

## **Information Systems in Small and Medium Enterprises: A Vehicle for Implementing Youth Employment Policies in Kenya**

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### **Abstract**

*This study set out to establish the influence of Information Systems in small and micro enterprises, as a vehicle for implementing youth employment policies in Kenya. The objectives of the study were to assess the role of information systems in SMEs as avenues for implementing youth employment policies; identify role of youth employment policies and the role of TVET sector in youth employment. The study used descriptive survey design. The sample size consisted of the 15 Small and Medium Enterprises (SMEs) that were registered, offer loans to members of the public and operate in their own premises. Both quantitative and qualitative data was collected and analyzed using descriptive and inferential statistics. The study found that most SMEs could not apply the information systems in their operations because of the high cost involved. Most youth employment policies have not been successful. Most parents and learners have not embraced TVET courses as avenues to youth employment preferring to take up university courses. The study further found that most SMEs had not exhausted the optimum employment capacity and contributed to youth unemployment in Kenya. The study also found out that there were no proper policies on youth employment in SMEs, and also the role of TVET on youth training and employment was not well realized. The study recommended that SMEs should invest in the information systems to enhance customer relationship management; education, training and mentorship; monitoring and evaluation; and for research and development in order to create employment opportunities for the youth; TVET institutions in conjunction with SMEs should come with a proper curriculum designed to meet market needs to ensure youth employment; and the government should have proper policies to enhance youth employment in SMEs.*

**Keywords:** *Information system, SME youth, employment policy*

### **Introduction**

The applications of information systems have developed in the last decades in the USA, Europe and Australia, and recently in Asian and African countries. During this period, business organizations were struggling and are still struggle even today to come up with fundamental frameworks to understand the potential of information technology in enhancing youth employment. At these time farmers were using the information systems like the Material Requirement Planning (MRP) system to help in inventory and production management (Al, 2000).

In Kenya, information systems demand has drastically increased especially in manufacturing, hospitals, education and banking sectors with most micro and small enterprise sector embracing the technology as it offers the opportunity for the provision of high quality services (Hawking & Brendan, 2004). With the advent in e-commerce, information has been creating a behind the scenes revolution in business that has seen the massive development in information system and its implementation in banking institutions and more so in the SMEs (Shoemaker, 2003).

Having successfully implemented the information system in business organizations, SMEs have started experiencing the benefits of the applications (Zornada & Velkavrh, 2005). The implementation and adoption of information system has improved service delivery by facilitating increased sharing of the information, organization, planning, control and access to information (Partnerships, 2010).

Implementation and adoption of information system is meant to connect all SMEs units and its functions to ensure that there is a unified computer system that satisfies the needs of the customers, and adds value to the entire SME world (Partnerships, 2010). It's also noted by Zornada and Velkavrh (2005) that sooner than later, with the increased divesty of people living in different corners of the world, changing lifestyles and demand, the clients at these markets will demand services offered by other organizations that are already using the information systems for both convenience and flexibility in services offered. Just like business organizations, today SMEs are running up to ensure that they implement the information systems to ensure that their services are accessed globally which as a result enhances youth employment (Laudon, Laudon, & Dass, 2010).

## **Objectives**

The objectives of the study were to:

- i. To Asses role of information systems in SMEs as avenues for implementing youth employment policies
- ii. To Identify role of youth employment policies in Kenya
- iii. To Establish the role of TVET sector in youth employment.

## **The Statement of the Problem**

SME have great potential for creating employment opportunities for the youth. This can be further expanded through the integration of the information systems in their operations. Information Systems and their applications have facilitated decision making with simulations for enhanced responsiveness and change. It uses portal technology, business intelligence, knowledge management, and mobile technologies that save time and reduce the cost of service delivery.

Mwangi (2013) notes that the major benefits of implementing the information systems are: need for common platform, process improvement, increased customer responsiveness and improved strategic decision. If well implemented information systems should enhance job opportunities in SMEs sector.

However, the ILO Report (2015) and Esim (2016) shows that up to 73.3 million youth are unemployed, 169 million working poor giving a rate 75% informally employed and giving rise to youth unemployment rate at 25 % globally. In Kenya however, the youth unemployment rate is at a severe rate, higher than the adults. 80% of the Kenyan 2.3 million youth is unemployed, between the age of 15-34 year, 30% between the age of 20-24 years and 9% at the age of 30-34 years. This has been caused by the low economic growth, corruption, financial handicap, and lack of the required skills. However, the uptake of information system application in SMEs has been slow further limiting expansion of job opportunities in this sector.

