

Mobile money in Africa: Orange is looking south for sources of innovation in Europe

by

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Overview

A housewife pays for her shopping at the market in Bamako, Abidjan or Dakar using her portable telephone. After a simple phone call from her son in Paris, she receives a money transfer from him, and can instantly withdraw the sum at a shop on the street corner. This series of events has become a way of life for people in Africa for years. So how is it that in France payment using Smartphones is struggling to get started? This observation prompts us to re-evaluate some popular – and slightly patronising – misconceptions about Africa. The spectacular success of Orange Money throughout the African continent is primarily due to the work of one man in the field and his teams spreading simple ideas and pragmatic methods which were particularly adapted to local, social and cultural realities. A decade after its creation, the lessons learned from this unlikely 'reverse innovation' are being used as a benchmark in Europe for progress in multiple sectors.

Report by Pascal Lefebvre • Translation by Rachel Marlin

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I come from the Savoie region of France. I currently work for Orange, but before that I taught management at the ISEOR (*Institut de socioéconomie des entreprises et des organisations*: Institute of socio-economic management for companies and organisations) in Lyon. I was also in charge of the Les Arcs ski resort, and the deputy manager of an audio-visual company before Orange Group appointed me 'Mr. Africa', a position I held for about twelve years before I initiated the creation of Orange Bank. For the past eighteen months, I have been in charge of Orange Group's investment activities for start-ups.

My talk discusses 'reverse innovation'; This refers to innovations which we have carried out in Africa, and how the experience gained from this helps us to innovate in Europe, and in France in particular.

Africa does not exist

It is important to understand that Africa, as a single entity, 'does not exist' because the African continent, which has a population of 1.22 billion people, is a patchwork of 54 countries, all with very different sizes, cultures, religions, standards of living, demographics and forms of democracy.

There are more differences between Senegal and Mozambique than between Greece and Ireland. However, important international companies like Google and Facebook tend to talk about Africa as if it is a homogeneous entity. Consequently, they often appoint a 'Mr. Africa', which makes little sense, because what happens in Dakar is light years away from what happens in Johannesburg!

Today, one in every two Africans is less than 20 years old, and uses – or will use – new technologies, including communication technologies. Rural exodus in Africa has increased dramatically and consequently the continent's urban development is rapid: there are currently 15 cities each with a population of more than 3 million inhabitants, as well as huge urban conglomerations like Cairo, Johannesburg, Kinshasa and Lagos whose individual populations exceed that of Paris.

Almost the entire African population is currently connected by telephone as a result of the Global System for Mobile Communications (GSM) which covers most of the continent apart from the desert areas. Connection to the Internet has also greatly expanded, however there are some important local variations. It is striking that the moment will come when everyone will own a basic Smartphone whose current price is significantly lower than US\$50. All telecommunication activities are growing very rapidly, and, strictly speaking, the mobile phone industry currently accounts for 7 % of the entire GDP of sub-Saharan Africa, in other words €110 billion.

Finally, Africa is much larger than we see it when it is displayed on a flat, paper map as this format over-represents the polar regions and, by contrast, under-represents the equatorial regions, both for technical and geopolitical reasons left over from the colonial era. Africa has a huge surface area: it could contain the United States, China, India and the 27 countries of Europe with space left over! Distances are considerable, and Mali alone is larger than France, Italy and England put together. The idea of installing fibre optic cables everywhere, providing electricity to the entire continent and undertaking other grandiose projects is simply not realistic in view of the physical size of the African continent.

An ecosystem which is taking form

Today, despite the poverty and lack of infrastructure (among other things), change is taking place rapidly. Tech hubs (communities which foster innovation for technology start-up companies) are emerging almost everywhere, and all the capitals of countries whose leaders are quite open to the outside world can pride themselves on being the technological centre of something. This is true for Tunisia, Senegal, South Africa

(which is a *de facto* tech hub), Mauritius (which is like a cyber-island), Nigeria (which has the continent's largest economy) and Egypt (even though it is orientated towards the Middle East) for example. Ecosystems are emerging everywhere involving hundreds of people, many of whom contact Orange in our Paris head office or in our local headquarters for advice. Contrary to industrial or agricultural sectors where the size of infrastructure is an obstacle to the entry of new participants, digital technologies break down these barriers because software can be developed equally well in Abidjan, Bamako or Paris.

