Critical Success Factors for obtaining outsourcing projects for Uganda.

Bart VAN DER LINDEN¹, Sytse HENGEVELD²

Radboud University Nijmegen, Heyendaalseweg 135, Nijmegen, 6525 AJ, the Netherlands
Makerere University Uganda, Faculty of Computing and ICT, Kampala, Uganda

¹Tel: +31 6 52362987, Email: bartlind@sci.ru.nl
²Tel: +31 6 18871527, Email: shengeve@sci.ru.nl

Abstract: East African countries are trying to create or expand business activities by adopting outsourcing strategies. One of them is Uganda. The Ministry of ICT has given high priority to creating sound Business Process Outsourcing (BPO) policies in order to attract foreign investors. Furthermore, the faculty of Computing and Information Technology at the Makerere University in Kampala is focussing on more IT Outsourcing (ITO) projects for Uganda. However, before these measures can lead to success, several critical factors have to be met. We identify nine factors that can lead to the success of the Ugandan ICT-sector. We look into Uganda’s current investment climate against the framework of these critical success factors (CSFs).

Keywords: ICT4D, CSF, BPO, ITO, Uganda, economic development

1. Introduction

Globalisation and the ever increasing deployment of information technology throughout the world, is moving humankind towards becoming a knowledge society. In this world of rapidly changing technologies, markets and products, knowledge that enables innovation is an important source of sustainable competitive advantage [24]: Albert and Bradley recognised the importance of knowledge in this respect in the 1990s [2]. Specialised talent is thus becoming increasingly important. Appropriate education can ensure its availability, but it needs the support of a sound investment climate [3, 4, 5].

A new approach is to use Information and Communication Technology (ICT) as a tool for development, known as “ICT for development”, in short, ICT4D [6]. But before ICT can be used as a tool for economic development, there must be sound knowledge and new attitudes to innovation. According to Hanushek and Wößmann: “It is hard to have a strongly growing economy without complementary institutions in the labour and product markets, without openness to trade and investments from the outside, and without effective systems of laws and property rights”[7].

The authors of the present paper look at the current situation in Uganda with regard to ICT4D. We then propose a set of recommendations for actors in Uganda concerning what can be done to obtain ICT-projects. Note that there is a discrepancy between the success factors and the triggers leading to outsourcing of work; a trigger is an incentive that motivates an organisation to outsource work. The three triggers that motivate outsourcing are cost reduction, quality improvement, and a quicker pace of work. In the next chapter,
describing the nine critical success factors (CSF), the authors are concerned with the creation of a sound investment climate for outsourcing activities. We then look at the current situation in Uganda within the CSF framework. Finally, we present our conclusions.

1. Critical Success Factors

To develop a successful strategy for economic growth on the global market, it is important to use certain criteria. Although not all of them may be needed to boost a particular sector, it is however prudent to look for a sustainable factor to ensure that growth is long-term. Knowledge and exposure of actors in the playing field are two factors inevitably related with success. According to Tan et al., knowledge has become the third major factor of production next to labour and capital [8]. Countries are looking for ways to promote the knowledge economy. The best way of doing so seems to be by focussing on what has proved to be its most significant factor, ICT.

Thus, the first criterion for success is knowledge. Looking at industrialised countries, we see that their key to success was putting a premium on learning, improving skills as a way to solve problems. Juma points out that this approach should provide a firm foundation upon which to base development investments and international partnerships [3].

Exposure to the international working culture is the second important criterion. However, there is a discussion between two camps of researchers on whether the migration of skilled workers can be regarded as brain drain or brain gain [3, 9, 10, 11, 12]. The camp focussing on the brain drain points out that knowledge is gone when graduates or skilled employees migrate to another country. Although this is the case within the medical sector, and perhaps some others, it does not apply to the dynamic environment of ICT. The brain gain camp argues that by creating a diaspora, knowledge gained in the foreign countries can be mobilised, helping development in the country of origin. We share the brain gain view, thinking it is very important for stakeholders of the ICT-sector to be exposed to the international working culture; this movement of people is an inevitable consequence of the growing globalisation.

Hence, the governments of several countries are making good use of the knowledge gained by diaspora working in western companies [10]. These countries have adopted policies to enhance collaboration with their diaspora, and have in this way brought about economic growth. Digital knowledge networks have been set up that allow interaction between the diaspora and government, which even include comments on new policies. Furthermore, conferences are held regularly to bring diaspora and policy-makers together.