Youth employment policies date back to pre-independence. A number of policies and programs have been crafted but research has shown that most of this policies have not been fully implemented (Leaders, 2013). The vision 2030 blueprint contemplated the TVET sector would be the vehicle for attaining industrial and sustainable development by imparting skills, knowledge and attitudes for middle level managers and hands-on artisan by the year 2030. This was to aim at transforming Kenya into an industrialized, middle income country by providing high quality life and poverty eradication through employment (World Bank and Government of Kenya, 2014).

There is therefore a mismatch between supply and demand of labor especially among the majority youth. Report of the UNESCO on tackling youth unemployment shows that lack of relevant skills, lack of information about the labor market, lack of the entrepreneurial skills, and an inhospitable investment climate discourages entrepreneurship and job creation. (Subrahmanyam & Ananiadou, 2013).

Since youth unemployment is a global crisis SMEs are in a position to offer financial support to the youth and at the same time offer job opportunities to reduce unemployment. This can be achieved through having proper strategies for information system implementation (Leaders, 2013). With this rate of unemployment, it calls for implementation of information systems, measure the value and setting policies that guide the employment of the youth in Kenya. Therefore, what policies have the SMEs put in place and what is the role of TVET in youth employment in the country?

## **Literature Review**

### **The Role of Information Systems in SMEs as Avenues for Implementing Youth Employment Policies**

Information System is a major investment to any organization as it involves a lot of money in implementation although it helps in automating and integrating the institutions functionalities (Tian & XU, 2015). According to Njihia and Mwirigi, (2014), financial resource availability, organizational complexities, employee perception, regulatory requirement and having top management support affects the effective implementation of information systems and which in turn affects an organization's performance and further influencing the youth employment.

The adoption and eventual implementation of information systems goes through multiple phases, and this contributes in many organizations avoiding change. Its implementation results in process re-engineering, revamping old ways of conducting business, redefining job responsibilities and restricting the organization to ensure that all the needs of the organization are catered for which involves changing the current institutions functionality, back filling of the staff, training, recruitment of talent and retention (Swartz & orgill, 2001). This involves a lot of cost and many SMEs may not have the capability. Converting the legacy system into the new user-friendly system is a great challenge to most organizations. However configuration process and transformation of key business processes has led to a lot of losses since many organizations do not have proper procedures for this (Lau, 2003).

Lau (2003) notes that different organizations have implemented the information system at different levels depending on their capability. Bigger organizations with complex functionalities have some difficulties in implementing the system and the small with few functions organizations have implemented successfully, however, some may not have implemented due to the cost. Some organizations are still using the traditional approach to gather, store, manipulate and disseminating data for they are unable to raise the billions of money to implement the information systems (Swartz & orgill, 2001). This has become a stumbling block to many that are ready and willing to integrate their systems for improved service delivery, but do not have the capability.

In Kenya youth have come up with their enterprise start-ups with the intention of promoting employment. This includes: YES-JUMP and COOP Africa, youth housing cooperatives, recycling cooperatives, transport cooperatives, among others. Esim (2016) identifies SMEs as avenues for youth employment because of the financial support given to them for self-employment, internship and apprenticeship and hiring them for formal jobs.

### **Role of Youth Employment Policies**

Globally youth employment policies have been towards consolidating and integrating youth development, strengthen the capacity of youth training institutions, strengthening a patriotic citizenship among young people and foster national cohesion (Ministry of Youth Affairs, 2006). In Mauritius, the youth policy focuses on youth as development drivers and they should be engaged without discrimination on the bases of origin, race, political opinion, color, creed or gender.

In Kenya, youth employment policies are a vehicle for prioritizing the government action in creating employment for the youth. The policies are always in line with the constitution and the laws of a country. Basically, it focuses on culture and ethical values, equity and accessibility, gender inclusiveness, good governance and mainstreaming of youth issues (Leaders, 2013)

World Bank and Government of Kenya (2014) note that the Vision 2030 was divided into three pillars; political pillar, economic pillar and the social pillar for sustainable development come the year 2030. The social pillar focuses on education and training more so on TVET sector for hand-on training. This has been enhanced through designing of a curriculum that is market based and involving the public in decision making and facilitating employment.

