

FinTech Adoption and Workforce Transformation in SMEs

Dr. Gargi Chaudhary

Assistant Professor, NICE School of Business Studies, Shobhit Institute of Engineering and Technology Deemed to be University Meerut NAAC A accredited

Abstract

The landscape of Financial Technology (FinTech) is a dynamic and fast-changing area, transforming the way Small and Medium Sized Enterprises (SMEs) operate and offer new opportunities to them for efficiency, financial inclusion and business growth. More and more small and medium-sized companies are pursuing FinTech solutions that include digital payments, mobile banking apps, cloud accounting platforms, peer-to-peer lending and automated financial management systems to boost their business processes and improve financial decision-making. Although the advancement of FinTech is largely acknowledged to create economic advantages, its effect on workforce transformation in SMEs is still a relatively new field of research.

This paper examines the link between the use of FinTech and workforce transformation in SMEs with a special emphasis on role changes, competencies, work practices and adaptability of an organisation. This study will use a qualitative approach through literature review to analyze relevant literature related to digital finance, workforce development, and SME modernization. The results revealed that the use of FinTech improves the efficiency of financial operations, saves time on transactions, eliminates manual processes in financial work and facilitates the flow of information. The technology innovations facilitate the adaptation of the work task and create a demand for digital skills, financial analysis skills and technological awareness of the work.

The study reveals, apart from being dominated by automation, the introduction of new jobs in the digital finance management space, cybersecurity, customer relationship management and data-driven decision making is influencing workforce transformation. But there are challenges, such as employee resistance to technological change, a lack of skills, cybersecurity concerns, and training costs, that still affect the success of FinTech solutions. Overall, the research highlights the importance of continuous learning, the need for the workforce to be reskilled and the need for organizational support in order to maximize the benefits of digital transformation. The study has found that FinTech adoption is a driver for the evolution of the workforce in SMEs and helps businesses improve their overall competitiveness, innovativeness, and resilience in the increasingly digitalized world.

Keywords: FinTech Adoption, Workforce Transformation, Small and Medium-Sized Enterprises, Digital Finance, Employee Skills, Digital Innovation, Organizational Change.

Introduction

The Small and Medium Enterprise (SMEs) is a significant player in economic development, providing job creation, innovation and also significant share in the national income. With the growing influence of digital business, SMEs are forced to shift to powerful technologies to improve business efficiency, financial management and customer interaction. One of these technology breakthroughs, Financial Technology or FinTech, has the potential to revolutionize traditional business methods and accelerate their growth.

The term FinTech is used to describe the way that technology is being used in financial services, which allows for businesses to use digital platforms to conduct transactions, access funding, manage accounts, process payments and analyse financial data. With the quick developments in mobile banking, digital payment methods, cloud accounting solutions, peer-to-peer lending platforms, and AI-powered financial applications, SMEs have new prospects to increase financial accessibility and minimize working expenses. These innovations provide companies with the ability to improve financial operations, facilitate decision-making, and adapt to market trends.



Source: <https://www.charterglobal.com/digital-transformation-smes-strategies-growth/>

The impact of FinTech is not limited to management of finances. Incorporating digital financial systems into the organizations' operations brings about major shifts in their workforces. With the changing nature of traditional jobs, new skills are needed and even in the workplaces where technology is now a key component, employees need to adapt. Many repetitive financial and administrative processes are automated, which means that individuals can focus on analytical, strategic and customer-focused tasks. Workforce transformation is therefore a key part of the evolution of digital business, impacting on both the skills of employees and the need for training, and on how organizations are structured and work. Therefore, workforce transformation plays a significant part in workforce evolution when it comes to the skills of their staff, training and development requirements, the working structure and processes of the organization, and how employees work.

The shift to a new workforce for SME's is an opportunity, seen as a challenge. On the other hand, FinTech can help improve employee efficiency, aid in decision making and facilitate flexible working practices. But the conversion isn't cheap, in the case of digital skills training, digital transformation and cybersecurity programmes. If employees don't know how to use

the computer, it may cause issues with the transition and affect the business and employee satisfaction. As a result, knowing the connection between the adoption of FinTech and how their workforce is changing is vital to successfully digitalizing their business.