Access to a high-quality infrastructure is the third criterion for success. In the present paper, we only refer to electricity and internet connectivity, as these are the most important infrastructural elements with respect to outsourcing or offshoring. Other elements, such as roads and sewage are outside the scope of our research.

Awareness of cultural differences is the fourth criterion for success. Offshoring projects will only succeed if people of the countries participating both recognise and understand
differences between cultures. Projects will be deemed to fail if there is lack of awareness. According to Gartner, 50% of all offshore contracts signed for a period of three years or more, did not come up to expectations because of the negative effects of cultural differences [13]. A change in approach is clearly needed.

Mastering English, the world’s leading language, is the fifth criterion for success. In countries colonised by the British, English was the language at school. The result a command of both spoken and written English. Perhaps a doubtful heritage, as local dialects were suppressed. There was however an advantage. According to La Porta et al., having been colonised by the British rather than the French or other Europeans, gave better protection to rights of small shareholders allowing broader and more efficient capital markets to develop [14]. We can expect that, in the face of growing globalisation, countries that were French and Spanish colonies will also have to adopt English in the long run.

Investment into the local economy by large international companies is the sixth criterion for success. Investments can also be made by one entrepreneurial company using the “first mover approach”. This gives the IT-sector a financial boost and helping make the economy worth investing in, bringing about an upward spiral of economic growth. Much research has been done on a special investment called Foreign direct investment (FDI), which is defined as the physical investment of a company of one country, for example in the form of a building or machinery, into another country. Also, strategic alliance with a local firm with attendant input of technology is part of FDI. It is widely known that this type of investment has a positive influence on both emerging and developing economies [15, 16, 17, 18].

Creation or expansion of a potential niche is the seventh criterion for success. We define a niche as a specialisation within a sector, in our case the ICT-sector that has business potential. A niche creates many possibilities for innovation, becoming a ‘playground’ for potential investors in that particular area, at first locally and then from abroad; once there is a niche, foreign investors will be attracted more easily. We suggest that a sector needs a particular niche in order to play a role in the overall economic growth of a region. Creating a niche accords with a “first mover” approach defined by Lieberman and Montgomery [Li87 28]. Among the advantages of being the one who takes the initiative, the first mover, are the technological leadership that comes from learning and experience, and being able to assure that the acquired knowledge is protected with research and development patents. Furthermore, there is evidence that first movers also move up the value chain of the particular sector [30].

The political stability of a country is the eighth criterion for success in attracting foreign investment. Companies have to keep their risks low. This is a difficult criterion to meet, because there is no one way of ensuring political stability.

All the criteria for success described above contribute to the ‘playground’ necessary for attracting investors to offshore outsourcing projects. All these factors are needed to create a sound investment climate in terms of more/considerable foreign trade as well as a higher growth [DH06 4]. This is done by three actors in particular. The first, and, at present, growing to be the most important actor, is academia. Besides providing education,
Universities are becoming a valuable resource for business, industry and society [3, 20, 21, 22]. This results in a contribution to the general welfare of a region. The second actor is industry, which makes innovation and technology available to the consumer. The third actor is the government, which has to create an institutional policy playground whereby companies and universities can act freely to enhance economic growth. In other words, regulatory institutions create the rules of the game and the structure in which firms and universities can interact with each other, making use of a market economy mechanism. Dollar et al. define the term ‘investment climate’ purely in a policy context that is, the investment climate, the institutional policy and regulatory environment. If, as they claim, the local government is highly bureaucratic or even corrupt, then investments tend to be low and not trustworthy [4].

