



PAYMENT TECHNOLOGIES

## 2015 Sub-Saharan African Information Technology for Banking Technology Leadership Award



FROST & SULLIVAN



50 Years of Growth, Innovation & Leadership

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## Background and Company Performance

### *Industry Challenges*

Sub-Saharan Africa's (SSA) growth improved to 4.5% in 2014 for the second year running, while the Gross Domestic Product (GDP) has consistently remained above 4% since 2011. The International Monetary Fund (IMF) expects GDP growth to pick up to approximately 5.75% in 2015. As urbanisation and disposable income grow, so does the retail industry and the need for modern and efficient electronic payment technologies. Frost & Sullivan recognizes payment technologies created in developed nations do not cater to the challenges of operating within Africa, which includes: lack of infrastructure, intermittent Internet access, and frequent power cuts. Thus, a market for uniquely African solutions that mitigate these factors is opening up.

At the back-end of payment technologies are the technology companies that develop them and banks that distribute them. As SSA leapfrogs into modernisation there is a greater need for financial inclusion (access to banking services and payment technologies). This makes electronic payment (ePayment) systems and mobile Point-of-Sale (mPOS) terminals essential elements in the financial services sector. Despite the needs outlined above, providing technology solutions to financial institutions in order to enable their clients to sign-on and transact is not without its challenges. One of the greatest challenges is providing accessible options for banking sign-on, cash deposits and withdrawals and payments processing. In addition, facilitating financial inclusion in rural areas has to overcome challenges of accessibility (poor roads and long travel distances), and a lack of access to brick-and-mortar branches. Automated teller machines (ATMs), POS terminals, and agent networks must be conveniently located throughout a community. The up-front capital expenses this requires can be substantial.

Software developers are confronted with the difficulty of establishing and providing competitive ePayment systems to increasingly demanding populations with a myriad of differing and rapidly changing needs. Systems must be able to process increasing purchase volumes reliably, include small merchants, and keep up with the fast pace of technology evolution. The lack of Internet and mobile phone infrastructure has made it difficult for software developers to take advantage of ePayment platforms to offer easily accessible ePayments solutions.

Technology providers are challenged to create all-inclusive solutions that meet international banking regulations and end-user needs.

## *Technology Leverage and Business Impact*

### **Commitment to Innovation**

As a company with 16 years of industry experience, iVeri Payment Technologies, continues to be at the forefront of innovation for the banking industry with two exciting technologies that bring cutting-edge solutions to their banking customers. These banking solutions enable iVeri's customers to grow their client bases through accessible on-boarding and provide their clients with technological solutions for their retail business needs. iVeri considers itself to be the "innovation arm" for banks and financial institutions by continuously developing solutions that will bridge the gap between what banks can offer and what their clients need.

Frost & Sullivan notes that iVeri's Payment Gateway is a multi-channel card payment acceptance system that enables merchants and online retailers to access a range of services from remote payment devices to real-time monitoring of transactions. It routes card payment transaction messages from remote payment devices such as POS terminals, Internet, and mobile devices in a secure environment to a transaction switch for processing. It also offers comprehensive reporting and back-office functionality for both the bank and the merchants. As multiple payment options are accepted, more transactions can be processed by the merchant, increasing their sales volume ability.

As part of iVeri's commitment to innovation, more channels are continuously added to the Payment Gateway and merchants are able to use a single acceptance channel or a combination of such channels. mPress was launched by iVeri in February 2013 as a product within the Payment Gateway solution. The product combines a smartphone application (app) with an internationally certified card reader. It is one of the first live Europay, MasterCard, and Visa (EMV) chip-and-PIN certified mPOS solutions in South Africa. Traditional POS terminals are transactional devices lacking the ability to analyse the wealth of data that can be derived from all the transactions that they process daily. iVeri developed mPress as an open-source software solution easily downloadable onto a mobile phone as an app that syncs with the POS terminal to provide retailers with the needed business logic, i.e., the retailers can design a dashboard for the analytics that they need to derive from their POS transactions and structure it to meet their unique needs—all via the app.

iVeri's second product innovation is the recently (in the fourth quarter of 2014) launched MicroBank+ that addresses the constraints faced by banks due to a lack of infrastructure in rural areas that hinders them from reaching unbanked populations. MicroBank+ is a sophisticated operating system for financial institutions that require flexible information technology systems to manage basic banking functionality, such as the acquisition of new customers. It is a remote banking solution that enables banks to enter rural areas without a brick-and-mortar branch presence, but with all the security found in a branch. It further enables banking clients to deposit and withdraw money without having to travel long distances to the closest town in which such transactions would usually take place.

