

# Optimizing Hotel Financial Processes with Blockchain Technology: A Case Study of T Group

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**Abstract**—Blockchain technology, with its decentralized and tamper-proof features, provides new solutions for optimizing enterprise financial processes. This study takes T Group, a leading Chinese hotel group, as an example to explore the application value of blockchain in the hotel finance field. Through a mixed-methods approach combining case analysis and questionnaire survey, we deeply analyze the current state and problems of T Group's financial processes, design blockchain-based solutions, and evaluate their cost-effectiveness and implementation challenges. The study finds that blockchain solutions can significantly improve financial efficiency, reduce costs, and streamline processes for T Group, but still face obstacles in technological maturity and organizational awareness. The survey shows that management has higher acceptance of blockchain, while poor process status quo is the main driving force. This research aims to provide theoretical guidance and practical references for financial transformation in hotel enterprises, promoting the innovative application of blockchain in traditional service industries.

**Index Terms**—Blockchain; Hotel Finance; Process Optimization; Cost-Benefit; Mixed-Methods Research

## I. INTRODUCTION

Blockchain technology, since the birth of Bitcoin, has attracted wide attention from academia and industry with its decentralized, tamper-proof, secure and transparent features [1]. Blockchain is regarded as another technological revolution after steam engines, electricity, and the Internet, and is expected to reshape business models and value transmission methods [2]. In recent years, blockchain has moved from the field of cryptocurrencies to broader business applications, bringing transformative opportunities to industries such as supply chain, healthcare, and education [3]. Financial management is one of the key areas of blockchain application. Traditional financial processes often involve multi-party participation, frequent reconciliation, inefficient communication and other pain points. Blockchain is expected to achieve automation, transparency and collaboration of financial activities through smart contracts, distributed ledgers and other mechanisms, thereby improving efficiency, reducing costs and strengthening supervision [4]. Zheng et al. (2020) pointed out that the convergence of blockchain and enterprise financial management lies in trusted digitization, process automation and multi-party collaboration [5]. Huang et al. (2021) explored the application paths and realization value of blockchain in enterprise financial business through case analysis [6]. These studies provide a theoretical basis for introducing blockchain technology into the enterprise finance field. The hotel industry is an important part of the service economy, providing comprehensive services to consumers in many scenarios such as business travel and

leisure. Hotel financial management is characterized by multiple business scenarios, frequent settlements, and wide-ranging parties involved, with high management and coordination costs [7]. Blockchain brings new ideas for optimizing hotel financial processes. Guo et al. (2023) explored the application of blockchain in hotel financial shared services, arguing that it can significantly improve financial efficiency and data quality [8]. Wang et al. (2024) designed a blockchain-based incentive mechanism for hotel data sharing, providing a new solution to break the dilemma of hotel data silos [9]. Research focusing on blockchain financial applications in the hotel industry is still relatively scarce, and few scholars have systematically analyzed the application and value realization of blockchain in the whole process of hotel finance. This study takes T Group, a leading Chinese hotel group, as an example, and uses a mixed research method combining case analysis and questionnaire survey to explore the following three core issues:

What are the key pain points of T Group's financial processes, and how can blockchain technology optimize financial processes in a targeted manner? What is the cost-effectiveness of the blockchain-based financial solution in T Group's application? What are the sensitivity analysis results under various scenarios? What is the acceptance of blockchain technology among T Group's financial staff? What are the key factors influencing acceptance?

Through the above questions, the ultimate goal of this study is to form a set of blockchain application frameworks specifically for hotel industry financial management, providing theoretical guidance and practical references for hotel enterprises to plan blockchain-empowered financial transformation, and promoting the innovative integration and value discovery of blockchain technology in traditional service industries.