Collaboration between the government, higher educational institutions and industry is the ninth and probably the most important criterion for success. This Triple Helix, as it is known, is necessary for a sound investment climate, as earlier stressed by Hanushek and Wößmann [7]. According to them, it is hard to have a rapidly growing economy without complementary institutions in the labour and production markets, without openness to trade and investments from the outside, and without effective systems of laws and property rights [21]. The Triple Helix model was developed by Professor Etzkowitz, one of various knowledge-based innovation models providing an analytical framework for evaluating and analysing knowledge networks and interactions within innovation process at national, regional, institutional and individual level [20]. Lucy Lu and Henry Etzkowitz summarise what needs to be created between universities, firms and government for the Triple Helix model to work: “opportunities may be opened up for “brain circulation” and knowledge sharing between academics, business practitioners and government managers; academic research is linked with business practice and informed by real market demands; entrepreneurial culture is developed and new start ups may be created from Triple Helix model (TH) innovation networks as a result of knowledge sharing between academia, industry and government; and new policy initiatives may emerge from the networks, giving the government a better understanding of where research is located, thus enabling them to design policies to support new research areas. [21]”

It is interesting to note that China’s new strategy for innovation, to be launched in 2009, will use TH, considering it an important instrument for success [21].

2. Critical Success Factors and Uganda

Outsourcing and Uganda is not yet a common combination, not only because little appears in the media, but also because Uganda is a developing country. Several factors are preventing Uganda from becoming a region to outsource to, but there is also potential. In this chapter we will discuss Uganda in the context of several criteria for success.
2.1 Knowledge

As mentioned earlier, universities are becoming a valuable resource for business, industry and society [3, 20, 21, 22], resulting in them contributing to the general welfare of a region. As Juma points out, Africa is adopting a new approach, with its universities having a central place in the process of development [3]. However, if a university takes on an entrepreneurial role in the development of economic growth, it needs the support of government and businesses to maximise the outcome. This is exactly what the Faculty of Computer and Information Technology (FCIT), Makerere University is doing. For example, at the moment they are integrating into the production sector and also into society in many ways. First of all, the FCIT created many spin-off firms; graduates set up their own company and collaborate with the government to develop new products or improve old ones. Secondly, the FCIT is doing research on mobile connectivity and is in close contact with Nokia-Siemens. Thirdly, to gain more knowledge, the FCIT is collaborating with more and more partners in industry as well as with various universities outside Africa. Lastly, the faculty has a positive attitude to study abroad.

2.2 Exposure

The most striking remarks of businessmen in Uganda concerned their lack of exposure to other working cultures. They regarded exposure as crucial for the development of their company, and of the country in general. At present, lack of money prevents Ugandans from going abroad, in contrast to the opportunities enjoyed by scholars and businessmen of Western Europe. In terms of education, exposure leads to improvement of quality of research, since review by other scholars with similar expertise is essential. When it functions well, exposure generates criticism, identifying flaws in reasoning, and giving rise to comments that can bring forth new ideas. The same principle can be applied to businesses and organisations, where there is a constant search for efficiency and higher quality. People travelling abroad come into touch with other working methods, working cultures, strategies, enabling them to improve and to gather new ideas. At present, the Ugandan government is negotiating with the Indian government so that Indian universities will take on Ugandan students. The Ugandan government wants to ensure that the students return, injecting their newly-won knowledge, bringing their new network of contacts with them.

2.3 Infrastructure

Nowadays there are enough engineers in the world who can manage the amount of IT-work which needs to be done. It is not like in the days of boom of the IT sector in India. There is not a direct need for skilled personnel, fixing the Y2K problem. This is why the electricity as well as internet connectivity are criteria for success in order to be interesting for potential outsourcers. Poor infrastructure is a barrier for further application of technology to development[3].

2.3.1 Electricity supply

Access to constant electrical power in Uganda remains a big problem. Electricity is being rationed throughout Kampala, some areas of the city being cut off for twelve hours on end, while rural areas have blackouts of up to 48 hours. Among the reasons for these black-outs are delays in commissioning additional generator capacity, loss of electricity during transport of about 21 percent, and an increased demand of six to eight percent per year.
The country relies heavily on hydropower; 90 percent of the electricity consumed in Uganda is generated by the dams at Jinja. The present shortage of electricity has contributed to a decline in economic growth of 1-2 percent, since investors stay away, and businesses are confronted with higher costs.

On the short term, the Ugandan government has focused on thermal power to solve the energy crisis, using imported diesel. It had added an extra 100MW to the grid by 2006, and is currently in the process of adding an extra 50MW. The total demand for electricity in 2006 was around 340MW, the total production 300MW. It is expected that demand will rise to around 375MW in 2010, to 545MW in 2015, reaching 789MW by 2020. [26] To meet this growing demand, the government is engaged in building an extra dam at Bujagali. It is estimated that it will produce between 200MW and 250MW.

