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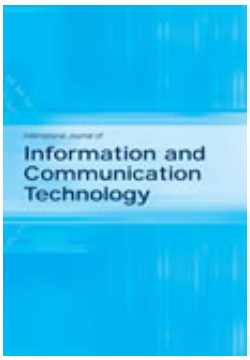

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AI-driven management information system for cost accounting and budget optimisation

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Abstract: This study aims to enhance traditional management accounting by developing an AI-based system for cost accounting and budget optimisation. The proposed framework follows a structured nine-step process, beginning with problem identification and concluding with system validation. Each stage ensures transparency and effective implementation. AI contributes to improved prediction accuracy, cost reduction, and more reliable financial decision-making, while highlighting the limitations of outdated, paper-based methods. In practice, AI assists in tasks such as tax processing, error detection, and forecasting. Historical data are used to train AI models, which are then applied to accounting operations and validated for accuracy and relevance. Despite challenges in integration, scalability, and ethical considerations, results indicate strong reliability, with Cronbach's alpha and composite reliability values exceeding 0.8 in SEM tests. Overall, the AI model outperformed traditional methods by reducing costs and adapting effectively to workload variations.

Keywords: AI-driven; management information system; MIS; cost accounting; budget optimisation; machine learning; decision support systems; financial management; predictive analytics; reinforcement learning; digital transformation.

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1 Introduction

Artificial intelligence's (AI) quick development has drastically changed how businesses handle their financial operations, especially in cost accounting and budget optimisation. Managers' capacity to make proactive, data-driven choices is constrained by traditional management information systems (MIS), which often depend on manual data input, rule-based analysis, and retrospective reporting. On the other hand, AI-driven MIS combines intelligent automation, predictive analytics (Feng et al., 2020) and machine

learning (ML) algorithms to improve financial management decision-making, decrease inefficiencies, and provide real-time insights. A key component of financial planning, cost accounting is essential for figuring out production costs, keeping tabs on spending, and guaranteeing resource efficiency. However, the limits of traditional accounting systems are brought to light by the growing complexity of corporate operations, shifting market circumstances, and the need for quick decisions. In order to allocate resources efficiently and reduce waste, budget optimisation – which is closely related to cost accounting – requires ongoing study of both historical and current data. Opportunities for dynamic budgeting, anomaly detection, scenario-based forecasting, and predictive cost estimating are made possible by integrating AI into MIS. In addition to increasing cost allocation and budget forecasting accuracy, an AI-driven MIS gives managers prescriptive advice for strategic decision-making. Organisations may find hidden trends in financial data and react quickly to new issues by using deep learning (Nawara and Kashef, 2021), natural language processing, and sophisticated data visualisation.

These systems also provide adaptive learning, which makes models very successful in unstable business situations by continually improving their forecasts and suggestions in response to fresh financial inputs. In the end, cost accounting and budget optimisation undergo a paradigm change with the incorporation of AI into MIS. It promotes openness, effectiveness, and long-term financial sustainability by bridging the gap between strategic decision-making and basic financial data. The design and implementation of an AI-driven MIS framework are examined in this paper, with an emphasis on the possible uses, difficulties (Zhang et al., 2025) and contributions of this technology to contemporary cost management and budgeting procedures. Also, it was hard to use them in real clinical settings because they could not handle data that was not clear or was missing parts. Remember that AI can help fix financial mistakes, even ones that are hard for normal software to handle. AI is being used in more and more computers in accounting to make work easier and faster. This is very important when you file your tax return. There are many hard ways for systems that use ML to find and fix bugs fast. AI can also look at a lot of data, which makes things more complete and correct and makes tax reports better (Elsayed, 2023). Tax reports need to be more accurate for people who care about the subject. Good corporate governance (CG) can help keep financial mistakes from happening, but it cannot guarantee that none will. For CG to work, accounting software needs to have better study tools added to it.

CG has to get past a lot of problems when it works in new places. It is hard to get better tax returns because of big problems like fraud and bad management. The rules are also hard to understand, and there are not enough tools. Even though CG was told the truth, it is important to know that financial statistics could be wrong (Al Najjar et al., 2024). Because of what the market wants, useful tools have been made that make accounting error-free. If someone uses these tools along with their brains, they can do better on their tax forms. For these tools to work, you need math that is hard to grasp and can do more than just draw a straight line. They made hard-to-use apps because they know that correct financial information is important and that bad tax returns can be bad for business. AI has come a long way since ML came along. It is a big step forward for technology to change (Fjord and Schmidt, 2023). This step needs to be taken. In 2008, people saw it for the first time as block chain technology (BCT). This is now one of the coolest and most important ways AI is used in accounting. That was in 2015. A lot of people use it because it works well and keeps them safe. There are other names for the technology that makes block chain computing (BCT) work. It is a ‘distributed database of

records' a 'public ledger of all transactions or digital events that have been executed and shared among users'. Everyone who has a stake in the deal has to agree on any changes to the BCT database. Because going digital has had such a big effect on business, some parts of the company are still not fully linked to IT and communication tools.