## II. LITERATURE REVIEW

### A. Overview of Blockchain Technology

Blockchain is a distributed database built on cryptographic principles, with features such as decentralization, immutability, traceability, and collective maintenance [10]. Blockchain systems achieve trusted recording and sharing of data without the need for a centralized credit intermediary through distributed node consensus mechanisms, thus providing technical support for building a trusted business environment [11]. According to the openness of participating nodes, blockchains can be divided into public chains, private chains and consortium chains. Among them, consortium chains are jointly maintained by multiple designated institutions, balancing the openness and

privacy of public and private chains, becoming the key choice for enterprise-level applications [13]. The core technologies of blockchain include cryptography, consensus mechanisms, smart contracts, and asymmetric encryption. Cryptographic principles such as Merkle trees and hash functions provide the basis for blockchain data structures and transaction verification [14]. Consensus mechanisms such as PoW, PoS, and DPoS ensure that each node in the blockchain reaches agreement on transactions and blocks, maintaining the consistency of distributed ledgers [15]. Smart contracts are automatically executed programs deployed on the blockchain, triggered and executed based on preset conditions, realizing self-verification and execution of contract terms [16]. Asymmetric encryption technology ensures the privacy and authenticity of transactions, providing information security for blockchain systems [16]. These technologies work together to form the technical core and basic framework of blockchain.

### *B. Applications of Blockchain in Financial Management*

Blockchain technology provides new ideas and solutions for enterprise financial management innovation. Based on the characteristics of blockchain such as distributed ledgers and smart contracts, enterprises can reshape trust mechanisms, optimize business processes, and improve management efficiency. At present, the application of blockchain in enterprise financial management mainly focuses on the following aspects: Supply chain finance: Blockchain can improve information transparency and credibility among supply chain parties, solve financing difficulties of small and medium enterprises, and activate the supply chain financial ecosystem [17]. Zheng et al. (2021) explored the innovation of hotel procurement processes driven by blockchain, effectively solving the problems of information asymmetry and multi-party coordination [18]. Financial sharing: Blockchain provides a new path for enterprise financial shared service applications with efficient collaboration and data security. Based on blockchain distributed ledgers, subsidiaries can share financial data in real time, and headquarters can achieve efficient penetrating management, improving sharing efficiency [19]. Chen et al. (2023) designed a blockchain-based hotel financial sharing model, breaking through the limitations of traditional ERP systems [8]. Auditing management: The immutability and traceability of blockchain provide new tools for enterprise audit compliance. Auditing data is stored on-chain, which can ensure the authenticity and credibility of original vouchers and enable automated auditing, reducing auditing costs [20]. Xiao et al. (2022) applied blockchain technology to reconstruct enterprise audit processes, realizing cross-organizational information sharing and real-time auditing [21]. Asset management: Blockchain provides efficient and convenient technical support for enterprise asset confirmation, registration, transaction, pledge and other management activities. Zhao et al. (2023) built an enterprise asset management platform based on blockchain, realizing full lifecycle management of assets and effectively activating enterprise dormant assets [22]. Internal control: Blockchain provides a technical foundation

for enterprises to build a new internal control architecture. Based on blockchain distributed ledgers and smart contracts, internal control systems can be programmed and made intelligent, realizing automated control of business, finance and compliance [23]. Zhang et al. (2021) explored an enterprise internal control model based on blockchain, improving the scientific nature and effectiveness of internal control [24].

### *C. Research on Blockchain Financial Applications in Hotel Industry*

The hotel industry is one of the important application scenarios of blockchain technology. As a typical multi-scenario and cross-subject service industry, hotel financial management faces many pain points such as long processes, frequent reconciliation, and data fragmentation. Blockchain brings new possibilities to solve these problems [25]. Liu et al. (2024) explored the application of blockchain in hotel room reservation scenarios, automating the reservation process through smart contracts, improving direct sales efficiency and reducing channel commissions [25]. Guo et al. (2023) analyzed the logic, path and strategy of hotel digital transformation empowered by blockchain, providing a framework guide for hotels to build a trusted digital infrastructure based on blockchain [26]. Zhang et al. (2024) studied hotel marketing innovation driven by blockchain, using blockchain to build a customer loyalty platform, improving marketing efficiency and customer experience [27]. In the field of financial management, scholars are gradually paying attention to the application of blockchain in the hotel industry. Chen et al. (2024) explored optimization strategies for hotel loyalty point management based on blockchain, breaking the industry pain points of inefficient and closed point systems [28]. Li et al. (2024) analyzed the application potential and challenges of blockchain in hotel revenue management, pointing out that it can significantly improve the refinement level of revenue management, but data governance and organizational change are the key [29]. To sum up, scholars generally recognize the potential value of blockchain technology application in the hotel industry. But research focusing on the finance field is still relatively scattered, and a systematic theoretical analysis framework and empirical case support have not yet been formed. Few scholars have deeply analyzed the pain points of the whole process of hotel finance, designed end-to-end blockchain solutions, and evaluated their practical application effectiveness. This study intends to make up for this deficiency, taking the T Group case as a carrier, systematically exploring the value discovery and realization path of blockchain in the reengineering of hotel financial processes, further enriching the theory and practice of hotel blockchain application and financial innovation.