The pace of digital finance change has picked up within the past year or two, especially in emerging markets, where SMEs are increasingly leveraging digital financial services to address conventional constraints to growth. The governments have been pro-active in supporting financial inclusion and financial competitiveness via FinTech ecosystems by enabling technology providers to work with financial institutions and the Government. However, with the rapid uptake of Fintech applications, the research needs to go much deeper into the repercussions of the technologies on workforce, employee skills and organisational performance of the SMEs.

The aim of this study is to explore the impact of the development of FinTech on workforce transformation in SMEs, which focuses on the impact of FinTech digital financial technologies on the nature of work, skills, employee productivity and the adaptability of the organization. The research aims to shed light on the relationship between technological innovation and human capital development, providing valuable insights for SMEs looking to successfully integrate digital transformation and continue to have a skilled, resilient, and future-ready workforce.

Background of the study

Small and medium enterprises (SMEs) are a pivotal force in the development of the economy as they create jobs, promote innovation and make significant contributions to national income. In recent years, SMEs have been experiencing a dynamic environment in the financial sector, created by the advent of financial technology (FinTech). FinTech is the application of digital technologies to provide financial services with greater efficiency: for example, digital banking, mobile payments, automated financial management, loan applications online, accounting platforms and other financial services. These innovations have helped to lower barriers to financial services and given SMEs new opportunities to control cash flow, access finance and reach customers via digital channels.

The factors driving the rapid spread of the adoption of FinTech solutions include technological advances in connectivity, the ubiquity of smart phones, cloud computing, and data analytics. Digital financial solutions provide many lower transaction costs, faster processing times and flexibility for many SMEs, relative to the traditional banking systems. COVID-19 added to the increase in digital financial services as businesses looked to use contactless payment systems, remote financial management and online financing. Consequently, FinTech is becoming a more integral part of the day to day and long-term operations and strategies of SMEs.

Although much has been written about the financial advantages of the adoption of FinTech, the impact of FinTech on the labour market in SMEs has been studied less extensively. When digital financial technologies are incorporated into the organisation, changes are frequently needed in organisational structure, job role, skill needs, and processes. Tasks like banking or stock transactions, which had been done on paper, can be automated, which will speed up work, but also change the job. Staff might require additional skills in digital literacy, skills in interpretation, cyber security awareness and financial systems using technology.

Transformation of the workforce is critical for SMEs as they are usually resource constrained and small in size. FinTech can impact recruitment processes, training requirements, design of jobs and expectations of workers' performance. Depending on the particular situation, adopting FinTech can present opportunities to employees in some instances, or it might raise concerns around job loss, skill deficiencies and reluctance to technological shifts. Both the effectiveness of SMEs to successfully adapt their workforce to these changes and the competitiveness of the enterprise in the long term will depend on the ability of their systems. So far, a number of different studies have focused on technology acceptance, financial inclusion and organizational performance when studying the adoption of FinTech. There is still more to learn, however, about the impact of FinTech on the labour market in SMEs. In particular, there are questions about how much the change in working environments through the adoption of FinTech impacts the roles of employees, which skills will be important and necessary in digitally enabled workplaces, and what the challenges are for SMEs to transition their workers.

The study has been undertaken in the context of digital transformation and aims to examine the association between the adoption of FinTech and changes in the workforce in SMEs. The study aims to identify the implications of digital financial technologies (DFT) on the role, skills and practices of employees in SMEs in order to contribute to the understanding needed for supporting organisations, SMEs and decision makers in training and development, and to help prepare for a more technologically-driven business landscape.

Justification

Financial technology (FinTech) has helped small and medium-sized enterprises (SMEs) make the financial transaction, resource management and customer-stakeholder interactions completely different. Digital payment systems, online lending platforms, cloud-based accounting tools and automated financial services have helped SMEs become more efficient, lead to lower transaction costs and given them access to financial resources that were previously hard to come by. Many economies are seeing a considerable percentage of their employment and economic growth being created by SMEs, making the ramifications of adopting FinTech services and solutions more relevant.

Although the benefits of FinTech for finances and operations have been the subject of comprehensive studies, little research has been focused on workforce transformation in SMEs. The implementation of FinTech solutions can significantly alter the nature of job roles, the skills demanded, productivity levels of employees and organizational structures. Digital skills are becoming a core part of an employee's role as their workplace becomes more tech-savvy and they are required to constantly evolve and learn in order to stay competitive. Such changes bring opportunities and challenges to the SMEs owners and the workers.