There are many changes in what accounting does and how it is done. He says "these effects surely (and hopefully) will not deliver the dream of perfect information and rational decision-making as one may be led to believe by the growth of data-driven organizations and societies" (Marques et al., 2023). This is because it is still not clear how going digital will change how managers make budgets and rules. After everything goes digital, different people have different thoughts and hopes about what accountants will do for a living. Accounting is a big part of how businesses run and decide what to do, which is a good thing. This is because accountants will have more time to do more important work (Massicotte and Henri, 2020). But it will be even less clear where work and personal life end, how computers and people talk to each other, and how safe digital financial data is. Of course, everyone knows that technology lets businesses get to a huge amount of different types of data. We still cannot think of a use for this information. One of the most important things for business people to do is to find out how bits and pieces of data affect them. Business and professional groups are trying to make it happen, so it is not going away. The Chartered Institute of Management Accounting tells you about four types of tech that are used in money management. This is to show you. NPL means for 'natural language processing', ML for 'machine learning', and AI for 'artificial intelligence' (Santos et al., 2025).

So you already know that. It is time to switch from financial accounting to management accounting (MA) since new technologies like AI are always being made. This has changed, which shows how important accounting is in today's business world. AI can help very small and medium-sized businesses (SMEs) move faster, make more money, and hire more staff.

This is how the rest of the parts of this work are put together. The remainder of this paper is structured as follows. Section 2 reviews related work on AI-driven MIS. Section 3 discusses cost accounting, while Section 4 focuses on budget optimisation. Finally, Section 5 presents the conclusion.

1.1 Contribution of this study

Two of the most important things this study adds are an idea for and tests of an AI-based system that can keep track of costs and help people make better budgets. There are smart and useful ways to set up a system in the real world, even though it is hard. ML lets you add features to a system that help you guess what will happen and make the best use of its resources. There is a set way that real accounting systems look at events and the past. It is not the same. That way, businesses can decide quickly, which helps them save money and make better use of their resources. Of course, it also helps figure out costs and keep track of money better. It can handle new business situations and keep getting better over time because optimisation and reinforcement learning are already built in. It was planned with the technology acceptability model (TAM) to find out if the financial staff would be willing to use AI. It is still a very important step to add this. The study shows that AI can be used in MA in a big way. Both the tech and the people who use it will be like this. You can find reads, talks, polls, and system tests in the right place to help you do this. AI has been shown to lower costs and make reports better. On the other hand, they make you

think about things like how to connect tools, how long it takes to set up, and safety. We find out new and important facts about how AI is used in accounting and how it changes companies and people. There is also a good way to save money in the study.

2 Literature review

Put new things in order, study them, and try to figure out what they all mean. After that, it sends this data to management. In Massachusetts, on the other hand, experts say that old ways of measuring and finding out costs do not work with new technologies (Goyal et al., 2021). This is very important for systems that use AI. Most ways of keeping track of money only show what has already happened. That is, they do not help you guess what will happen in the future, which is important for making choices. This is why Massachusetts needs to change its tools, strategies, and methods to work better with digital technologies and make management choices that get things done better and faster. MA today looks at problems that happen in the real world as well as the easiest and most important ways to make decisions. This was not always the case in the past. It is the job of MA to teach everyone in the company about money and accounting so that everyone can make choices. This keeps management and plan control safe. The way they handle risks is based on what MA says right now. In both HR and MA, AI tools could help people make better choices (Cubric, 2020). There is a way to think that can be used in many cases. It is called AI. MA needs to use AI more and more. He showed that many companies use AI to do work, gather data, handle it, and figure out what it all means. AI can also tell the right people what they need to know right now. A lot of people talked about how technology could change MA and how MA is already an important part of how businesses work.

AI is being used by lots of companies, even small ones with little funds, to keep things running smoothly and gather data on their own (Vărzaru, 2022a). Davenport divided the next level of AI technologies into four more groups: those that help people, those that do everyday jobs for them, those that are self-aware, and those that know and understand their surroundings. MA can figure things out and do math with the first three groups. This is because it depends on how smart the machine is (self-consciousness). AI has not quite made it to the fourth group yet. Cost accounting can help keep prices low, according to the person who wrote this. Also, they talk about how it has changed from a record book to a live news source (Serugga et al., 2020). The study is mostly about how useful it is for top management and how important it is for making strategy decisions to meet the charge. It also talks about how AI has changed the way costs are treated in a big way. There is math behind these AI uses, like ML, natural language processing, and robotic process automation. Examples are regression and optimisation (Sutrisna et al., 2022). But some say that having sins and losing their job are very bad things. You can save money and make money at the same time. People are shown new ways to save money on computers and how to use AI to make apps that are good at using resources. The study's main goal is to find big ways to save money that will not slow down apps (Serugga, 2025). AI can look at jobs right now and figure out how to best assign resources. It helps you save cash. A number of easy tests have shown that the idea works well.

AI might be able to help places keep their prices low in some ways. Watch how it tries to figure out what to make and how to use the things it has in the best way. In this way, the food service company can save money and make better use of its funds.

2.1 Modular housing systems

Open source software is becoming more common as a way to save time, money, and the environment, according to another study like this one. As we already said, operational support and control (OSC) can cut down on work on the job site, keep a better eye on quality, and finish the project faster by moving a lot of work to controlled workshops. One of the most well-known OSCs is the modular building method. Plan and make standard building parts that are then put together on-site. This is the basic idea behind this method. You could save money, make things more open, and let them grow (Wu et al., 2023).