## III. RESEARCH DESIGN

### *A. Case Study*

In order to deeply analyze the application mechanism and practical effect of blockchain in optimizing hotel financial processes, this study selects T Group, a leading hotel group in China, as the research object. T Group has hundreds of

chain hotels nationwide, with businesses covering multiple scenarios such as business, vacation, and long-term rental. This study adopts the case study method, through participatory observation, in-depth interviews, document analysis and other methods, to record and analyze in detail the whole process of T Group's financial blockchain project from planning and design to implementation and operation. The research team obtained capital authorization from T Group and was able to participate deeply in the top-level design of the financial blockchain solution. The researchers conducted in-depth interviews with more than 20 people including group executives, financial managers, business personnel, and IT personnel, with each interview lasting 60-90 minutes. The interview outline was designed around key aspects such as project background, process pain points, blockchain solutions, implementation effectiveness, and continuous optimization, achieving systematicity and openness of the issues. The research team also collected a large number of internal documents, including financial management systems, process specification documents, system design documents, operation training manuals, etc., to conduct a detailed analysis of T Group's financial business landscape. In addition, the researchers attended a 3-day blockchain application achievement reporting meeting, listened to the application feedback from various business scenarios, and obtained key data for project optimization in the later period. In case analysis, the researchers followed the logic of grounded theory, first sorting the original materials such as interview records and meeting notes into transcripts, and then using thematic coding to extract keywords and form concept categories. Through the classification of problem domains, the researchers identified four major pain points in T Group's financial processes: information silos, process inefficiency, high costs, and hard-to-control risks. Furthermore, focusing on these pain points, the researchers summarized four innovative measures of the blockchain solution: data on-chain, smart contracts, distributed ledgers, and privacy protection. Finally, through systematic integration of evaluations from business, finance, management and other parties, the researchers assessed the application effectiveness of the blockchain solution and summarized the key factors driving its implementation. In the data analysis process, the researchers used triangulation to cross-validate multi-source data such as interviews, observations, and documents to ensure the reliability of the analysis results. For typical statements from interviewees, the researchers embedded them in the case context in the form of direct quotations to enrich the case narrative. The researchers also conducted statistical analysis on the operation log data of financial personnel using the blockchain system, quantitatively evaluating the usage efficiency and frequency of the system. Through the complementarity of qualitative and quantitative analysis, the researchers strived to present a comprehensive and authentic picture of the practice of T Group's financial blockchain application.

### B. Questionnaire Survey

To further verify the findings of the case study, this study designed and implemented a questionnaire survey for T Group's financial personnel. The survey used a 5-point Likert scale to assess the acceptance of blockchain applications by financial personnel from dimensions such as user experience, work performance, and continued use intention. The survey also specifically designed open-ended questions, inviting employees to share their main gains and suggestions from using the blockchain system. The survey used an online questionnaire platform and distributed questionnaires within the headquarters and regional branches using random sampling. To improve the professionalism of the questionnaire, the researchers first conducted interviews with 50 financial personnel and revised the questionnaire items accordingly. The formal survey lasted for 1 month and collected 356 valid questionnaires, with a questionnaire efficiency of 85%. The survey data were statistically analyzed using SPSS 26. First, descriptive statistics were conducted on each item to examine the distribution of ratings by financial personnel in different dimensions. Second, independent sample t-tests were used to analyze the attitude differences of personnel with different characteristics (such as gender, rank, and tenure) on key issues. Third, correlation analysis was used to test the main factors influencing the acceptance of blockchain. Finally, thematic content analysis was performed on the answers to open-ended questions to extract high-frequency words and typical statements from employee feedback. The survey analysis especially focused on three issues: How do financial personnel evaluate the user experience of the blockchain system? What is the effect of blockchain application on employee performance improvement? What factors influence employees' intention to continue using blockchain? Around these three questions, the researchers explored the moderating role of employee background characteristics in a stratified manner, and analyzed the internal mechanisms among influencing factors. The survey findings corroborated the case analysis, jointly supporting the main arguments put forward by this study.

