost accounting accurately. Cost accounting information requirements of computer companies involved in the export operation decision analysis, and the development of Excel data processing function of cost information plays an important role in promoting, will greatly facilitate people's work and learning.

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