2.1.1 Cost modelling in OSC and modular construction

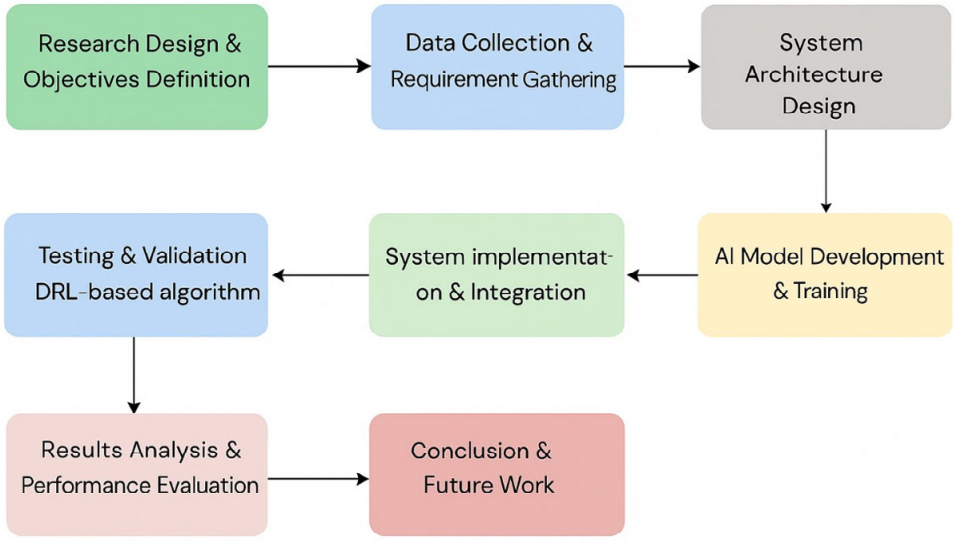
Cost modelling is a big part of OSC. It helps people decide how to spend money, share resources, and plan projects. Modular building is said to use standard parts and methods that can be used over and over again by many writers. People can use this to figure out how much it costs. Normal building needs special plans and a lot of work to be done on-site. Liang et al. (2024) on the other hand, have written about how this trend makes it harder to figure out costs: This way of making is hard to understand in a lot of places where the different parts connect to each other. In the long run, this makes it harder for more people to use modular building because it is harder to look at costs and lives. When you have to choose between making modules that can be changed to fit the needs of different people and modules that are the same for everyone, it is harder to guess how much something will cost. There are other things that cost models should look at besides just how much the building cost. Also, they should think about how much it will cost to fix, keep up, and finally shut down (Barik, 2025). Guesses and ideas that cannot be changed from people do not work well for modelling costs in OSC projects because they change all the time and are connected to other projects. The study authors also say that doing cost figures and material take-offs by hand can be slow and lead to mistakes, especially for big projects with lots of modules and links.

3 Methodology

Figure 1 show a study and growth method that is well put together. It explains how to make a computer system that gets the best prices using AI. The problem is first put into words. Next, a book study is carried out to discover what issues and limits exist in cost accounting and budget enhancement at the present time. It is possible for the study's plan and goals to work with the system because these things are known. The next step is to find out what needs to be done by looking at old records, studies, and talking to people who have a stake in the issue. These jobs help the process of making a system move forward. The next thing that needs to be done is the system design. As part of this, you

choose ways, set up systems, and make interfaces. These are the steps that are taken to get ready to make AI models. At the core part, which is making and teaching AI models, ML is used a lot to guess what will work and find the best ways to save money.

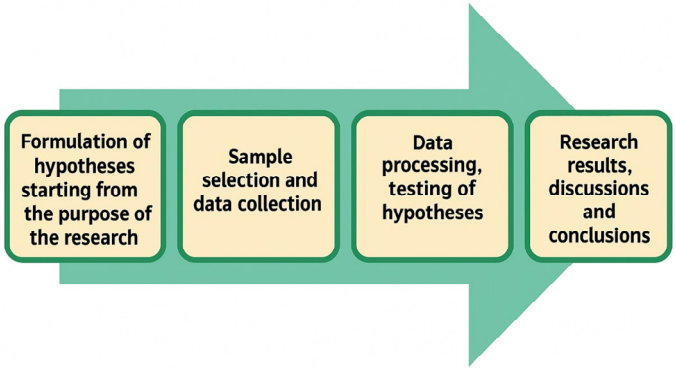
Figure 1 Sequential research methodology framework with nine phases from problem identification to conclusions and future work (see online version for colours)



3.1 Research design

As part of our quantitative study, we sent a poll to Romanian accountants to find out how open they are to using AI to update and digitise macroeconomic accounting. Figure 2 (Vărzaru, 2022b) shows the steps that are used to study.