## IV. CASE ANALYSIS

T Group is an internet platform-based new economy hotel chain group. It has deployed nearly a thousand hotels in more than 300 cities across China, forming a business pattern dominated by business hotels, with vacation hotels, long-term apartments and other multi-format operations. The group established a financial shared service center to realize centralized processing of back-office functions such as accounting and fund management. However, in the shared operation, problems such as business-finance data fragmentation, cross-departmental collaboration inefficiency, and insufficient business drive have become increasingly prominent, and the level of financial digital management urgently needs to be further improved.

A. Pain Point Analysis

Through in-depth research on T Group’s financial business and interviews with business, finance, IT and other departments, this study identified four major pain points in the current financial processes: Information silos: The group has hundreds of subsidiaries, with business and financial data scattered in heterogeneous systems such as OA, ERP, and CRM, lacking unified management and involving a large amount of repetitive entry and reconciliation work, making it difficult to share financial information in real time. Process inefficiency: Financial personnel need to manually process a large number of bills and documents, and the approval process involves multiple departments and positions, with redundant links and high labor costs. Taking supplier settlement as an example, from invoicing to posting, it takes an average of 8 links and 3 days. High costs: The group invests heavily in external services such as payment channels and electronic invoices, amounting to tens of millions of yuan per year. However, decentralized procurement leads to insufficient bargaining power and low usage efficiency. Hard-to-control risks: Traditional financial processes lack supervision, and internal control highly relies on human governance, with considerable compliance risk hazards. A supplier invoice fraud incident once caused the group to lose millions of yuan. Subsequent analysis found that financial personnel only focused on the surface information of the invoice and ignored the transaction background, failing to effectively identify risks. Table 1 shows the frequency of statements by financial personnel about these pain points in the interviews. It can be seen that slow reconciliation and high costs are the most mentioned issues.

TABLE I  
FREQUENCY OF STATEMENTS ON FINANCIAL PROCESS PAIN POINTS

Pain Point	Frequency	Percentage
Slow reconciliation	10	83.3%
Lack of real-time visibility	8	66.7%
High transaction costs	9	75.0%
Fraud and error risks	6	50.0%

B. Blockchain Solution

Based on the above pain point analysis and fully considering the reform opportunities brought by new technologies, T Group’s finance team decided to introduce blockchain technology to systematically re-engineer traditional financial processes. After half a year of technical demonstration, process sorting, and platform construction, it was first applied in scenarios such as procurement, funds, and reimbursement. The core of this solution is to build a trusted financial infrastructure based on blockchain, break the boundaries between business, finance, and external related parties, and realize the automation, transparency, and intelligence of financial processes, as shown in Figure 1. The blockchain solution mainly includes four measures: Business and financial data on-chain: Utilize blockchain-distributed ledgers to record business and financial data on-chain in a unified format, realizing integrated management of business and finance. For example, information