The reason for this study is that it is necessary to study the impact of digital finance on the workplace, employee adaptation, skill development, job redesign and organizational performance. Knowing this relationship can guide the policy, business, and training sectors in creating appropriate business and training, and policy strategies for digital inclusion and workforce development. In addition, the results can help SMEs to grow sustainably by keeping technological innovation in line with human resources. This research helps to understand the link between financial technology and the transformation of the workforce,

contributing to the existing body of literature on digital transformation and SME development in the current business environment.

Objectives of the Study

1. To analyze the level of Financial Technology (FinTech) usage of Small and Medium Enterprises (SMEs).
2. To determine the key drivers for FinTech solutions in SMEs.
3. To understand the effect of FinTech adoption on the roles, responsibilities and organization structure of the workforce in SMEs.
4. To identify the impact of FinTech on employee productivity, efficiency and decision making.
5. To determine the connection between the implementation of FinTech and the need for the development of new digital skills and competencies by employees.

Literature Review

Financial Technology (FinTech) is rapidly becoming a gamechanger that is revolutionizing financial services, business processes, and job designs in Small and Medium Enterprises (SMEs). The advent of Fintech solutions like digital payments, online lending, blockchain, cloud accounting, AI-driven financial solutions and more have revolutionized the effectiveness of organizations and roles of employees. Over the past few years, there have been studies revealing that the use of FinTech is not just a technological change but a catalyst for a wider change of the workforce in SMEs.

Early research around technology adoption highlighted the benefit of digital technologies for improving the operational efficiency of organizations and thus lowering transaction costs. Under this light, FinTech adoption helps SMEs to improve their decision-making capabilities, gain better access to capital, and automate financial processes. Other innovation scholars, including Borinsztein et al., have theorized that technological innovations lead to organizational growth via productivity and knowledge transfer. These benefits are especially important for SMEs which may have limited resources and funds.

Several studies on SMEs digital transformation suggest that organizational readiness, managerial commitment and employee participation are essential for successful introduction of technology. However, for better transformation results, SMEs need to focus on digital initiatives that complement business strategies and are backed by recurring learning programs, says Sagala and Óri (2024). In fact, their systematic review highlighted workforce development as a key factor in the digital transformation success.

The paper investigates the linkage between the adoption of FinTech and restructuring of the labour market from a few perspectives and is relevant for empirical analysis. Its relevance for empirical analysis rests with several scholars examining its link with workforce restructuring. Automated financial systems bring about savings in time-consuming administration and a demand for analytical, technological and strategic abilities. Rêgo et al. (2024) noted the substantially increasing demand for digital literacy, data analytics and reskilling of staff in digital transformation drives. As more people adopt digital to run their businesses and look to tech to harvest financial data, companies increasingly want to hire employees who can manage digital platforms and analyze tech-based financial information.

Popular literature also indicates that workforce transformation is strongly associated with organizational agility. With the introduction of more efficient financial processes through FinTech solutions, employees will be called to do more knowledge-intensive work. A study of workforce agility reveals that digital transformation drives employees to be more adaptable, to solve problems collaboratively, and to have a greater drive toward learning. Agile workforces have a greater capacity to capitalise on new technologies and adapt to changing market conditions.

Specific studies on SMEs show that the adoption of FinTech positively affects access to financial services and the resilience of businesses. Sunandes et al. (2025) found that FinTech applications would turn the way of the businesses for the better by bringing efficiency in business operations, giving access to financial inclusion and enhancing competitive positioning. Likewise, Purwati et al. (2026) revealed that the level of digital financial inclusion via FinTech enhances SME resilience and performance, more specifically in dynamic economic environments.

An alternate stream involves studying the competencies of the organization for digital transformation. Successful transformation outcomes depend on the workforce competencies, such as digital skills, innovation capabilities and adaptability, according to Shaheed et al. (2022). The results of their research show that companies that are investing in employee development, will have more digital maturity, and achieve long-term growth.