Figure 2 Research process (see online version for colours)



Source: Own construction

When making the form for this job, the TAM was used as a help. The TAM uses a method based on behavioural theory to describe the process and rate how well people settle for new technology. AIMA techniques were used in the study to look into behavioural accounting, a way to find out how accountants in Romanian companies think and act. The TAM can tell how well technology solutions are accepted in a certain area by a number of different signs. It also looks at how different things affect different things. For structural equation modelling (SEM), the PC version of the SmartPLS v.3.0 tool from SmartPLS GmbH in Oststeinbek, Germany, was utilised. These were the ones that were used to see the info.

3.2 Data collection

It was gathered by talking to people at the business and getting it from other places. To make sure the info was correct, this was done. First, we looked at other sources to find information and data about the AI-based SCF solutions that the sample members gave us (Ronchini et al., 2024). Their websites were the first place to look because they had a list of the products and services they offered for SCF and other problems that were related. On their site, you could find case studies and white papers. We used them to find out what we needed to know about the case after we got them. Because we had done research with A, C, E, G, H, and J before, they already knew things that helped us with the project. This information was needed to find more data that supported what the SCF providers said in the interviews. It was also needed to add more information about the problem and how it could be fixed that fit with what was already known. Table 1 shows a poll method that was made with these data in mind. Most of the information was gathered from it. We talked to decision-makers in person at each company to add to the information we got from other sources and to use the different points of view that were given. Someone at that company was in charge of the SCF products and helped the business use AI. People were chosen to talk to in order to find that person. At first, we only talked to tech companies that let us choose at least one SCF setting. People answered the question in a way that was similar to how they answered other related questions. That's why we looked into technology companies that could do extra things like check credit and bring old business methods up to date. Our minds were full because the tech companies that sell new things could not come up with any fresh ideas.

We chose to stop collecting data because of this. It was planned to ask questions before the interviews to make the process more effective in two ways: first, the questions would help them choose the right person to interview, and second, they would find out more about the company from other sources.

There were 60 to 90 minutes in each talk. We could talk to A, C, G, H, and J more than once. We could only do one with the other companies. Besides that, other people had told us a lot about the meeting. We were able to get the study's data no matter what. We mostly worked on the main topic of the study and reviewed the information we already had in the time we had. There were not many rules that were followed during the talks. That way, the people being asked could talk about anything that came to mind during the chat. The talks that were recorded or written down were added so that the numbers could be seen. The people who answered sent us all the information they needed by e-mail, so we did not have to give it to them again.

Table 1 Case study protocol

Supply chain finance services general information
What supply chain finance solutions does your company offer (e.g., reverse factoring, inventory financing, dynamic discounting, etc.)
How many customers does your company serve with SCF solutions?
How does your platform establish a connection between companies and financial institutions?
What are the most common needs that your customers want to satisfy by adopting your solutions?
Supply chain finance process
At the first contact with your customers, are they already oriented to a SCF solution to solve their needs or do they require to be informed about the potentialities of SCF?
When they require to be informed, how do you support your customers in selecting the solutions more suitable to satisfy their needs?
How do you support your customers in doing a screening of their supply base to evaluate which suppliers are eligible to a SCF program?
How do you support your customers for the on boarding of suppliers, in order to convince them to accept the SCF innovation?
How do you support your customers in spreading awareness and training their own employees about SCF?

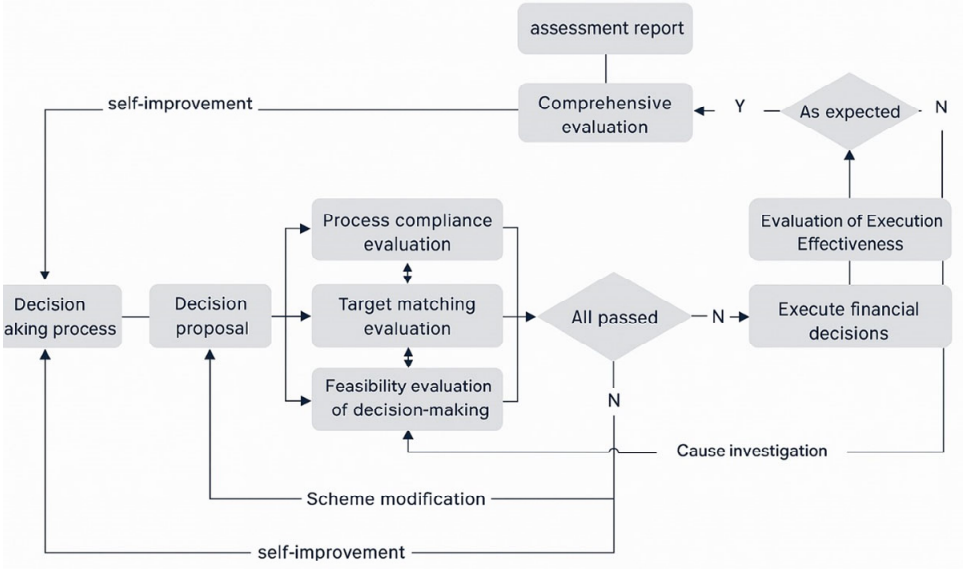
3.3 Al model development

It is the main goal of the chosen growth path for the field of accounting that is built on AI to make things work. What this means is both the rules and the tools that make things happen (Li, 2025). The rules for work explain how to do the jobs in general. The data, staff, and basic financial systems that make the plans possible, on the other hand, are part of the enabling systems. Some of the systems that help teach accountants how to use the AI framework and put together files with information from different sources. One more is the general way banks work. Controlling who can enter, making plans based on level, and giving each person in the company a specific job are all part of the rules that guide how things work. Second, it is not clear who is in charge of making decisions in accounting jobs. When people work in business around here, they think about normal things like what to sell and getting the money they're due. So, everyone in the company, from the CEO to the janitor, needs to help make tough decisions. In this case, the method should help you think of some good ideas. You need to use both the real data and the model's training results to come up with these ideas. But if the training cases are not good enough, these ideas might not work because they do not match the facts. You can use accounting to help you decide what to do, but you should also keep an eye on the review and growth tracks. When you look over accounting work, you should make sure that objective alignment is used.