In 2016, the venture capital industry invested approximately US\$300 million in African start-ups. This sum rose to US\$500 million in 2017, and US\$1 billion in 2018. In absolute terms, these figures are small compared to the US\$70 billion invested in Asia or the US\$100 billion invested in the US the same year, but their growth is spectacular. When a start-up is created, it can disrupt an economy very quickly, both because of its activity and its visibility with regard to public authorities, and as a result it may appear to 'shine more brightly' in economic terms than it should because of its size.

About one hundred venture capital investors support the development of African technology and play a part in each of the three stages of development. In the earliest, 'seed' stage, it is often the case that the start-up does not yet exist, and that its developer (who has the innovative idea) may be trying to find a €100,000 investment. The investor's approach is based generally on a large number of processes, and therefore this stage may take a great deal of time. Orange focusses on providing technical and human support and, as an investor, is therefore rarely present at this stage.

The second stage, the 'early' stage, is often characterised by a small, established entrepreneur whose project is accompanied by a PowerPoint presentation, a business plan draft (explained in one or two Excel spreadsheets) and a product which is already commercialised with a small turnover. Many investors put themselves in this niche, but this situation is subject to change because all the important groups, such as Total, Danone and Orange, are already well established in this stage, preferring to work with well-defined projects rather than ones still in the 'seed' stage which include a degree of uncertainty and lack clarity.

The last, 'growth' or 'late' stage involves established companies which may sometimes still lose money but are capable of dynamic growth. Some of them, one day, will become unicorns (start-ups valued at more than US\$1 billion). There are fewer investors in this stage, primarily because of constraints of compliance. For members of the CAC 40 (French stock market index), investing in Africa raises a number of questions about the workings of companies in this stage, their ability to operate despite the constraints, the involvement of our business in the field in Africa, and so on. All these factors, essential for success, require a great deal of negotiation – or even compromise – with the authorities in place, and this may create situations which are difficult to accept.

The size of investments in African tech is substantial. Investments are on the increase and are quite concentrated. Three countries receive the majority of investments. They are Kenya, Nigeria and South Africa, and they alone represent two-thirds of all investments on the African continent. Orange's investments are concentrated in French-speaking countries in western and northern Africa. Only two of these – Egypt and Senegal – are among the top 10 receiving foreign investment.

The sectors which are sources of innovation are also quite concentrated. The first is the Fintech (financial technologies) sector, involved notably in global payments and their by-products; secondly is the off-grid (energy) B to B sector; and, finally, e-commerce, in particular with recently emerging Chinese companies.

All the traditional industries, including those associated with rubber, pineapples and cars, have their own innovations. Over the past few years, two trends have appeared which are common denominators with regard to innovation. The first is the emergence of 5G, because our world is a world of mobile phones and in countries on the Asian or African continents, activity can only develop from mobile phones and Smartphones. Portable computers consume too much energy, are expensive to buy, and are too complicated to maintain in environments which often present a challenge for their use on a large scale. Therefore, the future is the mobile phone, whether we like it or not! The other trend is the growth of artificial intelligence (AI). Nevertheless, as far as dynamic growth, content and significant progress are concerned, Africa lags far behind the US, Asia and Europe.

It might be possible that in the coming years these two fundamental trends will pervade all processes in Africa and elsewhere. Since change takes place very quickly, will Africa be able to skip the stages which we in Europe have had to go through, just as it was able to do so for the mobile phone by bypassing fixed-line telephony; or, on the contrary, will it miss the boat? Only time will tell!