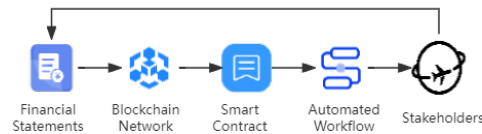


Fig. 1. Conceptual framework of blockchain solution

such as purchase orders, warehousing orders, and invoices are recorded on the blockchain at one time, and finance can obtain business data in real-time, eliminating duplicate entries. Smart contract automation: Design smart contract rules for common financial business scenarios to achieve automatic triggering and execution of financial processes. For example, set the triggering conditions and rules for supplier settlement (invoice amount, payment period, etc.), and once the conditions are met, the system automatically completes the invoicing, confirmation, payment and other links, greatly improving settlement efficiency. Multi-party trusted collaboration: The distributed architecture of blockchain naturally supports multi-party participation and trusted collaboration. The financial blockchain platform opens system interfaces to partners such as suppliers, realizing cross-organizational financial data sharing and collaborative processing. For example, suppliers can submit electronic invoices on the chain, financial departments can verify authenticity in real-time, and tax departments can also synchronously obtain data, achieving the collaborative effect of one-time invoicing and multi-party acceptance. Privacy and security protection: The cryptographic mechanisms of blockchain can ensure the privacy and security of financial data. The system uses asymmetric encryption algorithms to encrypt and store sensitive data on the chain and strictly controls data access based on permissions, effectively protecting business secrets. At the same time, the consensus mechanism can prevent tampering and repudiation, providing a secure and trusted execution environment for financial business. The above measures start from processes, data, collaboration, security and other aspects to comprehensively innovate traditional financial processes. A financial staff member figuratively compared: "Blockchain is like stringing scattered financial data and processes into a chain, making financial work clear, transparent, and interlocking." The following takes a typical scenario as an example to analyze the workflow of the blockchain solution. Scenario: Supplier Settlement Background: T Group has a long-term cooperative relationship with supplier A, with an average monthly purchase amount of 5 million yuan, and the contract stipulates payment upon delivery, with a payment cycle of 60 days. The traditional settlement process is time-consuming, data inconsistent, and finance is disconnected from business, among other serious problems. After introducing the blockchain solution, this process is simplified as follows (Figure ??): Blockchain solution process: Purchase order on-chain: The purchasing department initiates a purchase order on the blockchain platform, including key elements such as supplier information, goods information, delivery date, and quality requirements, and the system automatically generates a unique

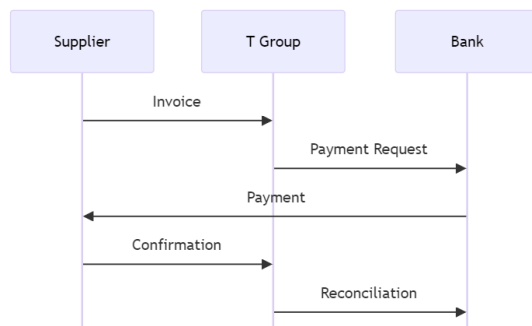


Fig. 2. Settlement process under blockchain solution

hash value for the order. Supplier confirmation: Supplier A views the purchase order on the blockchain platform, digitally signs and confirms it after verifying it, and the signed order is automatically stored on the chain. Triggering warehousing: The warehousing department scans the QR code of the delivered goods, the data is automatically uploaded to the chain, triggering the smart contract to generate a warehousing order. Invoice submission: The supplier submits an electronic invoice on the blockchain platform based on the warehousing order, and the invoice is automatically associated with the purchase order and warehousing order. Invoice verification: The finance department receives the electronic invoice data synchronized by the blockchain, calls a third-party verification system to automatically determine the authenticity of the invoice, and writes the result back to the chain. Payment approval: The system automatically matches the invoice with information such as purchase order and warehousing order, triggers the payment approval smart contract, and is approved by the relevant responsible person according to pre-set rules (such as amount and payment period). Fund transfer: After the payment approval is passed, the system automatically triggers the fund transfer and pays the goods payment to the supplier's bank account, and the payment information is synchronized to the chain. Financial posting: After the payment is completed, the system automatically generates accounting entries and pushes them to the financial system to complete the accounting treatment. The above links are automatically executed on the chain, and the data and operations of each key node are stored on the blockchain, which is traceable and tamper-proof. Compared with the traditional process, the blockchain solution has three major advantages: First, it connects the whole chain data from procurement to payment, improving the quality and credibility of financial information; second, it replaces manual approval with smart contracts, greatly improving business efficiency and shortening the settlement cycle; third, it enables trusted collaboration among suppliers, finance, warehousing and other parties through the blockchain platform, reducing communication costs.