By tracking end-user (banking clients) needs, following international and local banking regulations, and developing a strong understanding of the ability of technology to overcome the gaps, iVeri has positioned itself as an innovation company for banks throughout sub-Saharan Africa.

### **Technology Incubation**

iVeri's staff are payment experts on top of their daily job functions. Frost & Sullivan finds that they are in touch with the needs of banks and retail merchants. When a new technology or channel is developed, a collaborative process is followed to design, pilot, and launch the product. A typical time frame is two years from inception, to internal launch to the banking to external launch to the bank's clients. This incubation time period is, however, necessary to ensure that the launched products have been piloted and modified according to customer requirements. iVeri has strategically structured its business and product development cycles to work around the two year incubation cycle.

Although they have different end-user groups, both iVeri's Payment Gateway and MicroBank+ are aimed as solutions for financial institutions and meet all the strict international regulatory requirements for banks, such as audit trails, security encryption, and 24-hour operations. Since 2010, iVeri has been Payment Card Industry Data Security Standard (PCI DSS) Level One compliant. Furthermore, iVeri is currently the first supplier of EMV-certified mPOS technology in Africa. mPress is fully certified as Visa Ready for mPOS as well as meeting MasterCard Best Practices Standards. These certifications place emphasis on the depth of iVeri's regulatory knowledge as a competitive differentiator for its technologies.

### **Application Diversity**

Both Payment Gateway (with mPress) and MicroBank+ are enablers for iVeri's banking customers to support them to take on smaller merchants and acquire new banking clients. The ability to continuously add new channels to the Payment Gateway improves the application diversity of the product each year. In SSA, a majority of retailers are small and have been excluded from the online payments market; however, mPress enables access to this sector as potential customers. Frost & Sullivan's analysis reveals that unlike competitors in the electronic payments space, iVeri creates multiple solutions for banking customers. It has not limited itself to ePayments, but has diversified the use of POS terminals to make them usable by banks for client on-boarding. This application diversity makes iVeri a technology leader in the banking industry.

iVeri does not build its own POS terminals for mPress or MicroBank+. It procures the terminals from reliable equipment manufacturers. However, iVeri creates the mobile apps that integrate with the POS terminals to bring business value to its banking customers. iVeri is very particular about the POS terminals that it imports into Africa. The mPress POS is a terminal that is smaller in size and can thus be supplied at a reduced cost when compared to desktop POS terminals. EMV security for the card payment lies within the terminal but the business logic that was coded by iVeri lies within the mobile app. As it is open-source, merchants can add additional functionality.

The app is downloadable for Android, iOS, and Blackberry and connects to the terminal via Bluetooth. Once the payment has been authenticated the app sends a text receipt to the card holder. This best-in-class technology has simplified retailers' day-to-day e-payment activities.

MicroBank+, as an agency banking solution, enables a portable POS terminal to connect to a bank's core banking system. The battery-operated terminal is imported from South Korea and contains two mobile subscriber identity module (SIM) cards to ensure uninterrupted connectivity. It provides full customer registration including a camera to capture digital photos of the account holder and their identity documents and a biometric fingerprint reader to authenticate the account holder as well as a PIN or card number. MicroBank+ also provides a full mobile interface for each account holder to be able to perform balance inquiries and person-to-person transfers via SMS, thereby reducing the use of physical cash. The technology and solution provided by iVeri in MicroBank+ is an enabler for its customers to grow their client base and improve the ease of transacting. It is an innovative solution that provides an answer to the current banking problem of reaching unbanked populations while, at the same time, reducing the cost of acquiring new clients for banks. It opens up new markets for banks where traditional branches are not viable.