As much as the policies are in place, much has not been done to ensure implementation of the policies and youth have been left out in most decisions on employment. The constitution of Kenya is clear on inclusivity in all areas of citizenship, but which has not been realized yet. Equity and accessibility is also another area that has faced a lot of challenges since employment in some sector is offered on the basis of corruption and tribalism (Leaders, 2013).

### **Role of TVET Sector in Youth Employment**

TVET refers to the educational aspects that are process oriented study of technologies and related science, acquisition of practical skills, attitudes, understanding and knowledge relating to the available job markets (Subrahmanyam & Ananiadou, 2013). Youth are persons between the ages of 18-35 years old who need to be involved in policy formulation, implementation and evaluation for economic development

Youth unemployment is a global challenge which has led to insecurity, increase in poverty levels and social crimes all over the continent (Shreeve, Gibb, & Ribeiro, 2013). Their report indicates that there was a high rate of mismatch between the market demand and supply of skills from TVET institutions. It also shows that a lot of youth graduates from these institutions end up missing formal job vacancies because the skills they had acquired did not sufficiently fit the market demand.

The Kenya government recognizes the potential of the TVET institutions as the standing solution to youth unemployment and has come up with new reforms for the sector through formulation of new agencies responsible for TVET coordination, and introduction of curriculum based competency (CBET). The

government has also cooperated with the private sector in assessment and certification of the trainees and establishing network of centers of excellence and upgrading in technical training institutions (Government of Kenya, 2013).

The same report advises that the only way to cap youth unemployment is through involving the private sector in designing and delivering of the TVET training, recognizing and accrediting skills and experience gained outside of school, and offer on-job training and career guidance (Subrahmanyam & Ananiadou, 2013). TVET institutes are empowered for research and innovation because they are the only hope and potential solution to youth unemployment. Focus is on providing work related skills and working together with the employers and the key stakeholder to ensure that training is for the job market. This has been ensured through repositioning of the TVET institutions through funding from the government, provision of adequate facilities, qualified personnel, proper supervision and monitoring of TVET programs, and introduction of competency based curriculum (Tansen, 2012).

Further, the government of Kenya has also established laws to govern and regulate youth employment in small and micro enterprises (Ministry of Youth Affairs, 2006). In a memorandum between the youth and the Ministry of Devolution and Planning it was agreed that the government should develop and implement a mainstream youth policy on employment. It was also agreed that the government should cut the cost of transport, food, health and reduce tax on essential commodities and also involve the youth in decision making at all levels. With the advent of the big four agenda implementation for the current Jubilee Government, affordable housing, access to health care, expansion of manufacturing sector and access to education that the government there will be reduction of unemployment among the youth. The main avenue for implementing youth employment has been through the state funded National Youth Service Training that has suffered numerous challenges as at now, together with the Youth Funds for enterprise start-ups and growth (KIPPRA, 2018).

## **Methodology**

The researchers used a descriptive cross sectional survey research design. The target population comprised of 15 registered SMEs that offer loans to members of the public and operate in their own premises in Nairobi region. The study used stratified sampling method since there were different categories of SMEs in Nairobi County. Each strata of SMEs was given an equal proportion of participation.

The study also utilized questionnaires to collect both quantitative and qualitative data from the enterprise managers, ICT and credit managers. The questionnaires consisted of structured and non-structured questions and data was analyzed using inferential and descriptive statistics and presented using tables, charts and figures.