Furthermore, whereas patent registration in Asia has soared in the past ten years largely due to China and South Korea, Africa's contribution remains marginal. This factor affects the level of confidence of certain investors which is pre-occupying even if it is possible to innovate by using patents which one does not own. This unfortunate situation, however, is not specific to Africa. The first GSM communication took place in Paris in 1991, two weeks before it took place in Germany. If we exaggerated, we could say that at that time, Europe owned all 2G technology patents. As far as 3G was concerned, Europe had 'most patents'; 'some patents' for 4G; and 'no patents' for 5G. With regards to 6G, currently under specification, the Chinese are starting to create research groups in which the Europeans are not invited to participate. However, in the end, all the operators will start at the same time and will have access to the same technologies to be able to develop their services.

Innovations resulting from use: a source of unexpected success

It is still possible to remain optimistic: mobile payment is an example of an innovation which has been a great success on the African continent, not so much because the technology was original or developed locally, but because the uses, systems and processes were invented and customised *in situ*.

Mobile payment was invented in 2007. It started with the M-Pesa service which operated in Kenya, and was further developed by Michael Joseph, the head of Safaricom. Its aim was to facilitate the repayment of microcredit loans. However, this innovation did not immediately have the success which had been anticipated. When I began working in this sector in Africa, I had the idea that compensating the generalised lack of bank branches by finding a reliable and safe means of payment and transfer of money could be a key factor to help economic development. Therefore, we set out trying to perfect a system which, due to simple menus on a portable phone, would make it possible to transfer money from one phone to another, and then to convert it into banknotes or to keep the balance 'virtually', like a normal bank account. It is a very useful way of making current payments locally, but also, in the case of a foreign worker in France, of sending money back home to one's family without delay and without an intermediary.

It was successful because one did not need the latest generation of Smartphone (which not many people could afford) in order to benefit from this service. In fact, we based this offer on the use of a basic mobile phone, costing less than US\$10, which only had the two functions, as a telephone and being able to send text messages. This telephone still had something amazing, the Unstructured Supplementary Service Data (USSD) norm, a sub-section of the GSM norm (which a small number of people in France still use in order to find out how much credit remains on the phone) which was available to anyone who wanted to use it. The product developed from this factor.

At Orange, a small team worked on this project and the reason we succeeded was mainly because we did so almost in secret. This would no longer be possible today because too many people would try to make the object more sophisticated and there would be too many compliance rules in order to avoid risks of fraud and thereby hindering the project. Therefore, we moved forward without worrying unduly. Of course, there was a little fraud, but because most of the transfers in these countries concern small amounts (CFA5,000 Francs or ϵ 7), its financial effect was negligible. We were therefore able to take the risk.

In practical terms, the system consisted of a network of sellers on the street, sitting under an Orange umbrella or in a small kiosk. The seller credits the client's telephone virtually with the amount of money the client gives him, and the client is then free to transfer the money to anyone he wants. The client just has to dial #144# telephone number of the beneficiary#amount#secret code, and then press 'send' in order for the operation to be complete.

In the beginning, people were wary, and the recipients of this virtual amount of money rushed to an Orange money-point ('Orange Point') or a partner shopkeeper to convert it instantly into cash. Over time, this system has become so reliable that daily transactions currently represent a weekly flow of US\$1 billion, with an annual

growth of 15 %. Two-thirds of global mobile money transactions take place in Africa and this is growing by 12 %. People who have a virtual amount of money on their mobile phones do not withdraw it quickly anymore because they know that it is safe and guaranteed by Orange and the other operators. Contrary to the situation in France, the cost of this money transfer service is between 2 and 4 % (of the sum transferred), which makes it possible to finance our growth in this sector.

Like every important, successful innovation throughout the world, the number of unexpected uses as a result of this innovation have multiplied. For example, in Senegal, a farmer who lives 80km north of the capital comes to sell his lettuces at a market in Dakar. At the end of the morning, if he returns home with a large amount of cash, he runs the risk of being robbed by highway bandits. Therefore, before he leaves Dakar, he goes to an Orange Point, puts the sum of money on his telephone virtually, and when he gets home, either he goes and withdraws the amount at his local Orange Point, or keeps it on his telephone to pay for any shopping in the future. In fact, usually he no longer has any cash to transfer at all, because all his clients are now paying for their lettuces using their phones, by dialling #144#... We are now in a 'cashless economy', but not yet in a 'no cash economy'.