That's because people with different amounts of information should also have different amounts of power to decide what to do. It is important to think about the business when you come up with plans. The stocks, goods, and other things could be in this. This will help make sure the thoughts get to the right people. Rule-following is very important, and the main goal should be to get it done quickly and right so that the needs are met. For long-term progress, you need to follow the steps, make sure that the

processes work together, and check to see if the approach is even possible. Before anyone decides to print anything, all three of these things must be checked and found to be fine. During the performance part, there should be a lot of real-time feedback, and discussions should happen at key points. Figure 3 shows that these studies should look at how well the money is spent and how costs and returns are linked.

Figure 3 Path for continuous improvement of the system (see online version for colours)



3.4 Testing and validation

You can read more about the case in Algorithm 1 (Li, and Qin, 2023). There is room in this DRL that can hold a certain amount of code. It keeps track of the transfer values between the present state, the action, the reward, and the future state. What the DRL does wrong can be used to make it better. It is also used a minibatch data set made up of random repeat memory samples to change the DQN's setting often. There's a wait time after each U-choice set to make sure things do not get too strange over time. The experience repeat method can make the data and the range of y less alike because it learns from random samples. The goal network and the evaluation network help the DNN be less different and less unstable. Their bodies are the same, but their beliefs are different. There is no difference between the data network and the goal network when you look at how they are set up. A lot of the time, offline training is used with deep learning. This method is no different. That way, the costs can go down as much as possible, and useful SMP resources will not get stuck. Once the model has been trained for normal jobs, it does not need to be trained again offline. It is possible to plan in real-time. In the buried layer of the model, 20 neurons are used. When the model is small, the cost is very close to zero. Another thing is that the time it takes to arrange is always less than 10 ms, which is very little time.

Algorithm 1 The DRL-based algorithm for real-time cost optimisation of the MPC-SDSmp

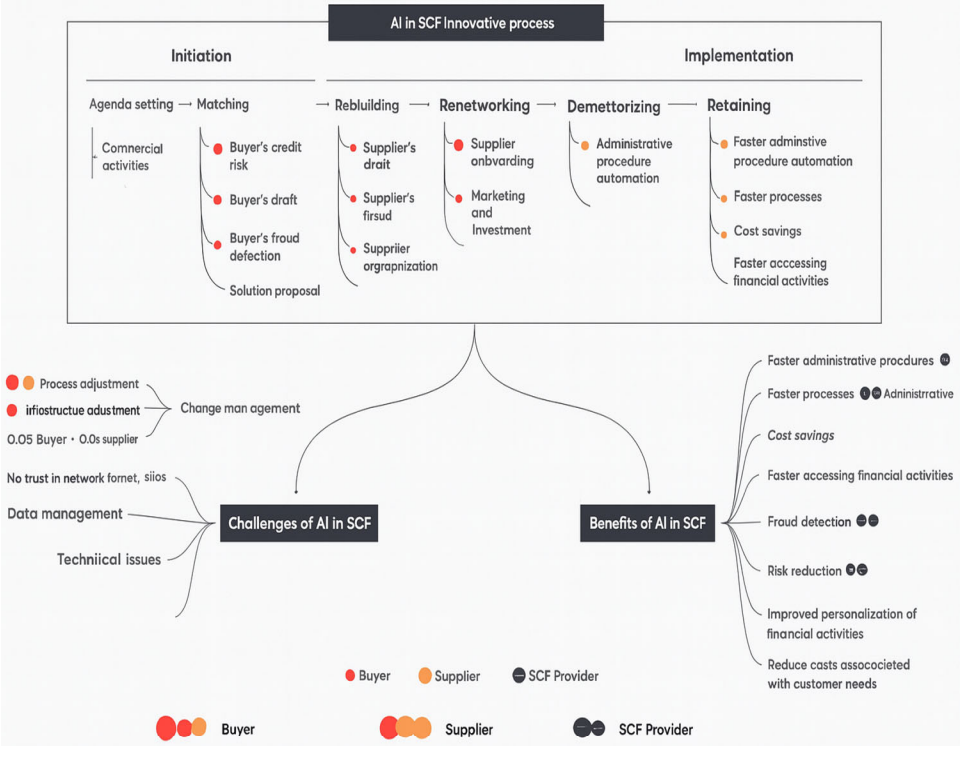
1:	Input: initial ϵ, α, γ, learning frequency f, start learning time τ, minibatch $S\Delta$, replay period η
2:	Initialise replay memory Δ with capacity $N\Delta$
3:	Initialise evaluation value function Q with random parameters θ
4:	Initialise target value function $\hat{Q}$ with random parameters θ'
5:	For each new job j arrives at tj do
6:	With probability ϵ randomly choose an action; otherwise Aj = argmax $AQ(Sj, A, \theta)$
7:	Schedule job j according to action Aj, receive reward Rj, and observe state transition at next decision time $tj + 1$ with a new state $Sj + 1$
8:	Store transition $(Sj, Aj + 1, Rj + 1, Sj + 1)$ in Δ
9:	If $j \geqslant t$ and $j \equiv 0 \bmod f$ then
10:	if $j \equiv 0 \bmod \eta$ then
11:	Reset $Q = Q$
12:	end if
13:	Randomly select samples $S\Delta$ from $N\Delta$
14:	for each transition $(Sj, Aj + 1, Rj + 1, Sj + 1)$ in $S\Delta$ do
15:	*target* $k = rk + \gamma \max A'Q(Sk + 1, A'; \theta')$
16:	update DNN parameters θ with a loss function of *target* $k - Q\ (Sk, Ak; \theta)2$
17:	end for
18:	Gradually decrease ϵ until to the lower bound
19:	end if
20:	end for