### **Financial Performance**

By building a brand recognised for creating innovative world-class solutions for the banking environment, iVeri has not only achieved success within South Africa, its home base, but also in SSA as a whole. mPress mainly caters for the South African market and more established banking markets, as it can only target banks that provide cards (debit, credit, and check) to their customers. iVeri boasts two of the top four South African banks as customers as well as three other banks outside of South Africa who provide the solution to their clients. It processes over 1.6 million transactions a month to the value of approximately USD 100,000,000.

The newly launched MicroBank+ caters to customers in the rest of SSA and currently has one customer outside of South Africa who will launch the solution to its customers by mid-2015. It also has two more banking customers in the pipeline. Due to the proven track record of mPress and iVeri's in depth understanding of its target market and the dire need for mobile (portable) banking to reach a large and unbanked Africa population, Frost & Sullivan is certain that MicroBank+ will be a success and make an impact on the banking industry. It has the potential to change banking business models, create a more inclusive definition of a banking client, and alter the modes of reaching those clients. MicroBank+'s strength lies in the fact that it does not rely on a card system and can, therefore, target all financial institutions.

Due to its success throughout SSA in 2012, iVeri's revenue growth was 20%, which was maintained for the 2013 and 2014 financial years. The launch of mPress provided iVeri with good vertical growth; when its first banking customer launched MicroBank+ to its customers, there was an expected growth jump. In addition, net profit was approximately 7% in 2013.

## Customer Acquisition

iVeri's customer acquisition and retention strategy are closely intertwined. Three regional managers in Lagos, Nairobi, and Johannesburg are responsible for face-to-face interaction on a regular basis with existing and potential customers. Maintaining excellent customer relationships is a means to grow and expand with their existing customers as well as deliver technology solutions that are accurately targeted to meet customer needs, thereby opening the door to new customer acquisition.

Customer retention is maintained through continuous technology improvements and training to accompany it. iVeri trains all new customers on the use of the technology and how it fits into their customers' business objectives. Initial face-to-face training as well as continuous refresher training is offered via an online portal. Banks face high staff turnover, which iVeri responds to by providing extensive training to all new staff. The training is accompanied by a remote 24/7 call centre with staff available to answer all requests, in line with international standards. The training and call centre assists customers to get the most out of iVeri's technology, thereby strengthening iVeri's reputation as a supplier of quality technology payment and banking solutions.

The key value proposition that the company offers banks is that they can sign up more clients because the mPress solution is cheaper and the equipment costs lower relative to that of competing solutions. These partnerships are testament to iVeri's unmatched product excellence, leading to greater customer acquisition.

## Growth Potential

iVeri has been developing electronic payment technology since 1998, initially providing payment solutions in the eCommerce space. While a growth in online and brick-and-mortar retail calls for efficient e-payment solutions, there is a higher need to serve the unbanked population, calling for new solutions to reach them, as efficient mobile (portable and phone) technologies are becoming everyday needs. iVeri has thus cleverly positioned itself as a solutions provider to address this need, not only in South Africa, but throughout SSA. iVeri's Payment Gateway is currently present in Namibia, Lesotho, Swaziland, Zimbabwe, Angola, Kenya, Rwanda, Malawi, Tanzania and Zambia; it plans to reach three more countries by the end of 2015.

iVeri's growth is set to spur from geographic expansion as well as vertical and horizontal expansion. Frost & Sullivan find its payment gateway, including mPress, grows vertically every year as iVeri launches new channels that enable its existing customers to grow vertically. Horizontal growth comes from the new banking solutions that are incubated by iVeri—including mPress, its leading product, and now MicroBank+.

## *Conclusion*

iVeri is regarded as a technology leader for banks as it develops and incubates inventive solutions that solve modern day's banking challenges. With 16 years of experience, iVeri leverages its extensive knowledge of its banking customers' needs as well as regulatory requirements to create solutions that meet at the convergence point. iVeri's certified, affordable, and flexible solution, mPress, is the first EMV Chip-and-PIN mPOS solution in South Africa. Frost & Sullivan's independent analysis of the Banking industry clearly shows that iVeri provides small and mobile merchants with a superior product that meets the highest security requirements. iVeri continues to be an industry leader, driven by its ability to continuously keep up with new technology trends, as mPress has positioned it ahead of its competitors in the mobile ePayments industry in South Africa. Furthermore, MicroBank+ creates the opportunity for iVeri to target a broader customer base just as it enables its banking customers to broaden their reach.