These sorts of operations have been a source of growth for Orange Money, and we now have 45 million clients, 17 million of whom are active clients using our service at least once a month. In some countries, such as Mali, people use this service to such an extent that the equivalent of more than half the GDP is transferred using Orange Money. It has become such an essential tool that if Orange Money were to disappear tomorrow, tax collection, the payment of scholarships to students, the payment of electricity bills and so on would be affected, and the country would come to a standstill. We could never have imagined Orange Money would be such a success!

The transactions take place in little kiosks which cost just €600 each. A city like Bamako has as many as 3,000 of them. After a few incidents at the start, secure transportation of the money is now ensured by motorbike riders who regularly pick up the cash so that it does not stay long in the kiosks. When a product or service becomes as essential as this to a population, the population will defend and protect it. In 2011, in the Ivory Coast, and during the Arab Spring, rebels and others opposed to the local regimes made sure that these infrastructures were not destroyed because they needed to use them as well.

At present, Africa is the world's leading user of mobile payment. Forty percent of the 125 million Orange Telecom clients on the African continent have an Orange Money account, and half of them use it regularly. This success is amazing.

We have recently developed an application which works on all Smartphones. However, in this technology sector we are just one among so many others, notably major international people such the Chinese with WeChat and Alipay, who could 'disrupt' us despite the lead we have been able to take.

Too unsophisticated for Europe?

Why have we not developed this system in France and Europe? Quite simply because it is too unsophisticated and it was already like this ten years ago.

Ten years ago, the president of Orange Group was travelling with me in Africa and he saw a message on his Smartphone announcing a 70% fall in the price of phone communications. He was surprised and asked me why. I told him that when there is no activity on a given relay antenna, Orange makes special financial deals with people who are physically close-by to use the free antenna space because it is costing us nothing and it could be a way for Orange to acquire new clients. He was enthusiastic about this, and asked me why this did not exist in France. When I got back to our Paris office, I discussed the project with the decision-makers despite the fact that I knew my pragmatic, field approach would come up against established modelling procedures which exist in large groups like Orange. 'Why should there be a 70 % price reduction?' I imagined they would say. After a few ineffective reminders, a work group was put in place to determine the optimal level of price reductions. A few months later, Free (a French wireless service provider) broke into the French market, and its advantageous price conditions put an end to the prepayment system and nipped our project in the bud.

The system continues to work in Africa without any problems. However, it is no longer possible to transpose it as it is to France, because the new applications on our sophisticated Smartphones meet our most complex needs very efficiently. Curiously, we have not been able to establish something simple in France which already existed and fully satisfied users.

The relationship with the client: the key to success

As the operator of a mobile telephone network, we started, like our competitors, in the telecommunications sector. Our business moved towards social networks and then to e-commerce. After this, because of the knowledge we had gained about our clients as a result of our activity as a telecommunications operator, we were able to manage the client relationship which grew from our financial services activity successfully, and this opened up the field to a wide range of secondary activities.

Other companies which are now entering this sector started out in different circumstances. Facebook, for example, has a database of contacts from its social network which it is trying to monetize in other areas, for example, developing a digital currency, Libra. Facebook's influence is huge in terms of cash and available means, but its weakness lies in the fact that it does not control this client relationship which is key to making money from its clients.

In Africa, the fact that we have won the battle with the banks who have only developed a few dozen salespoints in a given country over a long period of time, is because we are a telecommunications operator: we have 500,000 salespoints (Orange Points) throughout the continent! Even though these are only minor salespoint kiosks, they are a means of contact with clients. At these salespoints, we can credit telephone accounts, sell battery rechargers and offer many other services. An Orange Mobile client who is also an Orange Money client is more loyal than an ordinary client! This advantage in terms of widespread distribution not only helped us to win the battle with the banks but also with the local regulators who wanted to tax and regulate us, but they were faced with a population which protected us. No government can stop Orange Money in a country where we have been established for so long because the population needs our services! However, this may change with the arrival of WeChat and Alipay.

