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Identifying the factors affecting System throughput accounting Theory of Constraint-Based Technology Industry Drivers from the FDAHP method

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ABSTRACT

The current research is aimed at identifying the effective components on the throughput accounting of the propulsion system of the technology industry based on the theory of limitations. System throughput accounting is a dynamic, aggregated, principled and comprehensive approach to management accounting that provides information to support managers' decision-making in order to optimize the organization. The methodology used in this research is qualitative-quantitative. in which the foundational data grand theory method is used. using the opinions of subject matter experts and interviewing 14 experts in this field and using the snowball method until reaching the theoretical saturation stage in order to identify the effective factors in identifying the desired components of the research using open, pivotal coding and the choice has been made. The results of this research in the quantitative part have also led to the identification of 26 effective components in the subject of the research, which are ultimately effective on the throughput accounting of the propulsion system of the technology industry. The relevant components are fully included in the conclusion.

Keywords: Model presentation, system throughput accounting, technology industry drivers, theory of constraints

1. Introduction

Today, with the globalization of the economy, technological developments and the ever-increasing expansion of business, accounting information has gained a special place; Because investors to make decisions Finances themselves need accurate financial information, and accounting plays a central role in the prosperity of the economy and the circulation of wealth and capital; In addition to this, the emergence of the age of communication revolution and new concepts in accounting; Such as digital currencies and their position in the face Finance, network marketing and..., the need to make fundamental changes in education to respond to It has created the needs of the new age. In this regard, due to the limited economic resources in contrast to the unlimited human needs, throughout history, emphasis has always been placed on the better use of these economic resources. Therefore, with the development of human societies and the creation of a concept called democratic governments, this issue has gained double importance. In contrast to May It can be said that the dominant paradigm of the rulers of the developed countries is to pay attention to the development of the accountability system, the high accounting institutions of the leading countries are responsible for the accountability mission with the throughput accounting approach. In this sense, on the one hand, by conducting a financial audit and complying with the legal requirements, the financial operations of executive bodies are examined and any Violation report that the relevant department includes consideration of maintaining their supervisory duty and on the other hand, by applying performance audit, while maintaining their supervisory duty, they also play a consultative role (Babajani and Jabarian, 2016).

System throughput accounting is one of the subsystems active in the accountability system, which plays an important role in evaluating the accountability of public sector institutions. throughput accounting as a part of the comprehensive accounting system that uses new methods to manage, evaluate efficiency, effectiveness and economic efficiency of public and functional financial resources of executive bodies, which ultimatelyIt can make the consequences of drivers of economic transformation, especially new technologies, to create value in developing countries a reality. This means that the capabilities of the data-driven economy require focusing on the structural changes of growth and development from the perspective of sustainable development. Now, with the advancement of technology and increased competition, business units have faced double risk and uncertainty in the business environment. Accordingly, to deal with the risk and uncertainties in the economic environment, it is important to apply and use new techniques. throughput accounting has been continuously increasing. The cause of this phenomenon is the intensification of competition in the economic environment inside and outside the countries, the reduction of profit margins, the increase in the price of inputs and energy, economic crises, etc. (Kashan pour et al., 2017). In order to get out of this situation, it is necessary to be able to use new technology that has profound effects on the throughput of companies, especially in the production and analysis of big data. As a part of control systems, it should be used properly (Chapman & Kihn, 2009). In this field, accounting researchers, like researchers in other fields, with technological changes, the complexity of the business environment and the invention of new methods, have sought to conduct new applied research and tried to find optimal methods by conducting research and using it in the development of accounting. This field is needed to prepare and produce financial information and as a result increase the quality characteristics of accounting information (Lake et al., 2019). The good thing about the trend is that, although the field of futurology emerged later than some other fields, it has become very widespread (Sadiqian et al., 1400). Therefore, it is necessary for the competition and success of companies in today's competitive and accelerated world to make correct decisions based on correct, accurate, relevant, reliable and timely information, and management accountants, as one of the main providers of information required by management, should Keep up with the surrounding developments and developments. One of these areas is the field of science and technology, which is constantly progressing. In this regard, we must change our understanding of the organization and how to manage it and consider the organization as a living organism that all its parts must work together in order to move towards its desired goal. One of these important and basic changes is changes in tasks, skills and tools of accountants. Having correct, accurate, relevant and reliable information is one of the most important elements of decision-making, and since accountants are the providers of information required by management,

paying attention to throughput accounting is one of the most important factors in creating competitive power. Therefore, considering the progress and prospects of technological progress in Iran and the world and the expansion of global markets and globalization, as well as the theoretical concepts of system throughput accounting, compiling a 20-year plan for accounting and determining the necessary tasks and skills for accountants with an emphasis on the field of information technology is necessary. is Also, the complexity of decision-making in business and the survival of the company made the use of profitability analysis techniques necessary. Among these methods, we can analyze profitability based on limitations[1](CBPA) and the theory of constraints (TOC) and profit margin analysis[2](CMA) pointed out to decide on multi-product combinations. Profitability analysis based on the constraint, the most profitable combination of the company's product production using activity-based management (ABM) calculations It is a limitation and a bottleneck. The theory of limitations is a type of this method that companies consider to identify profitable products (rahnamarodposhti and Salehi Guide, 2019).