With its strong overall performance, iVeri Payment Technologies has earned Frost & Sullivan's 2015 Technology Leadership Award.

## Significance of Technology Leadership

Technology-rich companies with strong commercialization strategies benefit from the increased demand for high-quality, technologically innovative products. Those products help shape the brand, leading to a strong differentiated market position.



## Understanding Technology Leadership

Technology Leadership recognizes companies that lead the development and successful introduction of high-tech solutions to customers' most pressing needs, altering the industry or business landscape in the process. These companies shape the future of technology and its uses. Ultimately, success is measured by the degree to which a technology is leveraged, and the impact that technology has on growing the business.

## Key Benchmarking Criteria

For the Technology Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Technology Leverage and Business Impact—according to the criteria identified below.

### Technology Leverage

- Criterion 1: Commitment to Innovation
- Criterion 2: Commitment to Creativity
- Criterion 3: Technology Incubation
- Criterion 4: Commercialization Success
- Criterion 5: Application Diversity

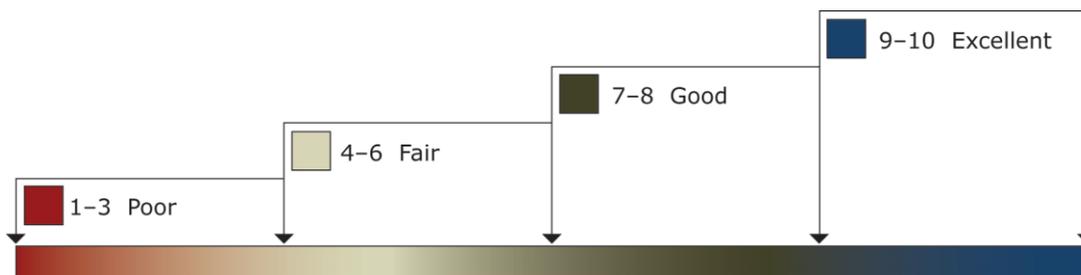
### Business Impact

- Criterion 1: Financial Performance
- Criterion 2: Customer Acquisition
- Criterion 3: Operational Efficiency
- Criterion 4: Growth Potential
- Criterion 5: Human Capital

## Best Practice Award Analysis for iVeri Payment Technologies Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows our research and consulting teams to objectively analyse performance, according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are illustrated below.

### RATINGS GUIDELINES



The Decision Support Scorecard is organized by Technology Leverage and Business Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criteria are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, Frost & Sullivan has chosen to refer to the other key players as Competitor 2 and Competitor 3.

**DECISION SUPPORT SCORECARD: TECHNOLOGY LEADERSHIP AWARD**

<i>Measurement of 1-10 (1 = poor; 10 = excellent)</i>			
<b>Technology Leadership</b>	Technology Leverage	Business Impact	<b>Average Rating</b>
<b>iVeri Payment Technologies</b>	<b>9</b>	<b>9</b>	<b>9</b>
Competitor 2	7.5	8	7.75
Competitor 3	7	7	7

*Technology Leverage*

**Criterion 1: Commitment to Innovation**

Requirement: Conscious, on-going development of an organization culture that supports the pursuit of groundbreaking ideas through the leverage of technology

**Criterion 2: Commitment to Creativity**

Requirement: Employees rewarded for pushing the limits of form and function, by integrating the latest technologies to enhance products

**Criterion 3: Technology Incubation**

Requirement: A structured process with adequate investment to incubate new technologies developed internally or through strategic partnerships

**Criterion 4: Commercialization Success**

Requirement: A proven track record of successfully commercializing new technologies, by enabling new products and/or through licensing strategies

**Criterion 5: Application Diversity**

Requirement: The development of technologies that serve multiple products, multiple applications, and multiple user environments

*Business Impact*

**Criterion 1: Financial Performance**

Requirement: Strong overall financial performance in terms of revenues, revenue growth, operating margin and other key financial metrics

**Criterion 2: Customer Acquisition**

Requirement: Overall technology strength enables acquisition of new customers, even as it enhances retention of current customers