## Findings

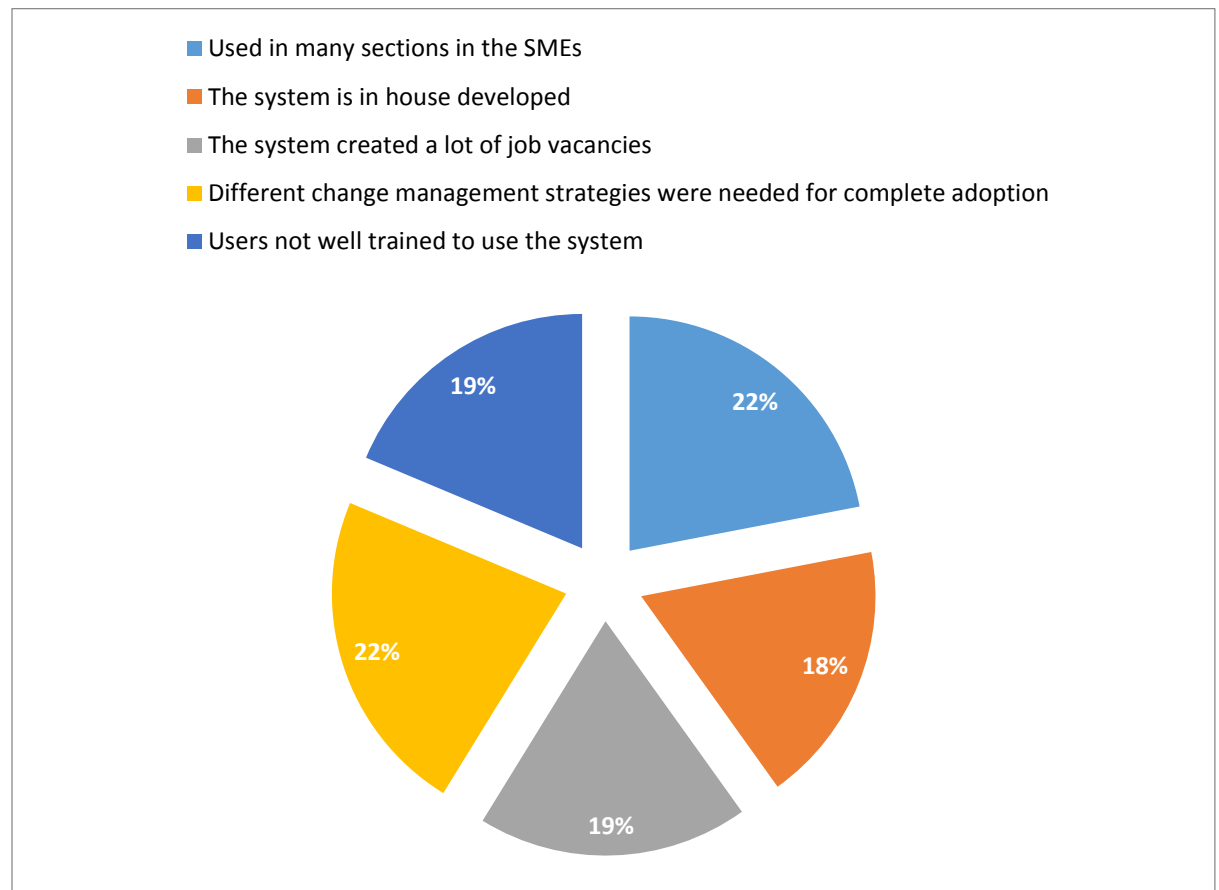
The respondents were SME management, ICT managers and credit officers from SMEs that are registered, offer loans to members of the public and operate in their own premises. Most of the respondents had worked with the SMEs for a period of five years with the majority having worked between five to fifteen years and they were able to witness the transition of the SMEs from manual systems to the use of information systems. It was found that above 50% of the respondents had worked with the SME for a period of more than ten years and a smaller percentage had been there for between 5-10 years hence giving us a 25% experience. However, though most of the respondents had worked with the manual systems, and transited with the organization to using the information systems, they were able to distinguish between the two systems (manual and use of the information systems), and give the values and the challenges they had experienced. The table below shows the respondents and the number of years they had worked in the organization.

**Table 1** Respondents Experience and Position

Year Category	SMEs	No. of respondents
Below 5 years	01,02,04,05,07	5
5-10 years	06, 08, 09, 10, 11, 12, 14	7
10-15 years	03,13, 15	3
<b>Total</b>		<b>15</b>

## The Role of Information Systems in SMEs as Avenues for Implementing Youth Employment Policies

The data collected from the respondents indicates that the SMEs had knowledge of the information system and were used in many sections of their operations. The use of the information systems in SMEs and the change management strategies had a percentage of 22% showing that this concept is very important for any organization. Most of the systems were in-house developed, with a percentage of 18% showing that whether in-house developed or outsourced, does not matter but the implications of the system to youth employment is the major factor. It is evident that the system created employment opportunities for the youth as users needed to be well trained for value addition.