Therefore, the aim of the upcoming research is to present the accounting model of the throughput of the propulsion system of the technology industry. But the main point is how to perform the throughput accounting process of the technology industry's drive system in order to have the necessary effectiveness? How to manage system throughput accounting for technology industry drivers? And what factors are effective on the throughput accounting process of technology industry drivers? According to the mentioned cases, the basic questions of the research are what are the drivers and key factors for the future of system throughput accounting in the field of information technology.

Research literature

Now the majority Societies, organizations and individuals are in diverse and changing environmental conditions. Understanding the consequences of drivers of transformation, especially new technologies, for value creation in developing countries, becomes more important day by day. This means that the capabilities of the data-driven economy require focusing on the structural changes of growth and development (value creation) from the perspective of sustainable development; This is especially necessary in developing economies, which have a deep gap with leading economies in this field. Considering the full inclusion of the value creation process in the management accounting system, it is necessary that the changes in this field be carefully examined and identified in accordance with the ways of value creation and existing obstacles. The effect of transformation drivers is focused on the role (duty) of accountants; For example, in recent decades and following the developments caused by the Internet economy, the role of accountants has been studied a lot (Weber, 2011; Byrne & Pierce, 2007; Burns & Baldvinsdottir, 2005) and continues as a research area (Goretzky et al., 2017; Moll & Yigitbasioglu, 2019; Rieg, 2018; Schäffer & Brückner, 2019). In addition, considering that management accounting includes the entire process, taking into account technical, behavioral and organizational aspects, the need to know the impact of using new technologies and other drivers of change in the thinking, processes and procedures of management accounting is a tangible thing that ultimately It leads to adjustment of many management accounting positions and creates challenges for management accounting in the future.

System throughput accounting

Today, with the globalization of the economy, technological developments, and the ever-increasing expansion of business, accounting information has gained a special place; Because investors need accurate financial information for their financial decisions, and accounting plays a central role in the prosperity of the economy and the circulation of wealth and capital; In addition to the emergence of the age of communication revolution and new concepts in accounting; Such as digital currencies and their position in financial statements, network marketing, etc., has created the necessity of making fundamental changes in education to respond to the needs of the new era (Khajawi and Mansouri, 2019).

Accounting researchers, like researchers in other fields, with technological changes, the complexity of the business environment and the invention of new methods, have sought to conduct new applied research and tried to find optimal methods of preparing and

[1] Constraint Based Profitability Analysis (CBPA)
[2] Contribution Margin Analysis (CMA)

producing financial information by conducting this research and using it in the development of accounting. and as a result, to increase the qualitative characteristics of accounting information, teach and create (Lake et al., 2019). The good thing about this trend is that although the field of futurology emerged later than some other fields, it has become very widespread (Sadiqian et al., 1400).

Objectives of throughput accounting

Goals Accounting operational particle for direct object may power to the face Below summary did (Abrehi, 2019):

1) determine and size get cost Hi production with Loading product with items cost E that to Convenience may power Roy it product loading did and items cost E that to Convenience not power to it product Allocation gave and leading to increase Completion company may to be.
2) help to Management company for do duty program tiny that one from the most important Duties is and role important in interest vector optimal from Resources and program tiny efficient Operation company has.
3) help to company for do Control cost that section important from performance Control administrative in company is.

The role of information technology in system throughput accounting

Rapid changes in the business environment, such as the globalization of industries, advancements in information and technology, increased competition and environmental issues, are all factors affecting the changes in accounting practices in recent years. Changes in the business environment usually lead to changes in the way of doing work, activities and management of organizations (Sulaiman et al, 2008; Talha et al, 2016).

Some experts believe that due to the changes that have occurred in the business environment and rapid technological developments, the information contained in the financial statements have lost their relevance over time and the stability of the basic principles and procedures of accounting has led to the current pattern of preparing and presenting the statements. Finance remains unchanged for years (Shams Zadeh et al., 2016).

Stein (2017) states that radical and continuous changes are taking place, but in the midst of this there are two more important ones that have the ability to change the accounting game around the world, they are blockchain (block chain) and artificial intelligence.