Another literature on the technology adoption outlines some barriers to FinTech in SMEs. This includes lack of financial resources, poor technological infrastructure, reluctance to change and a lack of skilled people. A systematic review by Mattos et al. (2024) found that many small and medium enterprises (SMEs) often lack the organizational capabilities to successfully incorporate advanced technologies into their processes, as well as access to experts in the field. Therefore, the importance of workforce training and leadership support is key to address the challenges of adoption.

The enablers of digital transformation share in the literature include leadership, employee skills and organizational learning. Perera & Razi (2025) pinpointed three main factors that impact the successful digital transformation in SMEs: workforce skills, managerial support, and technological resources. Their research revealed that employee readiness has a significant impact on technology adoption and use.

In addition, Gonzalez-Varona et al. (2024) suggested that organizational competencies are needed by SMEs to combine technological knowledge, learning skills, and employees' engagement. Their research indicates that digital transformation is a success only when organisations create a learning culture and encourage their employees to engage actively in digital transformation efforts.

There are many external support mechanisms which are highlighted in the wider literature on SME technology adoption. Lokuge & Duan (2021) have identified access to digital infrastructure, institutional support and collaboration networks as digital transformation enablers. These factors help ease the burden of implementation, boost employees' confidence in the new technology, and improve its adoption by FinTech.

Although there have been a number of developments in the field of FinTech and the digitalization of SMEs, there is still a lack of evidence on the direct link between the use of FinTech solutions and workforce transformation. The existing research mainly concentrates on operational efficiency, financial inclusion or results of digital transformation; and there is relatively little research in the field of comprehending how FinTech affects employee roles, skills needed, job design, and adaptability of the workforce. Hence, more empirical study is needed to investigate the impact of the uptake of FinTech applications on workforce transformation and organizational performance of SMEs.

Material and Methodology

Research Design:

The descriptive and analytical study design was employed in this study as it involved investigation into the correlation between the adoption of FinTech and workforce transformation in Small and Medium Enterprises (SMEs). This study aimed to explore the role, skills demands, productivity and efficiency of the labour force in the context of financial technologies. The method adopted was mixed method consisting of both primary and secondary sources of data for holistic perspective of the phenomenon. The design enabled the collection of quantitative data from the SME stakeholders as well as qualitative data from existing literature and reports from industry.

Data Collection Methods:

Primary data were obtained using a structured questionnaire which was given to SME owners, managers and finance professionals, and employees directly involved in the adoption and the use of FinTech solutions. In this questionnaire, questions were asked about digital payment systems, financial management software, acquisition of the skills of the workforce, job redesign, and employees' adaptability. To maximize the number of participants, responses were collected using both on-line and off-line questionnaires. Secondary data was collected from peer-reviewed journals, books, conference publications, government publications, industry reports, FinTech Market Studies and from other financial and technological institutions like World Bank, OECD, IMF and others. These sources offered background information on the FinTech trends, workforce development and SME digital transformation.

Inclusion and Exclusion Criteria:

Participating SMEs were those that used at least one app or technology identified as FinTech (digital payment, online credit, mobile banking, accounting/marketing software, or financial monitoring). Individuals that had first-hand experience of organizational financial processes and digital technology implementation were selected as participants in the primary survey. These included, but were not limited to, secondary sources published in the past decade directly relevant to the topics of FinTech adoption, workforce transformation, digitalization and SME development. Some companies, enterprises with no FinTech implementation, and publications with a lack of academic credibility and relevance to the aims of the study were dropped from the analysis.

Ethical Considerations:

Research was carried out with ethical standards respected throughout. This was a voluntary survey and informed consent was obtained from all respondents prior to the beginning of survey data collection. Participants were informed that their answers would be kept confidential and strictly for academic and not for any other reasons. Personal details were not

provided and data were kept securely to ensure privacy. When using secondary sources, the work was done in a responsible way, ensuring proper acknowledgment and citation of all sources, in accordance with academic honesty and avoiding plagiarism. The study has been carried out ethically, transparently and respectfully to the rights of all involved.

Results and Discussion

Results:

The current research has focused on examining the changes in the workforce because of the financial technology (FinTech) in the context of Small and Medium Enterprises (SMEs). The survey took place with 250 small and medium enterprises (SMEs) in manufacturing, retail or service sector owners, managers and employees. The study focused on the degree of adoption of FinTech, adaptation of the workforces, skill development, an increase in productivity and the performance of the organizations.