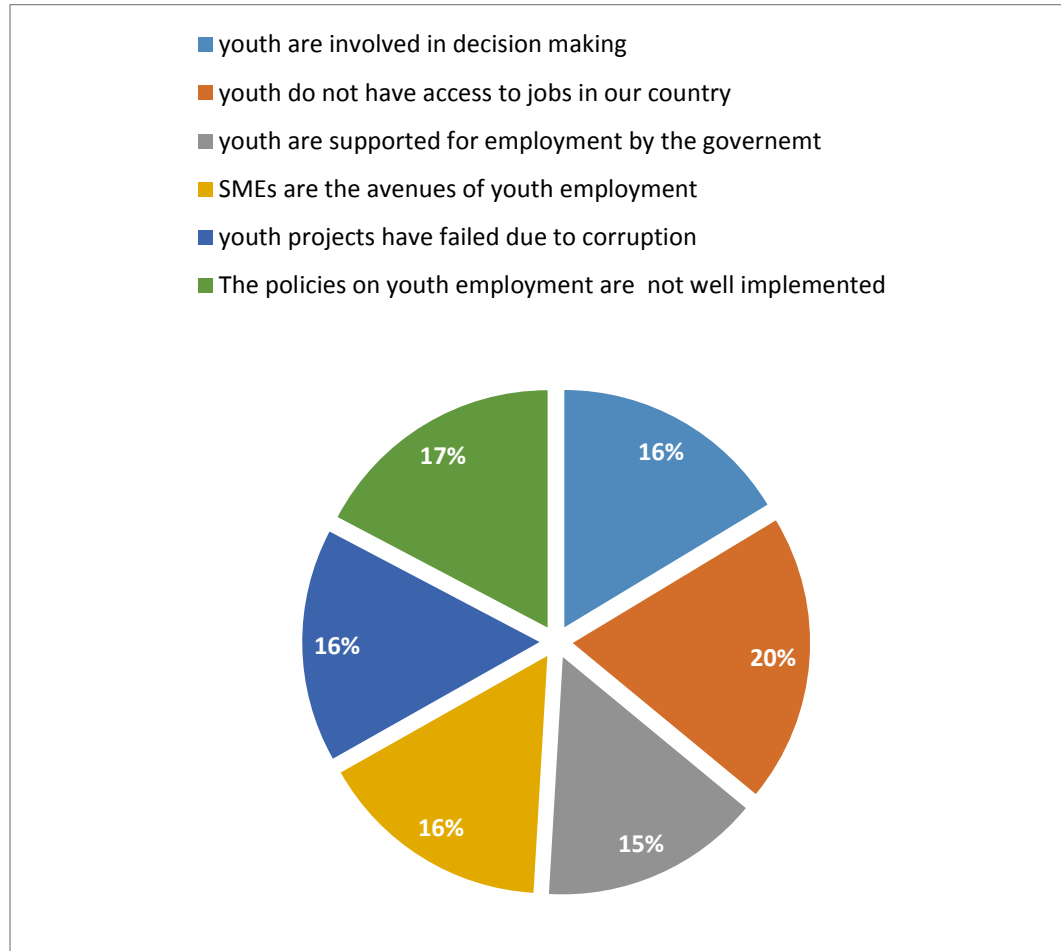


**Figure 1:** Role of Information Systems in SMEs

### Youth Employment Policies

Majority of the SMEs (20%) involved youth in decision making. It was however, evident that the youth were unable to access job vacancies in the country which may be as a result of corruption. There was also the mismatch between skills available and the skills required in the market, and lack of enough support from the government in terms of representation, protection and employment. The study also found that majority of the youth start-ups failed due to corruption and the policies for youth employment were not well implemented at a percentage of 17%. This was evident from some of the respondents citing the NYS which had had a lot of corruption scandals, the 'Kazi Kwa Vijana' and the Y2K projects that also failed.