Factors affecting throughput accountant

Throughput accounting one from Tools Accounting administrative is that on basis principles original Theory Limitation I see firm is and Mainly on interest to Management Limitation Hi apply done on activity Hi operational unit economic focus has work it supplement System Management accounting is because all Information particle for direct object that Managers for Management and Control limitations unit economic they need have presentation does(Elsukova,2016).in Accounting Assumption function may to be that every process at least one Limitation has, will equipment, workers or procedure I see be Also one philosophy Accounting traditional particle for direct object affects that may say Max to do profit from through Max use from the car instruments and force work do may to be throughput accounting badge may to give that improvement profitability with improvement flow in the whole process do may be (Maynard, 2011). concept original Throughput accounting to meaning use from analysis and analysis profitability in level unit It is economic to instead of analysis margin profit in level product to pay It's the opposite Accounting cost Hi traditional that At that cost I see from all section Hi process production plural Bring may to be and to roads different to Products special and so from deduction this cost from price sale this Allocation products may find , throughput accounting of margin profit gross in determining Sufficient or lack of profitability product to meaning production redo it use may to be(Bragg,2017).when use Accounting throughput, inventory so from sale product valuable does not have and Completion production and appointment to give it in So warehouse from sale product or presentation services, Good throughput is not because in the face Absence sale product and maintenance it in Warehouse, company storage cost cause create cost Hi additional for company may to be and possible is Damaged goods in the warehouse to see that this order cause increase loss company and decrease profit it may be, Therefore throughput accounting tends to decrease

inventory to the least limit possible has.in Accounting throughput, attention may to do that cost Material directly alone element Variable in Structure cost Hi production is, in while that the rest cost I see such as salary and other cost I see to title cost constant in opinion taken may to be and for arrive to margin operating profit, from income result from sale for Cost company Material directly reduce. The third effective factor in throughput accounting, element It is time that one from the most important Resources is company must from time to Syntax Ahsan interest vector slow because cost I see with attention to time made on Roy Products loading may to be and this time to when division may to be that value added has and time Operation real is and time to value time waiting, time examination and time handling addition not be, but this time essential is and company not can without it work slow Therefore company must it particle for direct object to at least possible decrease to give. In addition to the above factors, increase Efficiency Staff company and increase motivation they to work requires create System efficient motivational and adopt program Hi Appropriate training in inside or outside from company is that to increase production and quality item the need help may slow. This order in to Max deliver profitability company reflect may to be. Finally, from through use from System Throughput Accounting, the witness increases rate output and increase margin operating profit in the result increase production we are and this to Max deliver profitability company in the result change from apply cost Hi traditional Accounting to use from Accounting throughput help may slow.

The effect of transformation drivers on throughput accounting can be discussed from two aspects; From the first perspective, throughput accounting is the response and reaction to the developments and challenges of accounting progress. As the organizational environments become more complex, it seems that the throughput accounting response needs to restructure the information so that the potential to reduce uncertainty and help management decision-making is always maintained. In cases where information structures were challenged due to the need to increase the clarity of organizational decision-making, the appropriate response is to advance accounting techniques that use new formatting, new structures, or changed technical logic (Hazelman, 2019). From the second point of view, changing the role (duty) of the accountant is operational. Management actions and organizational changes reflect environmental changes, such as increased production flexibility, increased product range, and deeper and faster competitive displacement among competitors. Considering all the mentioned cases and the fact that today the developments caused by the changes in the business environment with the focus on improving productivity, creating employment and increasing economic growth are proposed as one of the dominant approaches in most countries of the world and the business organization is in the position of accountability, this reflects the changes and considering the role of operational accounting in the organization and the need to change this area in accordance with the attitude, goals, strategy, development and maturity of the organization, the present research tries to explain the multifaceted nature of throughput accounting, the aspects of accounting's effectiveness as drivers of transformation and The requirements to change it are to adapt to the recent environment. In this regard, paying attention to the role of the theory of limitations and its importance in throughput accounting can be a new approach in the development of this field.

Research background

Jackson and Allen (2023) drew a model of technology acceptance and examined accounting professions' perceptions of technology, and how it might affect acceptance at work. Data from an online survey of 585 accounting managers from organizations of various sizes and pay levels. The results showed that educating accounting staff on the value of technology and optimizing their confidence and skills through training and support initiatives is fruitful, especially for smaller businesses.

Jun Dai et al (2023) Recent advances in technology have stimulated and facilitated a revolution in the field of production called the "Fourth Industrial Revolution". Also, these changes will significantly affect current business models and affect the scope of throughput accounting. The profession may adjust existing procedures to accommodate these changes or invent new approaches to improve analytics and decision-making, and possibly become smarter.

Varzaru et al (2023) investigated the role of digital accounting in the drivers of organizational sustainability from a decision-making point of view.

This research was evaluated using artificial neural network analysis and structural equation modeling. The results showed that, from the point of view of accountants, the leading roles of management accounting on organizational sustainability are enablers and reporters of sustainable value created in the organization.

Monday et al. (2023) in their article entitled "Empirical evaluation of the impact of throughput accounting costing on the financial criteria of manufacturing companies in Nigeria" investigated the relationship between costing throughput and financial criteria of manufacturing companies in Nigeria. The results of this study show that there is an insignificant relationship between throughput costing and financial metrics of manufacturing companies in Nigeria. Based on this result, it is suggested that manufacturing companies in Nigeria should implement other management accounting techniques such as scheduling system, activity-based costing, target costing and kaizen costing system in order to increase their financial throughput in addition to implementing throughput costing system in resource management.