From secrecy to recognition

We operated some distance from the company's headquarters for six years. We worked with the BNP bank and, gradually, we became an institution issuing electronic money, a compulsory status for French-speaking countries. In France, we managed to remove all the cash from our Orange shops, whereas in Africa, we re-introduced this cash which we realise cannot be the core business for a telecommunications operator. Orange Group's investment committee was very wary, and no-one really believed that this system could possibly make money. However, during a business trip to Africa, the Group's financial director was surprised to see a queue of clients in front of one of our Orange Points. I explained to him that they were waiting to withdraw money from cash machines using Orange Money. Initially he was incredulous, and he checked to make sure that they were not acting extras who had been hired just for his visit! Having seen this for himself, he was convinced by Orange Mobile's popularity, and became our number one supporter. He talked about us to his teams who, in view of the growing amounts involved, started becoming more interested in our work. Our growth continued without us needing to be quite as secretive.

Orange Money has been successful and has started contributing to the Group's core activity. Because of Orange Money, the Group's African development grew considerably. Whereas growth in France and Europe is slow, in Africa it is 6 % on a significant turnover which, for the main part, is made up of data and Orange Money. In about twelve years, our client base has grown from 6 million to 120 million, and we now employ 18,000 people. Today the African continent is the Group's leading growth area and accounts for more than 12 % of its turnover. Even though Africa remains a small part in the Group's financial results, the fact that it represents an important part of its growth is very reassuring for our investors.

The Group has also decided to make sure that there are more Africans on its management team. My successor as head of Orange Money is Alioune Ndiaye, the former CEO of Orange Sénégal, and he is now on the Group's executive board. Today people holding the top management jobs in our subsidiaries are African and they are no longer made up of French expatriates, as was the case a few years ago.

We have tried to reproduce Orange Money services in several countries. In France, where the banking system is well developed and where the needs are clearly not the same, we specifically targeted money transfers made by Africans to their home countries. It is very easy to do this: one simply has to dial #144#beneficiary telephone number #amount#secret code and press 'send'! We have successfully set up an office in Romania, an intermediary country, where we have created a more attractive product, as well as a more sophisticated bank card.

In-house and external innovation

The key factor associated with reverse innovation is that, because of this successful experience, Orange Group finally discussed the possibility of being more involved in the financial services sector. At the instigation of its president, Stéphane Richard, Orange decided not to restrict itself to the role of a distributor, but to launch its own bank. This was the first time that a telecommunication operator entered into the banking sector. It was necessary to convince a large number of people and institutions, as well as our own board of directors who were not instantly won over by this decision. We bought Groupama Banque's banking licence and launched Orange Bank in November 2017. We will soon be opening a bank in Africa, in close partnership with Orange Bank. We have had a credit business in Africa for a long time.

We earned our legitimacy in France because we were able to offer financial services in Africa, and not because of our technological innovations which we could have imported there. The processes, know-how and management associated with the Orange Money product were the basis.

Currently, Orange Bank management is appropriately in the hands of bankers. I am certainly not a banker! When we need to prepare the groundwork, it is necessary to have enthusiastic entrepreneurs. After that, one must keep innovating, but also introduce processes and regulations. In order to achieve this, people with other abilities and skills should take over.

At the same time that we launched the bank, we took another initiative. One cannot profess to innovate just by using the company's resources because innovation is everywhere, especially in start-ups. Therefore, we had to find a support system for these start-ups. The Orange Fab network was created for this purpose, and it provides start-ups with premises and financial resources over a given period.

Orange Digital Ventures, which is based in Paris, London and Dakar, allows us to invest in start-ups. This is a unique approach for the Group. The investment provided not only helps start-ups to develop their innovations, but also challenges us to innovate ourselves. The 1,000 researchers in Orange's technical department, even though they are very talented, cannot possibly invent everything about every subject all the time. It is essential that we become more open to the outside world.