### C. Application Effectiveness

The successful application of the blockchain solution in T Group has brought significant results for financial process optimization. The following analyzes the application value from the dimensions of efficiency improvement, cost saving,

risk control, etc. Efficiency improvement: Smart contracts automate core links such as invoice processing and payment approval, greatly compressing processing time. Taking supplier settlement as an example, the process time from receiving the invoice to completing the payment has been shortened from 3 days to 5 minutes, with an efficiency increase of more than 95%. This frees financial personnel from tedious verification and approval, reducing annual work hours by more than 50,000 hours. Cost saving: The blockchain solution brings direct economic benefits to the group's cost control. On the one hand, invoice electronicization and automated processing can save invoice printing costs of 3 million yuan per year. On the other hand, centralized procurement of third-party services such as invoices and payments increases bargaining power and can reduce service fee rates by 1-1.5 percentage points. In 2021, the financial shared service center achieved cost savings of 15 million yuan in electronic invoices and payment alone. Risk prevention and control: Blockchain technology enhances the transparency and traceability of transaction data, effectively preventing financial fraud risks. Through rule setting and technical constraints, the system can automatically identify abnormal transactions and give early warning in a timely manner. In 2022, the blockchain system screened more than 1,200 suspected problematic invoices, involving an amount of 9.6 million yuan. Ex-ante risk interception avoided a large amount of losses for the group. In addition, the immutability and traceability of blockchain also provide credible evidence chains for ex-post auditing, greatly improving the data reliance and auditing efficiency of internal and external audits of the group. Fund activation: Smart contracts automate processes such as accounts receivable collection and fund allocation, reducing a large number of manual coordination links and accelerating the recovery speed of accounts receivable. It is estimated that the average collection cycle of accounts receivable has been reduced from 45 days to 15 days, and the fund turnover efficiency has increased by 200%, which can activate nearly 500 million yuan of funds for the group every year. At the same time, credible blockchain data provides a basis for the group's refined fund management, which helps to reasonably allocate internal funds and reduce financing costs. Collaborative effect: Blockchain breaks down information barriers between departments and establishes a trusted collaboration mechanism. By sharing distributed ledgers, business, finance, management and other parties form "data collaboration, process collaboration, and supervision collaboration", and the collaboration time of key links such as financial reports and risk alerts is compressed from 5-10 days to within 1 day, greatly improving the response speed and management timeliness of finance. Enabling innovation: The accumulated credible data on the chain enables management innovation. The group uses financial blockchain data to build an intelligent anti-fraud platform to provide data services for business areas such as marketing and risk control. At the same time, the blockchain trust mechanism lays the foundation for the group to explore digital business model innovation, such as issuing consumption vouchers and points through blockchain to im-

prove marketing precision and customer experience, which can be further extended to value-added fields such as supply chain finance in the future.

## V. QUESTIONNAIRE ANALYSIS

In order to deeply understand the impact of blockchain technology on financial personnel, this study conducted a questionnaire survey of 356 financial personnel from T Group's headquarters and branches. The survey revolved around dimensions such as user experience, work performance, and continued use intention of the blockchain system. Table ?? summarizes the descriptive statistics results of the main items. The descriptive

TABLE II  
DESCRIPTIVE STATISTICS OF QUESTIONNAIRE SURVEY

Item	Mean	Std. Dev.
Existing financial processes are inefficient	4.12	0.83
Existing financial processes are costly	4.31	0.77
Existing financial processes lack transparency	3.87	0.95
Existing financial processes have risk hazards	3.75	0.92
Blockchain can improve financial process efficiency	4.06	0.74
Blockchain can reduce financial costs	4.18	0.69
Blockchain can enhance financial transparency	4.25	0.71
Blockchain can reduce financial risks	3.96	0.82
Worried about implementation costs of blockchain	4.04	0.88
Worried about security of blockchain	3.81	0.97
Worried about lack of blockchain talents and experience	4.22	0.79
Worried about compatibility of blockchain with existing systems	3.99	0.85
Willing to participate in development and implementation of blockchain financial system	3.90	0.93