Barzegar et al(۱٤۰۳) . In their study titled identifying the drivers of change in management accounting, they investigated the drivers of change in management accounting. The results showed that production technology, information technology, virtual systems, artificial intelligence, dynamic innovation, organizational structure, regulatory structure and works, globalization and cultural changes are the drivers of change. The need to recognize the effect of using new technologies and other drivers of transformation in thinking, management accounting processes is a tangible matter that ultimately leads to the adjustment of many management accounting positions and creates challenges for management accounting in the future. By providing views and solutions for increasing knowledge and implementing information technologies and adapting management accounting to these innovative waves, it contributes to the development of literature in this field.

Jalali Gorgani and colleagues(۱٤۰۲) In their research, they presented the evaluation matrix of driving forces in the emergence of legacy accounting in order to develop future-oriented scenarios for the development of legacy accounting perspectives. The result of this study in the qualitative part indicated the existence of 3 categories, 8 components and 33 themes as drivers of heritage accounting in household ownership, which was confirmed based on Delphi analysis. In fact, the result obtained in this study shows that accounting is used as a legacy in family-owned structures in order to meet the needs of the powerful person as the owner of influence on the structural functions of companies. Therefore, under the presence of executive appointments, the lack of independence of the board of directors, and the small size of the board of directors, the governance hegemony through accounting tools leads to the self-interest of those in power.

Barzideh et al.(۱٤۰۰) In an article titled "Identifying drivers affecting the future of accounting in Iran in the field of technological innovations, after four Delphi rounds, 31 drivers were found in six major areas". The results showed that accounting needs updating and changes in education, laws and standards and accounting techniques.

Mohammadi Noura et al. (1400) found that digitization improves the role and effectiveness of the auditor as a governance mechanism, improves processes and procedures, improves the quality of accounting information, improves stakeholder decision-making, improves employment methods and policies, and changes standards and legal requirements in accordance with They called digital transformations. Also, digitalization, on the one hand, by eliminating paper filing, improving access and facilitating the transfer of information, improves information security, and on the other hand, by facilitating disclosure and network abuses, it reduces information security, and as a result of this, the need It makes it necessary to create security platforms.

Research methodology

The research method in this research is qualitative, which in this section is first based on the investigations carried out in relation to the throughput accounting of the propulsion system of the technology industry based on the theory of limitations and criteria. Primary form Taking it in general was discussed and exchanged opinions with available experts and experts who were selected based on the criteria derived from the research objectives in a judgmental manner. The interviews were open-ended in the first sessions, and continued in a semi-structured manner in the subsequent sessions, with the identification of related issues. A total of 14 interviews were conducted with experts until

theoretical adequacy was achieved. After the interview finally to Interpretation of interviews conducted with experts System throughput accounting is paid in this study, interviews with experts in the field throughput accounting and technology industry drivers in this field and it took place in Tehran province. Focusing the interviews on the experts' expert opinion regarding the conceptual model throughput accounting of technology industry propulsion systems based on the theory of constraints was the initial interviews were conducted after extracting the main components from domestic and foreign scientific sources and texts in order to identify the main themes and categories. At the same time as conducting interviews, the researcher tried to identify people who during the process of data analysis could provide a specific insight into undeveloped or less developed topics and categories. In this technique, the Delphi Hierarchy Technique (FDAHP) is used to measure the viewpoint of verbal expressions. Verbal expressions have limitations in fully reflecting the respondent's mental states. For example, the expression "much" for person A, who is strict, is different from the expression "much" for person B. If a definite number is used to quantify the views of both individuals, the results will be biased. After the interview Qualitative and quantitative parts through the fuzzy Delphi hierarchy to identify the component effects on the research were done.

Analysis of the results see

In this interview research experts in the field throughput accounting of technology industry propulsion systems based on the theory of constraints by using three coding methods (re-centered and selective) in theorizing stage, data and information were collected and analyzed. As mentioned earlier, in the current research, the researcher has used the necessary benefits to analyze all the trends of grounded theory (open, central and selective coding, as well as recording notes and drawing diagrams). For open coding, according to the relevant table, which includes two parts of interviews and extracted primary codes, secondary codes of concepts and categories extracted from them. It has been exploited.

A: As can be seen in Tables No. 1, the effort is to highlight the key points and issues raised by the interviewees. It is emphasized to be extracted. Paying attention to these key points extracted from the text of the interviews helps the researcher with his creativity to choose titles that match the special features related to the research. After the coding, and the implementation of the related steps are done. All the key points of the interviews are given a title as follows.