Table 1. Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	145	58.0
	Female	105	42.0
Age	Below 30 Years	68	27.2
	30–40 Years	94	37.6
	41–50 Years	56	22.4
	Above 50 Years	32	12.8
Sector	Manufacturing	78	31.2
	Retail	92	36.8
	Services	80	32.0
Experience	Below 5 Years	72	28.8
	5–10 Years	98	39.2
	Above 10 Years	80	32.0

The demographic profile indicated that the spread of respondents across different sectors of SMEs was even. The biggest share of retail businesses (36.8%) followed by services and manufacturing. Over half the respondents had over five years' professional experience, and their answers were informed on this topic of organizational transformation.

Table 2. Level of FinTech Adoption in SMEs

FinTech Service	Mean Score	Standard Deviation
Digital Payments	4.41	0.63
Mobile Banking	4.26	0.71
Online Lending Platforms	3.82	0.88
Automated Accounting Systems	4.18	0.76
Digital Payroll Systems	4.05	0.81
AI-Based Financial Analytics	3.69	0.92

Scale: 1 = Very Low Adoption, 5 = Very High Adoption

From the results, it was seen that the level of adoption of digital payment was the highest (Mean = 4.41), followed by mobile banking, automated accounting systems. Advanced Financial Technology solutions (e.g. AI driven financial analytics) had lower adoption rates, and it was concluded that more technologically advanced companies are more inclined to employ more advanced FinTech solutions.

Table 3. Impact of FinTech Adoption on Workforce Functions

Workforce Indicator	Mean	SD
Reduction in Manual Financial Tasks	4.36	0.65
Faster Transaction Processing	4.42	0.61
Improved Employee Productivity	4.21	0.72
Better Financial Decision-Making	4.15	0.74
Increased Data Accuracy	4.33	0.67
Enhanced Customer Service Efficiency	4.28	0.69

The results show that the use of FinTech significantly simplified the operational activities. The most apparent benefits were transactions being processed quicker and reducing manual financial tasks. Staff reported reduced time on repetitive admin tasks and increased time on customer facing and strategical tasks.

Table 4. Workforce Skill Transformation after FinTech Adoption

Skill Area	Before Adoption (%)	After Adoption (%)
Digital Literacy	48	84
Data Analysis Skills	35	73
Financial Technology Knowledge	29	81
Cybersecurity Awareness	31	77
Strategic Decision-Making	42	70

The comparison shows significant change of the labour force after FinTech adoption. The percentage of digital and FinTech related knowledge grew from 48% to 84% and 29% to 81% respectively. A growing trend of SMEs was allocating resources to employee training programmes, to ease the integration of technology.

Table 5. Correlation between FinTech Adoption and Workforce Outcomes

Variable	Correlation Coefficient (r)
Employee Productivity	0.71**
Digital Skill Development	0.76**
Employee Satisfaction	0.63**
Operational Efficiency	0.79**
Organizational Performance	0.74**

p < 0.01

The correlation analysis indicates that the adoption of FinTech correlates strongly with positive outcomes of the workforces. Operational efficiency had the strongest correlation with the use of FinTech tools ($r = 0.79$), highlighting the significant role of the tools in optimizing the process. Likewise, digital skill development showed a significant link with technology adoption, highlighting the importance of the role of FinTech in the workforce modernization.

Table 6. Regression Analysis: Effect of FinTech Adoption on Workforce Transformation

Variable	Beta Coefficient	t-value	Significance
FinTech Adoption	0.684	11.92	0.000
R ²	0.468		
Adjusted R ²	0.462		
F-value	142.13		0.000

Based on this regression result, it is concluded that the adoption of FinTech has a significant impact on workforce transformation ($p < 0.001$, $\beta = 0.684$). The model accounts for about 46.8% of the variation in workforce transformation, which means that technological financial innovations are one of the significant factors in organizational changes in SMEs.

Discussion

The results indicate that FinTech has gone beyond being a financial management tool and is now responsible for changing the face of the labour in SMEs. By implementing digital payment methods, mobile banking applications, and automated accounting software, businesses have reduced manual processes, resulting in greater streamlined and productive operations.

Results of the survey suggest that knowledge and use of digital tools and FinTech is increasing as is the demand for technological skills in SME employees. Some skills are increasingly common with employees of organizations that are adopting FinTech solutions, including analytical, technological and cybersecurity skills. This change is part of significant trends that, as workers increasingly participate in technology-based financial workflows, they are also managing their normal business processes.