4 Results and discussion

We tested the simple model with this SmartPLS v3.0 tool. SmartPLS GmbH in Oststeinbek, Germany, made it. You can use SEM with this tool as long as you set the model factors in a partly least square form. In a SEM study, the first thing that is looked at is how the outside factors add up to make up the unseen variables. For the claim to be true, the value of the outside factors must be greater than 0.7. There was one theory model that was used. Figure 4 shows a picture of it that was made with SEM. There are times when accountants say things that make them less likely to use AIMA. Some of these are how useful and simple people think the answers are, which are qualities that come before the action. It looks at how users' happiness changes what they plan to do and how what they plan to do to use AIMA changes what they do.

It was clear that the model was very accurate and stable because both Cronbach's alpha and the total reliability score were higher than 0.8. The average variance extracted (AVE) values were also higher than 0.6 (Table 2).

Figure 4 Empirical model (see online version for colours)



Source: Author's construction using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany)

Table 2 Validity and reliability

	Cronbach's alpha	*Composite reliability*	*AVE*
Actual use	1.000	1.000	1.000
Behavioural intention	0.797	0.907	0.830
Easy to use	0.872	0.912	0.723
Usefulness	0.821	0.882	0.651
Users' satisfaction	1.000	1.000	1.000

The author built with SmartPLS version 3.0 (SmartPLS GmbH, Oststeinbek, Germany) as a help. There was only one outside factor that could have changed these two secret factors, so they got a perfect score of 1000 for both truth and reliability. Seeing how happy people were with them in real life gave me these ideas. The case studies helped us come up with the last plan for the study (see Figure 5). We looked into things like how AI fits into the SCF creation process. It shows all the important ideas, like the good and bad points of the SCF creation process.

Company changes are caused by the growth of accounting, even though the Soviet Union has a market economy. Their economy is getting stronger, and they can deal with other countries better. One of the most important questions for the growth of accounting both at home and abroad is how to make it more useful and help people make better

choices. There are a lot of issues with the current AI planning tools. Some of these are not being very useful, not being very smart, and not being able to fit in well (Figure 6).

Figure 5 The support of AI to the SCF innovation process – a framework (see online version for colours)

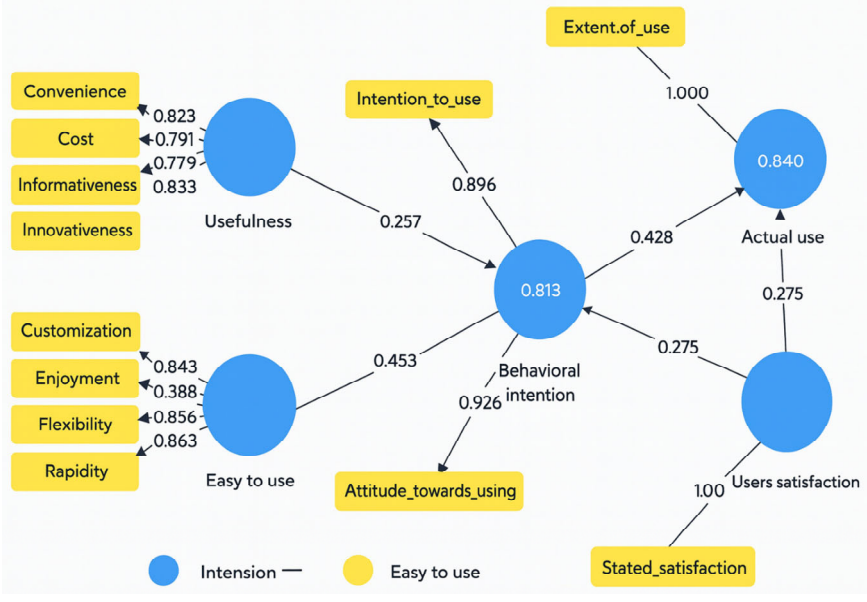
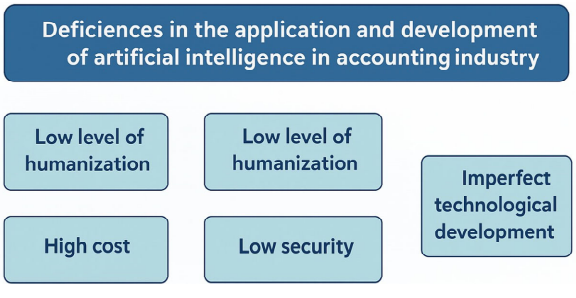