2.3.2 Internet connectivity

Low-cost internet connectivity is of prime importance, if Africa is to be able to exploit the opportunities for business process outsourcing (BPO) and other off-shore services.

The use of telecommunication is experiencing a huge increase, mainly in mobile telephony. On the other hand, the internet usage is still low. Uganda relies on satellites for communication with Europe and the United States, while satellite connectivity to the global telecommunication backbones is much more expensive than optic fibre connectivity. Due to these high connectivity costs, most universities and large businesses have less bandwidth than a single private broadband user in Europe or North America. Furthermore, prices remain high, also because local services tend to be monopolies.

The west coast of Africa does have access to the global telecommunication backbones through the optic fibre cable SAT-3. However, local businesses in the twenty countries connected to it do not feel the benefit, since most connections are run by state-owned monopoly or duopoly operators who exploit their position. This results in charges of over $5,000 per month for an E1 (2Mbps) circuit to the US or Europe; similar links from Europe to the US do not usually cost more than $10 to $20 a month, to Asia $15 to $30 a month. [27]

With exception of some links from South Africa, which are connected to SAT-3, and links from Sudan to Egypt (SEA-ME-WE) and from Senegal to Mali, the remaining thirty-three African countries are still not connected to global backbones. The e-Africa Commission described it as a chicken and egg situation; high prices slow the demand, therefore deployment stays behind, and the necessary investments are not made. Furthermore, the state-run operators have many more employees per line than private companies do. With the falling international settlement rates on international markets, these companies see their profits shrink. This, along with the lack of money from their host governments, results in a shortage of money for investing in a national fibre network. Private investors, who would otherwise bring in the much-needed capital, stay away from these state-run operators and closed markets, with the result that such operators are still in control of international gateways that allow connection to the global network.

On the east coast of Africa, a project was set up on the same closed consortium model as SAT-3. This project was named the East African Submarine System, EASSy. With the urgent need of increasing low cost connectivity for the whole of Africa, the e-Africa Commission decided to take matters into its own hands and planned its own fibre network, called Baharicom. The submarine segment of this network is called Uhurunet. Furthermore, the
Kenyan government launched The East Africa Marine System, TEAMS linking Kenya with the United Arab Emirates. Uganda will have access to all of these lines. SEACOM, a Mauritanian based company, will also provide broadband services within short term, and has announced that it will be offering very low prices. An overview of the routes can be found in Figure 2.

Figure 2: Landing points submarine cables East-coast Africa

Figure 3: Uganda’s connection to the submarine optic fibre network
2.4 Awareness of culture differences

As Uganda is culturally very diverse, it is difficult to generalise. However, for the reader to understand the context of our research, we will briefly outline the differences between the Ugandan and Dutch culture.

Ugandan society is far more hierarchical than the Dutch. Ugandans take the distribution of roles for granted, complying with the obligations and rules attached to these roles. Values like social position, authority, humility, wealth and wisdom are also highly important in Uganda. Ugandans are more embedded in the collective; there is more emphasis on social relationships and being part of a group, whereas in Dutch culture there is more emphasis on the independent pursuit of ideas and intellectual direction. Generally speaking, there is a cultural restraint on actions that might disrupt the in-group solidarity or traditional order. This fits in with the hierarchy, where obedience is valued highly. Many misunderstandings arise from these cultural differences, in particular from hierarchy.

However, probably the most important difference is the pace of life. Ugandans are far more at ease, taking life as it comes. This does not mean that they are lazy, or do not have a sense of responsibility, they just have another approach to problems.

2.5 Mastering English

That English is the second language for Ugandans is certainly an advantage when working with international companies. English is even spoken on the streets of Kampala. Furthermore, lectures are given in English at every university.

2.6 Investments of large international companies into the local economy

We emphasize the importance of having a large entrepreneurial investor present in a country like Uganda for several reasons. First, this stimulates other foreign investors looking for areas in this local economy to invest in. Also, like in Croatia, where Hunya and Skudar concluded that the foreign sector is more export oriented than the domestic market, it has a positive contribution to exports over time [16]. In Uganda the same could happen, because the situation regarding to exports is similar like in Croatia. Second, foreign direct investments as mentioned earlier, contribute to the growth of an economy [16, 17, 18]. Lastly these investments of foreign companies contribute to the knowledge economy as well as exposure to international working culture.