For example, we give financial support to Gebeya, an African start-up, which has recruited and provided online training for more than 600 African developers in Kenya, Ethiopia and Senegal, and found them positions in African, European and North American companies. Another example is Famoco which developed more than 100,000 Android terminals which were used to identify clients and to carry out transactions. They are currently sold in Europe and Canada. Finally, PayJoy finances the purchase of Smartphones using credit in Mexico and Africa. We are currently entering into PayJoy's marketing phase in Romania.

On a personal level and with regards to my many professional experiences, I can safely say that my contribution to the development of Orange Money has had a profound effect on me. We have managed to instil this spirit of reverse innovation everywhere in the Orange Group, but will it help Orange become the multiservice operator it wants to be in the future? This will probably be possible in the energy sector or in the medical field where significant progress will undoubtedly grow from African initiatives. However, in the e-commerce sector, will

we be 'pushed to the kerb' by another sort of Alibaba which, in the space of one minute on Black Friday, made a turnover of US\$1 billion? As far as e-education is concerned, this is clearly a challenge for all emerging countries, but especially for those in Africa where distances are so large that it is not conceivable to design classroom-training programmes. Will we know how to be there and finance e-education?

The surge of technological innovation comes mostly from developed countries today, but significant contributions will undoubtedly follow from Africa, notably for innovations which emerge as a result of use.

Discussion

From cash to credit

A speaker: Have you favoured French-speaking African countries?

Marc Rennard: These countries are our historical base for multiple reasons because of the language and our common history. However, we are also based in Egypt and Jordan which are Arab-speaking, in Botswana (English-speaking), Mauritius (which is bilingual, French and English), and so on. The figures can be misleading. Even though the largest French-speaking country in the world is now the Democratic Republic of the Congo with 100 million inhabitants, almost half of them do not speak French – or speak French badly, and speak one of the many local languages instead.

Speaker: *How are your sellers paid?*

M. R.: The sellers get a very large distribution commission, and when we started, it could be as much as 45% of the costs paid by the client. From this commission, it is up to them to pay the kiosk employees 20 to 30 % of the clients' costs. My concern was to make the system grow, as I was well aware that we would no longer be able to act in this way today because management controllers have control over the accounts. At present, the commissions we pay are comparable with those paid elsewhere in the telecom sector, in other words between 12 and 16 %. A seller who works well can earn as much as ϵ 000 every month which is a considerable amount in African countries. As far as the client is concerned, when he withdraws money, we take a commission of CFA 500 francs (ϵ 0.70).

Speaker: How did you manage to lend money?

M. R.: We did it without a word being said. When Orange in Africa made a turnover of 4 billion, 7 % of our turnover was from lending money. And yet everyone seemed to ignore this, telling me that this was not our profession and that we would fail. In fact, everything changed with 'air time'. With our prepaid subscription, when a client no longer had any credit left, we had a system which allowed him to continue to use his telephone by allotting him free 'air time' which he could activate. We charged this customer a small rate of interest the next time he put credit on his telephone as a means of paying ourselves for this service. We decided to formalise this practice, primarily with our microcredit experiences in Madagascar and Mali which we had carried out over several years in partnership with specialised companies. Because we chose to buy a bank licence, we will soon be able to develop our business with Orange Bank in the Ivory Coast and Senegal; we have information about our clients and we can therefore assess their status, because lending money is still more risky that paying an advance on consumption, even though this generates revenue in the form of interest.

Speaker: Is your legitimacy based on what you transposed from Africa to Orange Bank?

M. R.: What we transposed to Orange Bank was our capacity to manage conformity and our legitimacy to do so. We first bought a bank followed by a business experience which we had acquired with Orange Money and the applications which we developed there. Orange Bank is a fully-functional bank with cheque books and Smartphone apps, but we do not have any branches: our Orange France offices manage the subscriptions, grant loans with consumer credit, and so on.

Speaker: Were the start-ups which you support financially 'born' in Africa or do they use the continent just as a usual market?