Table number 1: Summary One of the research interviews (qualitative part)

Verbal statement
Ensuring the profitability and sustainable growth of a business is very important
The cost of creating and maintaining capacity allocated It is for a certain period
The current reality and the diagrams in it cause the creation of a logical structure that depicts the state of reality as it currently exists in a system, and this operational method is throughput accounting.
We can use digital tools to predict cash flow and prevent financial crises to improve the organization's financial performance. A more accurate analysis of liquidity helps us make better decisions about resource allocation.
Controlling the cost of production cost control is another primary goal of cost accounting. Accountants study the various operations and processes used to produce a product. They compare budgets allocated for materials, labor, and overhead to costs
Various businesses need to be able to monitor employee phone calls, emails and office behaviors such as internet usage to protect big data.
The use of blockchain systems in accounting provides the possibility of smart contracts, consolidated accounting, standardization in auditing, security, trust and less paperwork for accountants and better performance.

In this stage, by creating a line of codes in the coding stage and using them, 273 items related to the theme and compilation and presentation of an applicable and suitable model for accounting the throughput of the propulsion system of the technology industry based on the theory of limitations were identified.

B: Forming the main categories and classes In this part, the researcher focuses on the relationship between the concepts extracted between the interviews (initial coding) and the basic foundations of the research.(Presenting a logo for the throughput accounting of technology industry propulsion systems

based on the theory of constraints) is discussed and tried to adopt a comprehensive, complete, logical and integrated relationship among the mentioned categories in order to Base on that, he configured the main categories and classes and was able to develop the central coding to finally identify the component. Their considerations which are effective in the throughput accounting of the propulsion system of the technology industry be a step necessary to be removed.

As a result, according to the interviews conducted in this research, the researcher is looking for the answer to this question: What are the effective Identifying the factors affecting System throughput accounting Theory of Constraint-Based Technology Industry Drivers Through Fuzzy Delphi Hierarchy, Can the rank and position of each of them be identified?

After determining the categories, the stage of building the general classes of the theory is based on the method of Strauss and Corbin, which is presented in Table No. 3.

Table 2: Secondary coding of interviews

Verbal statement	component
Ensuring the profitability and sustainable growth of a business is very important	Increase profitability
The cost of creating and maintaining capacity allocated It is for a certain period	Increase resource capacity
The current reality and the diagrams in it cause the creation of a logical structure that depicts the state of reality as it currently exists in a system, and this operational method is throughput accounting.	Changing the structures and business models of accounting institutions
We can use digital tools to predict cash flow and prevent financial crises to improve the organization's financial performance. A more accurate analysis of liquidity helps us make better decisions about resource allocation.	Improving the organization's financial performance
Controlling the cost of production cost control is another primary goal of cost accounting. Accountants study the various operations and processes used to produce a product. They compare budgets allocated for materials, labor, and overhead to costs	The growth of financial startups
Various businesses need to be able to monitor employee phone calls, emails and office behaviors such as internet usage to protect big data.	Development of big data infrastructures
The use of blockchain systems in accounting provides the possibility of smart contracts, consolidated accounting, standardization in auditing, security, trust and less paperwork for accountants and better performance.	Blockchain technology development

Table 3: Forming general classes of categories According to the method of Strauss and Korbin

Subcategory	Main article
Increase profitability	Consequences
Providing new financial statements and reports	
Increasing basic researches, articles and related researches	
Increase resource capacity	
The emergence of new financial technologies	
Production efficiency	
Changing the structures and business models of accounting institutions	
Balance in planning to prevent waste of resources	
Controlling the entry and exit of bottlenecks (CCR)	
Improving the organization's financial performance	
Mechanization of financial processes	
Innovation in throughput accounting system	
The growth of financial startups	
Emergence of new generation customers Z	
Development of big data infrastructures	Strategy
Development of throughput accounting systems based on artificial intelligence	
Development of Internet of Things technology and collaborative economy	
Blockchain technology development	
Development of robots and machine learning technology	

Subcategory	Main article
Adoption of integrated financial and non-financial systems ERP	
Developing the use of technology XBRL	
Development of smart operational contracts in the country	
Development of knowledge-based businesses and start-ups	
Development of quantum computing and computers	
Developing the use of cloud computing capacity	
Development of technology-based inventory control system	
Investment in technology	
Transparency and accountability	
Planning bottleneck resources	
Geographic factors	Background conditions
Political factors	
Economic factors	
Legal factors	
Legal agents	
Social factors	
Technological factors	
Global throughput accounting standards	Causal conditions
Increasing the volume of data and information and reducing the cost of providing them	
throughput accounting professional associations	
Development and application of throughput accounting standards	
Use of big data	
throughput evaluation systems	
Financial engineering	
Financial instruments	
Risk management	
Level of readiness to change accountants	
Employee motivation	Intervening conditions
Training in order to change the role of accountants from a producer to an information analyst	
Universities and research centers	
Knowledge management	
Organizational culture	
The nature of financial businesses	
International financial restrictions	
Change management	
Sanction management of using new technologies	
Financial and accounting specialized associations	
Senior management support	

According to the above table obtained in the analysis of the interview, the component It was identified that the number of effective components the relevant 57 components were extracted.