2.7 Creation or expansion of a potential niche

Uganda has already invested considerably in its ICT education, and every year there are qualified IT engineers leaving university, waiting to be employed. Thus, there is an urgent need for an ICT-sector that offers a specialisation not found in other East African countries. The Makerere University has been doing research into mobile telecommunication for the past three years, and can provide such a specialisation.

It seems that Uganda may have found the right niche. The penetration of the mobile phone into daily life is at present the most important impact of ICT in Africa [36, 31, 32, 33]. For instance, a study carried out by Waverman et al. in 92 countries between 1980 and 2003,
concerning the impact of rollout on economic growth, concluded that: “mobile telephony has a positive and significant impact on economic growth, and this impact may be twice as large in developing countries compared to developed countries.” They also explain that telecommunication infrastructure is a crucial element of social overhead capital (SOC), that is, the expenditure on health services, education and public infrastructure [33]; the most important goal of SOC is to increase the spread of information.

In just a few years, a large part of African continent has become wireless connected. The way in which African people have embraced mobile phones in a short period is astonishing. For most people, even in the poorest areas of Kampala, paying for access to a mobile phone is considered more important than spending money on health.

Moreover, there is an indication that people have more then one mobile phone number to generate income out of; small businesses that provide airtime on mobile phones are mushrooming. In Africa, it is also common for individuals to share their mobile phones with family, friends and neighbours. The idea of sharing one mobile phone has also been commercialised. After successfully launching a village phone project in Bangladesh, the Grameen Bank has launched a similar project in Uganda. A village phone, managed by one subscriber, may have up to 71 users.

That people are able to communicate more easily with each other, especially applies when doing business. For example, farmers can keep up to date with market prices; their profits have grown [36]. Several studies have shown that ICT helps developing countries to strengthen sectors, such as business, health and education [35, 31, 25]. Numerous papers have also been written about the boom in the African mobile communication sector and its impact, for example in Uganda, Kenya, Burkina Faso [25], and South Africa [37].

Another project concerns e-banking or better, m-banking. With the use of mobile phones, people are able to make a mobile transaction between accounts without going to a bank as well as checking their balance. This way of banking also creates opportunities for rural areas, where bank facilities and services are not common. There are several m-banking projects done in Asia and Africa, such as G-Cash and SMART money in the Philippines, Wizzit and MTN-banking in South Africa, M-Pesa in Kenya and SIMBA cash in Uganda. At the moment, mobile operators are expanding the M-pesa project into Tanzania and Uganda. The aim of this project is to enhance the flow of money between people; in Kenya, there are more than a million customers using the system for transferring money from person to person, paying school fees or buying goods. Big companies now pay their employees in this way.

Another project concerns online banking. Mobile banking, m-banking, is developing rapidly. With the increasing availability of mobile phones, as well as being able to check their balance, people can make a mobile transaction between accounts without going to a bank. This way of banking creates opportunities for rural areas where bank facilities and services are uncommon. There are several m-banking projects running in Africa and Asia, including SIMBA cash in Uganda, M-Pesa in Kenya, Wizzit and MTN-banking in South Africa, and G-Cash and SMART money in the Philippines. Is At the moment, mobile operators are expanding the M-pesa project into Tanzania and Uganda. The aim of this project is to enhance the flow of money between people; is the Swahili word for money. In Kenya, there are already more than a million customers using the system for transferring money from
person to person, paying school fees or buying goods, while large companies now pay their employees in this way.

Because people are using their phones to such an enormous extent, Uganda may easily take a leading role in the development of applications for mobile phones. Research could be set up in collaboration with western companies and universities; Makerere University is already involved in R&D projects such as the Epihandy-project\(^1\) with a Norwegian university. Moreover, the market for mobile phone applications is huge, and other developing markets including South East Asia and South America are not to be forgotten.