Figure 6 The shortcomings of AI in the accounting industry (see online version for colours)



This makes apps not work well, costs a lot, and keeps businesses from getting the skilled help they need. A lot of people in accounting have talked about how AI will change the growth of the field. But the fact that most of the talk has been about how the program works is a pretty skewed view. AI has also brought many important benefits to the field of accounting. For example, it has made work more efficient, improved the accuracy and consistency of data handling, and given accountants more time to focus on big-picture research and management decisions. It does have some issues, though, that come with this kind of technology. The price of buying and running financial robots is the first thing that stands out. A lot of businesses, especially small and medium-sized ones, are having trouble with money as a result. This makes it harder for big businesses to use these new technologies. A market study found that a full accounting system with AI could cost

between tens of thousands and hundreds of thousands of dollars. This case does not look at how much it costs to help people keep up with changes in technology. A business called Sinochem International had to spend a lot of money to set up PwC's AI accounting system. It also had to pay a lot every month for people to help with service and programs.

A lot of businesses do not have the money to pay this high price. It is harder for a lot of people to use these cool new tools because of this. That being said, the AI we use is still getting better, so it does not fully understand how things work yet. Things went wrong when you used it for the first time or when it did not work well with other apps. People who use the system will feel bad about this, and it might also make it harder to set up correctly. The AI bookkeeping system that Smacc made lets many small and medium-sized businesses do their books online and right away. It has had trouble connecting to real-world business resource planning tools, though, so some of its features are not working. People who have used it already said that it cannot handle complicated business deals very well, which shows that it can only do so much. Not only that, but some other businesses have said they've had the same kind of issues with their AI systems. It looks like the accounting business will need more time to learn how to use AI better. Besides that, AI systems might not be completely safe when it comes to tech. Hackers could get into these devices if the right safety measures are not taken. Public information about businesses could be leaked, which would cost them a lot of money. Just one more thing to think about: the number of standard accounting jobs has gone down. This could make it harder for some people to keep their jobs. The reason for this is that AI is taking over more and more simple accounting tasks. People switch jobs and get better at their old jobs faster to adapt to the needs of the new field. At first, a random task model with big changes was used to see how well the model worked. The rate at which jobs showed up in the random task mode ranged from 0% to 100%, with a mean of 266.65 requests per second and a standard deviation of 147.56 requests per second.

Figure 7 shows this as a chance job showing rate. The type of job changed every five seconds, and the types of work and tasks were chosen at random.

Figure 7 Job arrival rate in random workload mode (see online version for colours)