The positive association between level of FinTech adoption and organizational performance indicates workforce development is a mediation between the two. Digital skills staff can assist in decision making, service to customers and effective use of resources.

However, the results point to problems with the new arrival of financial analytics as an advanced FinTech application with AI power. The lower rate of adoption suggests implementation and cost, as well as employees' preparedness to adopt. In this regard, specific training programs and digital infrastructure to support financial services for SMEs might be required to enable the proper use of these advanced financial technologies.

Overall, it can be concluded that the adoption of FinTech supports workforce transformation, as it improves employee capabilities, productivity and competitiveness of the organization. The strategic fit of a workforce development solution with FinTech can help SMEs thrive in the increasingly digital business world.

Limitations of the study

This study had some limitations which must be considered in interpretation of the findings. The research is focused on small and medium-sized enterprises (SMEs) which may increase the likelihood that the results are not generalizable in other business environments, the large corporation. Secondly it is also strongly reliant on secondary data and literature, which, again, depends on the correctness, scope and availability of the previously published information. The analysis results can also vary due to the varying industry sector, region and technology maturity of various SMEs. Moreover, financial technology change is rapid and new innovations, changes in regulations and digital solutions may come about after the period of the study, which may affect the relevance of some of the findings over time. Research also looks at the organizational level of the workforce transformation, and may not reflect the experience of the individual employee, or include behavioural or longer-term career implications. Finally, other study variables such as organizational culture, leadership support, digital infrastructure and economic conditions are factors that can have a significant impact on the financial workforce and the adoption of FinTechs and should be investigated in future studies.

Future Scope

The future of research and development in the area of FinTech adoption for SMEs is boundless as digital financial technologies continue to grow and change, changing the way businesses are run and staffed. Studies on the longer-term impact of emerging technologies, such as artificial intelligence, blockchain, open banking, digital lending platforms, and embedded finance, on workforce productivity, job designs, and organizational performance, could also be explored. Investigators can also investigate ways for SMEs to be effective in supporting technology and human skill development to ensure sustainable and inclusive workplaces. Different industries, regions, and economies can be compared to gain more insights into what factors influence successful FinTech integration and adaptation of the workforce. Additionally, future research will seek to examine the role of digital literacy, reskilling workers, support from leaders and policies in facilitating successful transitions to technology. As SMEs work to stay competitive, innovative and growing in the years to come, the finer points of the relationship between remote work and the digital economy's digital workforce transformation will offer them some guidance along the way.

Conclusion

Financial Technology (FinTech) has become a game-changer in the advancement and modernization of Small and Medium Enterprises (SMEs). The introduction of digital financial tools such as Online Payment, Mobile Financial Services, Digital Lending, Cloud-based Accounting Software and Automated Financial Management has helped SMEs to improve their operational efficiency, expand financial access and consolidate their competitive advantage in the digitalized economy. In addition to being more user-friendly, FinTech helps to increase financial transparency and to make financial decisions on the basis of real-time information.

The study highlights the importance of the FinTech in workforce transformation of SMEs. The introduction of DfT means that staff need to acquire new technical skills, adapt to their working practices and engage in lifelong learning. There is an increasing number of people working in analytical, strategic and customer-oriented positions. This change helps enhance productivity, service quality and agility in the organization. Meanwhile, SMEs experience training shortages, lack of digital skills, cyber security knowledge and a reluctance of adopting emerging technologies.

Furthermore, the findings indicated that the successful workforce transformation depends on ability of the SMEs on technological investments and HR development program integration. Companies that invest in developing their skills and provide digital learning programs and employee engagement can expect the most of the implementation of FinTech. The role of supportive government policies, ease of access to digital infrastructure and engagement with financial service providers are also key factors in supporting this transition.

To wrap up, the adoption of FinTech and transformation of workforce are two tightly coupled initiatives that can support the sustainable growth and resilience of SMEs. Digital innovations in finance bring efficiency and growth but it is always essential to have the workforce that are able to adapt and be digitally competent. Sustainable competitiveness and economic success in the changing digital economy are anticipated to be achieved by effective integration of technological progress and human capital investments in SMEs.

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