2.8 Political stability

Political stability is a key factor for economic success everywhere in the world. In Africa, the political stability is especially fragile, rather like a thin layer of varnish, in no time removed to make place for situations, such as those recently in Kenya, Zimbabwe and South Africa. In the coming years, Uganda needs to put energy into achieving in political stability, especially now that foreign companies are willing to invest in business ventures there. With the next elections approaching, the questions arise concerning which course President Museveni is going to adopt on power sharing, and how the opposition will react. The western world is calling for democratic elections, thus hoping to ensure that the reasonably stable political climate lasts. There are, however, local initiatives for securing peace in the region. The creation of the East African Community (EAC) is a positive development that widens and deepens cooperation between Uganda, Kenya, Tanzania, Burundi and Rwanda, the five partner states. Not only can such regional cooperation help prevent unstable situations developing, by helping partner states with peace-building and conflict management, the peaceful environment it promotes, allows markets to grow and develop [3].

2.9 Triple helix model

At present, the triple helix model (TH) is not yet being used in Uganda. However, all the elements are in place, or are developing in the right way. The faculty of Computer and Information Science of the Makerere University is an entrepreneurial university with spin-offs. Furthermore, the government has assumed an active role by encouraging and sometimes setting up ICT projects. The ICT industry, the third element of the Triple Helix, is growing.

Government Uganda’s National ICT Policy Framework mentioned the need for proactive policies that would enable Uganda to compete in the global arena. It advised the government not only to invest in infrastructure, but also to implement policies for infrastructure maintenance, underlining that a culture of maintenance was often lacking in developing countries. In this way operators could provide a reliable, high availability service to their subscribers.

The eReadiness Assessment advised the government to put ICT infrastructure higher on the agenda, arguing that a good ICT infrastructure was needed within the government and in

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1 EpiHandy is a project that changes the way in which surveys and data collection is done in health and development research, using mobile devices.
the country in general. Infrastructure development was hampered by problems of affordability, lack of funding and investment. Once there was a good infrastructure in place, ICT would grow, contributing to the country’s economic development. The government will provide incentives and tax exemptions for innovation and experiment. In addition, together with the private sector, it will set up and maintain an ICT promotion and development fund.

The Ministry of ICT and some members of the Uganda Investment Authority (UIA) put together a BPO strategy paper and sent it to parliament in May 2008. To give stakeholders and experts in the field a chance to respond to the strategy, the first draft of the document had been presented in the Grand Imperial Hotel in Kampala on March 28th. The strategy aims to go further than only creating the right fiscal environment for investment by foreign firms; the government wants to make ICT one of the focus areas. For instance, the government is looking into ways of making it easier and quicker to set up a BPO company in Uganda, but also at possibilities of buying bandwidth in bulk to sell at lower price to such companies. Apart from such measures, the existing laws have to be revised and extended to further improve the country’s position on the global market.

In setting up a strategy to develop the ICT sector, we stress the importance of strong collaboration between government and universities. Not only should this apply to policy making, but also concerns sharing contacts, channelling funds and directing research activities. At the moment, this collaboration is one of Uganda’s biggest challenges in the near future.

3. Conclusions

Uganda should be able to successfully participate in the outsourcing and offshoring market, if it meets the nine criteria outlined in this paper. Exposure of Ugandans to other cultures is limited by the unfavourable exchange rates that make a short stay in the West a huge investment. However, both the government and Makerere University are setting up programs for increasing the number of students going abroad. Infrastructure is still a major problem; the electrical power supply and communication infrastructure are both unreliable. Moreover, this last is very slow and expensive. Programs addressing these issues have been set up, aiming for improvement by the second half of 2009. Uganda has a top-down hierarchical culture, which permeates society. English is the second language in Uganda. In recent years, there has been a huge increase in the number of international companies investing in the local economy. While investigating whether Uganda would be a suitable outsourcing partner, our research received much positive interest. The fact that large IT companies have established themselves there, added interest.

The niche that Uganda occupies in mobile telecommunication is also of interest to these companies, although whether they stay depends largely on the political stability of Uganda. There is a lot of unrest in the area, with tensions in Sudan, Kenya and most recently Congo. Whether this unrest will spread to Uganda remains to be seen. Adopting the Triple Helix model by continuing intensive collaboration between industry, government and higher education, is necessary for Uganda. The Ministry of ICT and the Department of CIT at Makerere University occupy key positions in the collaboration. If the collaboration can be intensified, combining the strength of the university and the entrepreneurial spirit alive in both the Ministry and small and medium enterprises, Uganda can take a central position in the ICT market of Africa.
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