After identifying the index First, to identify and select panel members from the sample method Taking a snowball or the same sample Take the chain It has been used. First, two experts were identified in the field of throughput accounting, and then they were asked to introduce other experts and experts who are experts in the field of research. Using their opinions, a list of 47 experts was identified who have expertise in the field under study. had In the next step, the form is designed, which includes the topic of the research, the purpose of the research, and the duration and number of courses were the approximations of the research and this form was provided to 47 identified experts and they were asked to express their willingness and agreement to participate in the panel (participants The) to announce A total of 28 experts and senior accounting managers and technology drivers The relevant subjects showed their willingness and consent for the research and were considered as the statistical population.

Compilation of the initial questionnaire and its testing in a pilot study: In this step, first using the study Research and using the snowball method to list the factors that drive accounting and technology We identified the relevant ones that were effective. Then an initial screening was done and the index Duplicates or synonyms were removed, and finally 57 components of the main category were identified. After identifying the component research to design questionnaires and research questions based on this component action was taken. The questionnaire designed in this stage is the initial questionnaire or the first-round questionnaire of the fuzzy Delphi method called.

Sending the first-round questionnaire to the participants (experts): the same The Cheek The which is mentioned in the above content has become in this research, based on the snowball method, 47 experts who have the necessary expertise and knowledge about the research were identified and selected.

Table 4: Summary of experts' opinions for the first round questionnaire

Range of importance					Questions
(5)	(4)	(3)	(2)	(1)	
21	5	2			Increase profitability
12	10	6			Providing new financial statements and reports
2	6	5	8	7	Increasing basic researches, articles and related researches
18	7	3			Increase resource capacity
17	6	3	2		The emergence of new financial technologies
19	5	4			Production efficiency
7	7	2	11	1	Changing the structures and business models of accounting institutions
3	2	7	9	7	Balance in planning to prevent waste of resources

Then the Cronbach's alpha of the first round questionnaire is equal to (0.823)The It has been found that it is more than 0.7 value which shows The It confirms the reliability of the questionnaire in the first round, and finally, based on the amount of elongation and skewness of the data, it is checked as normal or not The Data normality Based on the results obtained, some questions did not get the required points, which led to their elimination It's gone. Because the questions did not reach theoretical saturation from the point of view of the experts and some of the questions were removed. Because the questions from the experts' point of view were not based on opinion shadows and a number of questions were deleted. The second questionnaire is not the same as the first questionnaire for experts to send and review the results of the analysis.

Analysis of the answers received in the third round: In this step, we will analyze the completed questionnaires in the third round, after collecting the completed questionnaires, as in the first and second rounds, the aggregation and average of experts' opinions will be calculated, and then the collected data will be analyzed. The sum of experts' opinions for the third-round questionnaire is presented in Table 5.

Table 5: Compilation of experts' opinions for the third-round questionnaire

Range of importance			Questions	Dimensions
U	M	L		
5	4.500	4	Increase profitability	Consequences
5	4.500	4	Increase resource capacity	
5	4.000	3	The emergence of new financial technologies	
5	4.000	3	Production efficiency	
5	4.000	3	Improving the organization's financial performance	

Range of importance			Questions	Dimensions
U	M	L		
5	4.000	3	The growth of financial startups	
5	3.750	2	Development of throughput accounting systems based on artificial intelligence	Strategy
5	4.000	3	Adoption of integrated financial and non-financial systems ERP	
5	4.000	3	Development of smart operational contracts in the country	
5	3.750	2	Transparency and accountability	
5	4.000	3	Planning bottleneck resources	
5	4.000	3	Political factors	Background conditions
5	4.500	4	Economic factors	
5	4.500	4	Legal factors	
5	3.643	2	Social factors	
5	4.500	4	Technological factors	
5	4.000	3	throughput accounting professional associations	Causal conditions
5	4.000	3	Development and application of throughput accounting standards	
5	4.500	4	Financial engineering	
5	4.000	3	Financial instruments	
5	4.000	3	Risk management	
5	3.571	2	Employee motivation	Intervening conditions
5	4.000	3	Universities and research centers	
5	4.000	3	Knowledge management	
5	4.000	3	Organizational culture	
5	4.500	4	Change management	

The Cronbach's alpha value of the first-round questionnaire is equal to (0.871), which is higher than the value of 0.7, which indicates the reliability of the third-round questionnaire.

Calculation of the fuzzy value of each of the research questions: In this step, we calculate the fuzzy value of each of the research questions using the opinion of experts.

Checking the stop condition: The results of the calculations of the third-round questionnaire are presented in Table 6. As can be seen, the fuzzy value of all research questions is higher than the average value of the spectrum (value 3). Therefore, all the components or questions of the third questionnaire are effective in the development of innovation of advanced technology businesses. On the other hand, as in the previous round, no new components have been proposed by the experts. Therefore, based on these results, we have reached the goal of the research, which is to identify the effective components in the system throughput accounting process. But we still need to check the condition of consensus or agreement to see if it is aggregated for all the questions (components) or not, which we will check the results of the de-phased value in the table below.