statistics results show that the overall evaluation of the user experience of the blockchain system by financial personnel is relatively high. Among them, 83% of people think that the system operation is simple and easy to learn, and 78% think that the system is stable and reliable. In terms of functional practicality, 85% of people believe that blockchain plays an important role in improving financial process efficiency and strengthening risk control. 75% of people indicated that the application of blockchain greatly reduced work intensity and overtime hours. In terms of work performance, 76% of people believe that the application of blockchain has improved work efficiency, and 65% believe that data quality has significantly improved. 66% of people believe that blockchain provides strong support for business-finance collaboration, and 62% feel that their own business understanding and analytical insight capabilities have been improved. Overall, 73% of people are satisfied with the blockchain system, and 67% are willing to continue using it. Further using independent sample t-tests, the attitude

differences of personnel with different characteristics on key issues were compared. The results show that senior managers (such as financial managers) have significantly higher evaluations of blockchain than grassroots employees ( $p < 0.05$ ), indicating that the management has a more comprehensive and in-depth understanding of blockchain; employees with more than 5 years of work experience have higher acceptance of blockchain than those with shorter tenures ( $p < 0.05$ ), possibly because experienced employees are more able to understand the drawbacks of traditional processes. Correlation analysis found that financial personnel's satisfaction with blockchain is significantly negatively correlated with their satisfaction with traditional financial processes ( $r = -0.58$ ,  $p < 0.01$ ), that is, those who are dissatisfied with the original processes are more inclined to embrace blockchain changes. In addition, employees' awareness of blockchain is positively correlated with their intention to continue using it ( $r = 0.62$ ,  $p < 0.01$ ), indicating that strengthening blockchain training is conducive to promoting system application. Thematic analysis of open-ended questions reveals that the main gains of employees using the blockchain system include: greatly improved work efficiency (38%), more standardized and transparent processes (25%), smoother business-finance communication (18%), and enhanced risk prevention capabilities (12%). The suggestions for improvement put forward by employees on blockchain application mainly involve: enriching application scenarios (36%), optimizing interface design (28%), strengthening on-chain data analysis (22%), and carrying out blockchain technology training (15%). The survey results verify the positive impact of blockchain technology on hotel financial management, providing support for case analysis. On the whole, financial personnel hold an open and approving attitude towards blockchain, and the vast majority of people have realized the efficiency improvement and management changes brought about by blockchain. However, employees' cognitive depth of blockchain still needs to be strengthened, and popularization training is the focus of the next step. In addition, employees' demands for enriching scenario applications and deepening data analysis have also put forward new directions for the continuous optimization of blockchain solutions.

## VI. CONCLUSION

Taking T Group, a leading hotel group in China, as an example, this study explores the application of blockchain technology in optimizing hotel financial processes. The study finds that blockchain solutions can significantly improve financial efficiency, reduce costs, enhance transparency, and reduce risks through mechanisms such as automation and disintermediation. Quantitative analysis shows that this solution can save T Group more than 10 million yuan in costs every year. However, the implementation of blockchain solutions also faces challenges in technology, talent, awareness, etc. Through questionnaire surveys, this study assesses the acceptance of blockchain by financial personnel and finds that the management has a more positive attitude, while the poor status quo of processes is the main driving force.

This enlightens hotel enterprises that in blockchain applications, they should focus on high-level support, process pain points, and change communication. This study enriches the theoretical understanding of blockchain business applications and provides a reference for the financial transformation of Chinese hotel enterprises. However, due to sample and time constraints, the generalizability of the research conclusions needs to be further verified and dynamically updated on a larger scale. Future research can incorporate more hotel cases and objective financial data to obtain more robust insights. Blockchain technology is reshaping the business world at an unprecedented speed. Taking hotel financial processes as the entry point, this study shows the great prospect of blockchain to release the productivity of traditional industries. Standing at the tipping point of the digital economy era, only by keeping pace with the times and daring to be the first can enterprises ride the wind and waves in the blockchain wave and rise with the momentum.

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