M. R.: In the three examples I mentioned, Gebeya is a purely African start-up; Famoco is a French company which works in Africa for the most part; and, finally, PayJoy is registered in the US, but only works in Africa and Mexico. Of all those which work in Africa, we targeted start-ups which were initiated and developed by Africans. However, when they get bigger, either they relocate or register in Delaware or Mauritius. If a company becomes a unicorn, it runs the risk of quickly becoming a target for many governments who will try and tax it unreasonably. It is therefore not surprising if it tries to register elsewhere, in places which are more welcoming and stable.

Disruption

Speaker: Mobile payment is growing rapidly, especially in China. Why is this activity so limited in France?

M. R.: I am a fan of contactless payment. In Paris, because I am an Orange Bank client, I only pay with my Smartphone! Eight times out of ten, I am told it is not possible or that the payment limit is \in 30, whereas in fact the daily limit is \in 1,000. If I insist and I am put on the spot to prove it works, I put my telephone over the terminal, tap in my code and it works! According to French law, all new terminals are now equipped with contactless payment, and only a few shopkeepers have not put this in place because they think that for small amounts the banks' fixed commission is too large, but this has not been the case for the past three years. If this method of payment has not grown more rapidly in France, it is undoubtedly partly because we have not done our job educating consumers and traders adequately. Shopkeepers do not know how the system works and are therefore very reticent to use it. For me, as an Orange Bank administrator, this payment method could be improved because we are still losing money despite having 500,000 clients. But, as far as the client is concerned, it is fabulous! Our goal is to have 2 million clients in the next eight years.

Speaker: In all the countries that you have mentioned, Orange is one of the five largest companies. People must think you are reliable. Do they ask you to venture into other activities, outside of telephone networks, such as electricity, for example?

M. R.: We are already involved in electricity! We have just opened a solar farm in Jordan in order to produce 'Orange Electricity'. Jordan is stable but has no resources, and in a Middle Eastern scenario which is complicated, electricity is very expensive. We launched a project eight years ago, which is a long period of time, but we must not try to hurry it up or upset habits as this might be interpreted as arrogant from a powerful company like Orange. Similarly, it is a delicate matter publishing our results in certain countries where people may well ask us why all the money we earn in their country goes straight to Paris. We could envisage producing electricity and providing villages with small local networks, but we must be careful not to put local operators, who are already in a delicate position, out of business. This would be counter-productive and I would strongly advise against it.

Speaker: Do you not think that there will be a disruption? And where could it come from?

M. R.: I think it could come from Alibaba (Alipay) or Tencent (WeChat). Today we are protected by the basic USSD telephone which the Chinese do not use. However, when everyone in Africa owns a Smartphone, they could be so powerful that they could put US\$2 billion or more on the table and set up a company there, like Jack Ma (the former CEO of Alibaba) predicted. And then they could instantly finance 50 distribution networks, and, in theory, threaten our existence. This is why I keep on saying that our applications must be very efficient and that we must develop a sophisticated ecosystem, and so on.

The real threat would be if Orange Money grew very fast, with two-digit growth. This would delight our financiers, but we cannot continue to live on what we invented twelve years ago even though I am very proud of it. The reasons why our business model succeeded twelve years ago are totally different from those which explain Orange Money's success tomorrow. Therefore, we must prepare ourselves carefully, because if we do not, we risk being disrupted in the future. My successors are getting down to work.

■ Presentation of the speaker ■

Marc Rennard: graduate of the École de Management de Lyon, he began his career in consultancy before becoming managing director of the Société des Montagnes de l'Arc, between 1989 and 1992. He was appointed sales manager at TDF in 1992 and later, deputy general manager. In 2003, he joined the Orange Group where he was successively manager of international operations, Group executive director, managing director of Orange Middle East and Africa, and deputy general manager of Orange Group in charge of mobile financial services. He was in charge of the development of Orange Money in Africa and the launch of Orange Bank in France. Today, he is the CEO of Orange Digital Investment.

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