To check the condition of consensus or expert agreement, as agreed at the beginning of the work, at least 70% of the experts must have given the same answer to one of the answer options for each question. Table 7 examines this condition.

As can be seen in the table above, except for the fifteenth and twenty-second questions that are related to the motivation of employees and social factors, the rest of the questions have been agreed upon and aggregated by the experts, and the amount of consensus of the experts' opinions on each of the answers is more than 70% .Therefore, based on the opinions of the research team, the consensus condition of experts' opinions is accepted in the third-round questionnaire. According to the obtained results, i.e. reaching the specified consensus level of the questions and not removing or adding a new component to the research, it is determined that the condition of the agreement of the research has been provided, and also according to the achievement of the stopping condition, the important components which are 26 The main component was found to be important from the point of view and scores of the research experts, which are the results of the research and are used for the development of system throughput accounting.

Table 6: Fuzzy value and D value Fuzzy questionnaire questions Third round

Question status	The de-phased value of each question	Fuzzy value of each question			Questions
		U	M	L	
confirmed	4.500	5	4.500	4	Q1
confirmed	4.500	5	4.500	4	q2
confirmed	4.000	5	4.000	3	q3
confirmed	4.000	5	4.000	3	q4
confirmed	4.000	5	4.000	3	q5
confirmed	4.000	5	4.000	3	q6
confirmed	3.583	5	3.750	2	q7
confirmed	4.000	5	4.000	3	q8
confirmed	4.000	5	4.000	3	q9
confirmed	3.583	5	3.750	2	q10
confirmed	4.000	5	4.000	3	q11
confirmed	4.000	5	4.000	3	q12
confirmed	4.500	5	4.500	4	q13
confirmed	4.500	5	4.500	4	q14
confirmed	3.548	5	3.643	2	q15
confirmed	4.500	5	4.500	4	q16
confirmed	4.000	5	4.000	3	q17
confirmed	4.000	5	4.000	3	q18
confirmed	4.500	5	4.500	4	q19
confirmed	4.000	5	4.000	3	q20
confirmed	4.000	5	4.000	3	q21
confirmed	3.524	5	3.571	2	q22
confirmed	4.000	5	4.000	3	q23
confirmed	4.000	5	4.000	3	q24
confirmed	4.000	5	4.000	3	q25
confirmed	4.500	5	4.500	4	q26

Table 7: Examining the condition of consensus or expert agreement

Consensus status	The degree of consensus	The largest aggregation value	Questions
Consensus	89.286	24	Q1
Consensus	88.69	23	q2
Consensus	86.607	21	q3
Consensus	84.821	21	q4
Consensus	82.738	22	q5
Consensus	81.25	18	q6
Consensus	88.393	24	q7
Consensus	85.119	20	q8
Consensus	83.929	18	q9
Consensus	85.119	20	q10
Consensus	88.69	23	q11
Consensus	87.202	22	q12
Consensus	89.881	25	q13
Consensus	86.905	20	q14
lack of consensus	69.345	10	q15
Consensus	88.095	22	q16
Consensus	82.44	17	q17
Consensus	84.524	19	q18
Consensus	88.69	23	q19
Consensus	86.607	21	q20
Consensus	79.762	14	q21
lack of consensus	68.452	10	q22
Consensus	83.036	18	q23
Consensus	86.607	21	q24
Consensus	80.357	15	q25
Consensus	86.31	19	q26