**Criterion 3: Operational Efficiency**

Requirement: Staff is able to perform assigned tasks productively, quickly, and to a high quality standard

**Criterion 4: Growth Potential**

Requirements: Technology focus strengthens brand, reinforces customer loyalty and enhances growth potential

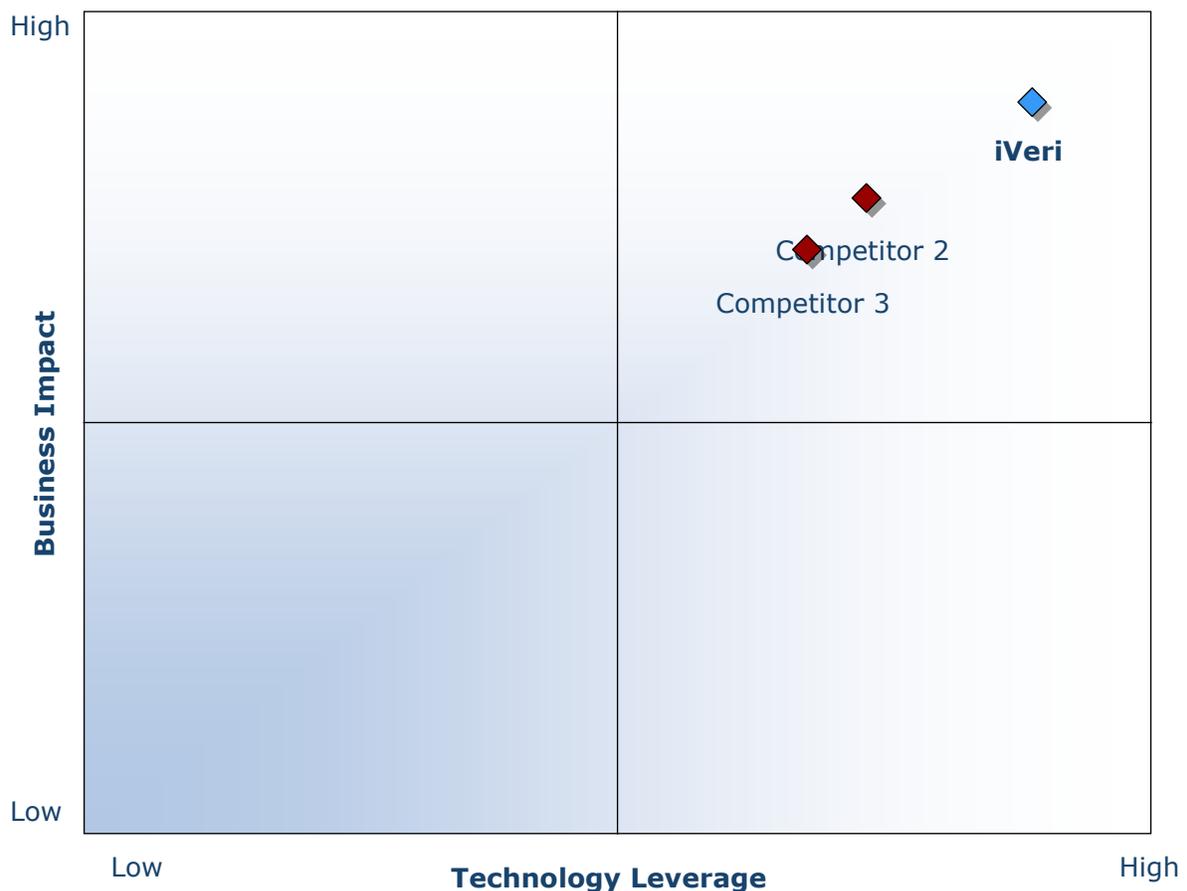
**Criterion 5: Human Capital**

Requirement: Company culture is characterized by a strong commitment to customer impact through technology leverage, which in turn enhances employee morale and retention

*Decision Support Matrix*

Once all companies have been evaluated according to the Decision Support Scorecard, analysts can then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.

DECISION SUPPORT MATRIX: TECHNOLOGY LEADERSHIP AWARD



## The Intersection between 360-Degree Research and Best Practices Awards

### Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

### 360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS



### About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best in class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages over 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 40 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.