**Figure 2:** *Youth Employment Policies*

### **Role of TVET Sector in Youth Employment**

The study shows that TVET sectors were not offering proper entrepreneurial skills. The skills offered were paper (theoretical skill) and the enterprises needed someone who was already practicing in the particular field of enterprise. It is hoped that the recent introduction of CBET based curriculum will be implemented to address the mismatch. On the other hand the study also established that TVET students were financed either by the Constituency Development Fund (CDF), Higher Education Loans Board (HELB) loan, other government bursaries and private sector sponsorship, such as banks and other organizations. It was also established that parents were not impressed by TVET training because of lack of knowledge on what TVET sector was and what courses were offered.

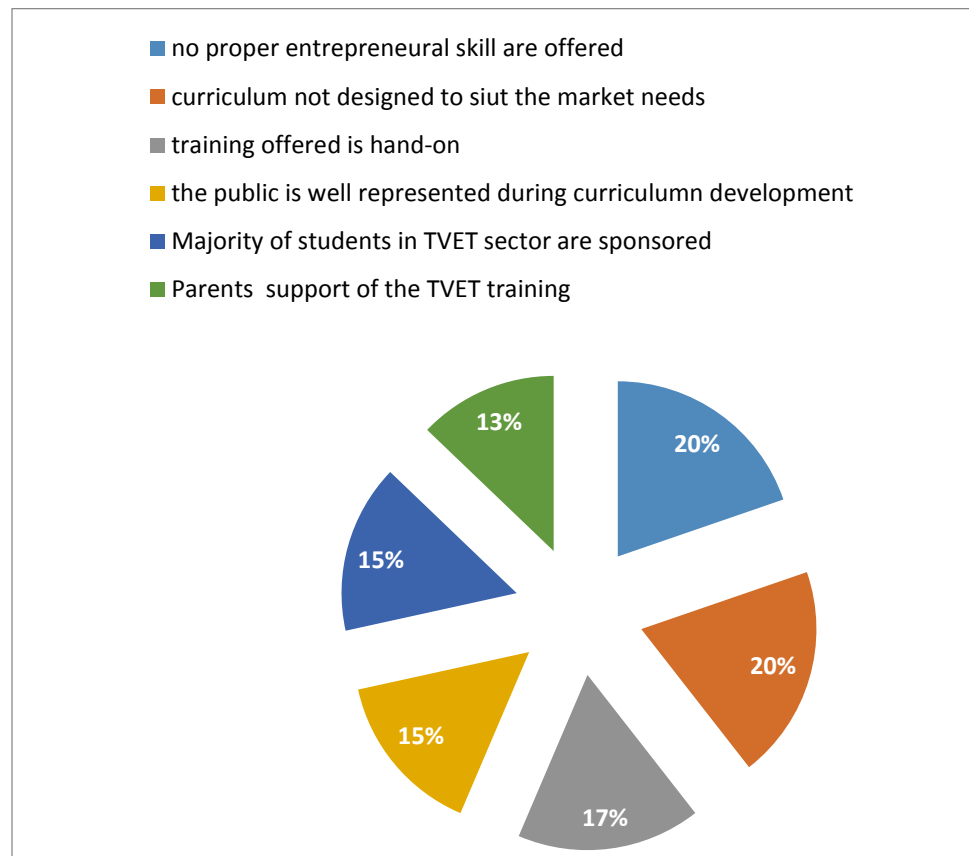


Figure 3: Role of TVET Sector in Youth Employment

## Conclusion

The study showed that most SMEs could not apply the information systems in their operations because of the high cost involved. Most youth employment policies have not been successful because of inadequate funding, high level corruption and inability to distinguish the meaning of a youth. Most parents and learners have not embraced TVET courses as avenues to youth employment preferring to take up university courses. Further, most SMEs had not exhausted the optimum employment capacity and therefore did not contribute to reducing youth unemployment in Kenya. It was also clear that there were no proper policies on youth employment in SMEs and the role of TVET on youth training and employment was not well documented. The study concludes that the TVET sector has the potential to resolve the youth unemployment in this country especially in the area of information systems skills which is attractive to the youth.

## Recommendations

The study recommends that SMEs should invest in the information systems to enhance enterprise management; education, training and mentorship information systems needs to be emphasized for employment benefits among the youth;

monitoring and evaluation of policies established for youth employment should inform further actions; and for research and development in innovative enterprises in order to create employment opportunities for the youth be encouraged; and TVET institutions in conjunction with SMEs should have a proper curriculum designed to meet market needs to ensure youth employability.

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