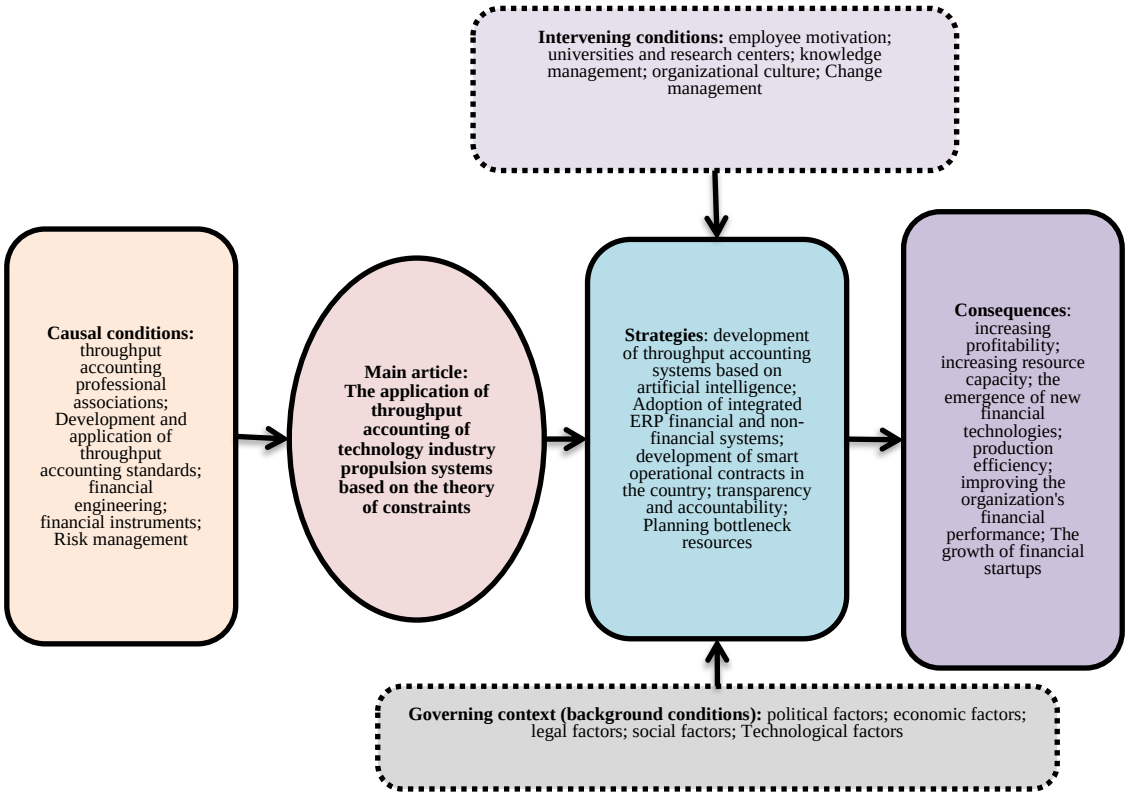

Figure 1: Research model based on Strauss and Corbin's framework

Conclusion

In the current research, after extracting the concepts and categories from the coding done in the grounded theory method, the researcher has started to identify the components of the research based on the opinion of experts and the research conducted in connection with the throughput accounting of the drivers of the technological industry based on the limited theory, so that the basis of the research used in order to identify the components. For this reason, the main findings of the research are presented in two sections: conceptual framework (theoretical literature and research background) and identification of components (interviews and experts). Before examining the two introduced sections, it is stated that the identified components have led to the improvement of the throughput accounting of the drivers of the technology industry, because in these components, in addition to the special emphasis on the participation of the board of directors, the CEO and the managers of different departments in the implementation plan System throughput accounting with a macro perspective, ability to use big data, accountability and control of accounting systems, control of capital circulation inventory, etc., which with the cooperation of all members and experts involved in the development of throughput accounting with monitoring and evaluation of appropriate feedback in this regard To be established by expert members and expert associations in the field of accounting and the relevant drivers, and finally they can identify the problems in the field of accounting. The components identified in this research are: increasing profitability; increasing resource capacity; the emergence of new financial technologies; production efficiency; improving the organization's financial throughput; the growth of financial start-ups; Development of throughput accounting systems based on artificial intelligence; Adoption of integrated ERP financial and non-financial systems; development of smart operational contracts in the country;

transparency and accountability; bottleneck resource planning; political factors; economic factors; legal factors; social factors; technological factors; throughput accounting professional associations; Development and application of throughput accounting standards; financial engineering; financial instruments; risk management; employee motivation; universities and research centers; knowledge management; Organizational culture and change management, which was obtained based on the opinion of experts in this research and fuzzy Delphi hierarchy analysis, finally, these components and their application in the accounting of the throughput of the driving system of the technology industry based on the theory of constraints cause improvement and functional improvement. And more effectiveness in throughput accounting. Regarding the comparison of the findings of the current research with other researchers' findings, it should be noted that most of the effective components presented on throughput accounting by other researchers, including Barzegar et al. 1403 in the components (production technology, information technology, virtual systems, artificial intelligence, dynamic innovation, organizational structure, regulatory structure and works, globalization and cultural developments), Barzideh et al. 1400 (accounting needs updating and changes in education, laws and standards and accounting techniques), Majlesi et al. 2019 (intelligent leadership has a positive and significant effect on accounting trends directly and with the mediating role of information technology), Jackson and Allen 2023 (emphasizing significant opportunities for organizations to educate accounting staff on the value of technology and to optimize their confidence and skills through training and support initiatives, particularly for smaller businesses); Sánchez 2022 (the analytical tool is helpful for describing future developments in the sector and customization for national level studies), He had the desire to expand this model and he had it all, So we can say that effective steps have been taken in better identifying the factors affecting the processing of the accounting model. On the other hand, in this research, considering that in the Delphi fuzzy prioritization, economic factors have obtained a higher rank and desired indicators from the experts, therefore, institutionalization applications of this factor should be used to strengthen the economic factors affecting performance accounting and in line with the stability of economic infrastructures. On the other hand, we should be able to strengthen economic factors by creating an appropriate infrastructure and the necessary basis and establish its foundations firmly, because the role and importance of economic factors on the performance accounting process of technology drivers in the field of updating relevant processes is very important. On the other hand, the component of increasing profitability is important, which can ensure the survival of a business, and it should be considered. For this reason, we should be able to ensure the survival of our business by increasing the capacity of both internal and external resources and the efficiency of human resources.

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