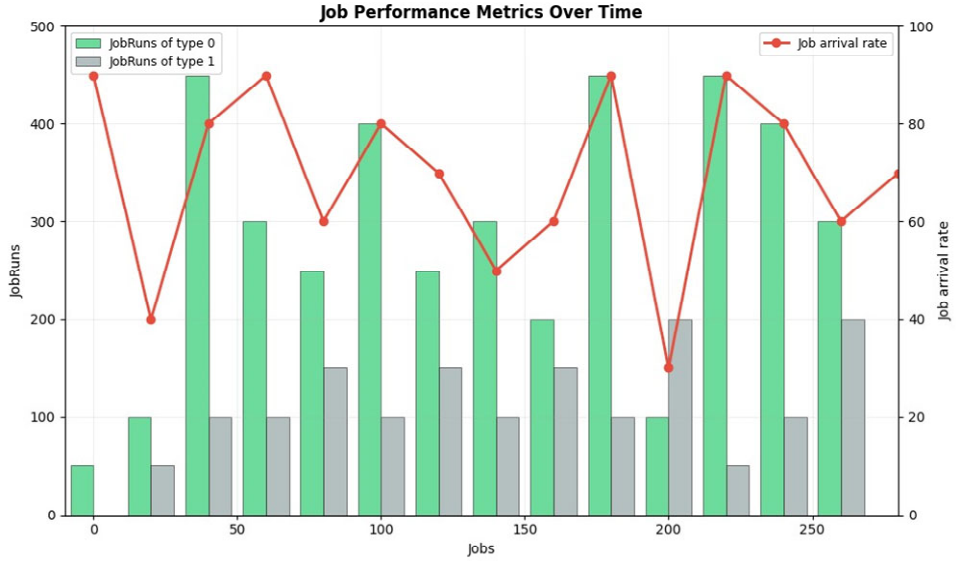
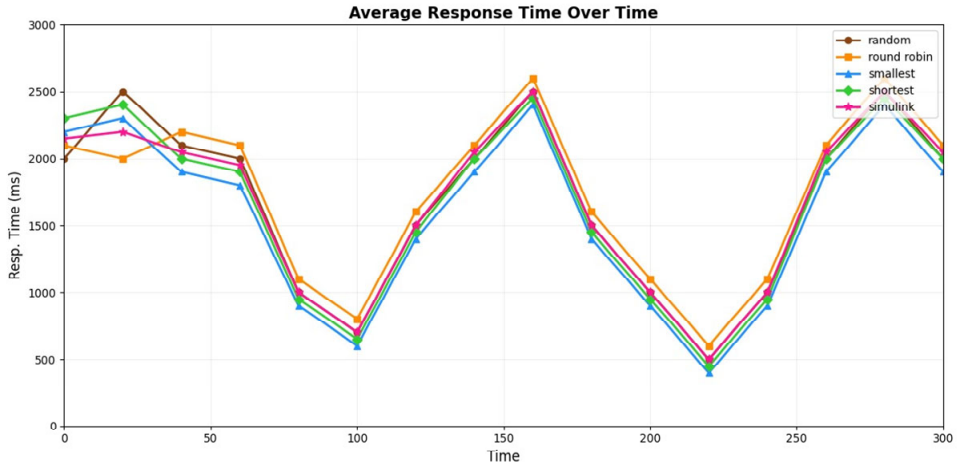
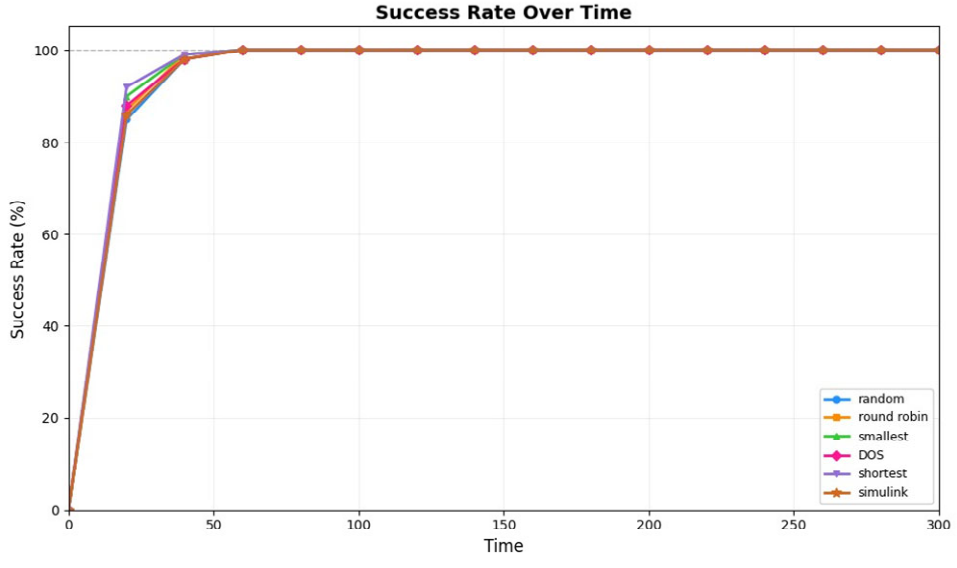


Figure 8 Average response time in random workload mode (see online version for colours)



As you can see in Figures 8 and 9, all load queues are empty while they are being set up. But there are jobs in the first five seconds. There are some ways that work, but not very well. 90% of the time, it takes 5 to 20 seconds, and only 8% to 35% of the jobs that are asked for come in every second. There is a difference between the ways, but none of them work well or take it into account. The lines get too busy in 25 to 125 seconds because chores are being done so often and are becoming more popular so fast. All of the steps are different because of this. From 125 seconds to the end of 300 seconds, the task queue does not get backed up, and new tasks are not added quickly. As for which SMP schedule method works best, the right and DQN ones are the best. There are a lot of things going on at once.

Figure 9 QoS satisfaction in random workload mode (see online version for colours)



As a whole, the suggested way is now in a training process that cannot be stopped for an hour. The DQN method stops training slowly after fifty seconds. It gets used to how the work is done and starts to stand out from the others. After that, the plan that was suggested works better than the way things are done now for both changes in high frequency and changes in low frequency.

5 Conclusions

This study was made to show how AI can completely change how costs are planned for and kept track of. AI can also help managers do their jobs better, faster, and more accurately, according to the study. Research that was well-thought-out shows that AI-based systems can do more than regular accounting methods. You can quickly try to guess what will happen and get help right away with these tools. Like, AI fixes bugs in old models so that managing money is more open and based on facts. Small businesses should be able to pay for a safer and more open system. Before AI can be used to improve reporting and cut costs by a large amount, these issues must be fixed. A lot of things need to be done. A lot of people are worried about how safe their data is, how much it will cost to get started, and losing their normal banking jobs. Another thing is that you should think about what is right and wrong, plan for the long-term, and check on the system often to make sure it stays alive. A lot of the move toward digital bookkeeping is due to AI. This helps businesspeople make better decisions for now and the future. To make the system more useful, easier to connect to other platforms, and simpler for people to accept, more work and study should be done. AI tools that help businesses save money may be able to be used by more businesses now. Everything would be better, and it would be safer to deal with money.

Declarations

All authors declare that they have no conflicts of interest.

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