

NEWSLETTER

CashDingo & KBA

45 banks attend combined CashDingo and KBA event.



Audience attending KBA & CashDingo, September 14th

At a recent KBA/CashDingo event held at the Hilton Hotel, Kenyan banks learned about the advantages a national and regional switch can bring to their operations. Speakers discussed practical and proven examples demonstrating how Kenyan banks can exponentially increase fee

based revenue possibilities for their banks. The CashDingo switch is a transaction processing engine and CashDingo's objective is to establish a regional switch in Eastern Africa.

Representatives from all 45 Kenyan banks were present.

continued page 2

CashDingo switch benefits

- Exponential increase in fee based revenue. Most banks make money from charging fees.
- Ability to add new channels and products easily and efficiently.
- More access for customers for less cost.
- Quicker settlement and clearing.
- Regional and international transactions for bank customers and competitive costs.
- Eliminate monopolies from the market.
- Economies of scale and uniform standards a precursor for interoperability.
- Position Kenya as a payment gateway for Africa.

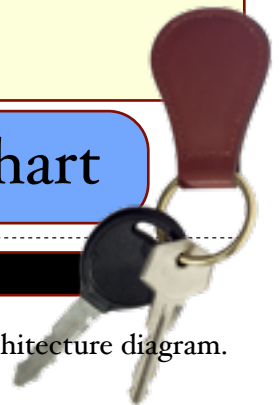
See page 3 for a product functionality chart

Newsletter contents:

Page 2	.....	CashDingo perfect score.
Page 3	.....	Supported products and services and product architecture diagram.
Page 4	.....	Settlement issues affecting regional goals.
Page 5	.....	October 20 press release.
Page 6	.....	Regional payments unlocked.
Page 7	Case Study: University of Nairobi benefits.
Page 8	CashDingo enhances cheque truncation project.

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continued from page 1

The objective of the event was to explain the benefits of the CashDingo switch projects and share valuable insights and practical knowledge about how a switch can lead to increased revenue and improved operations.

Representing CashDingo were members of its international team of experts. Each speaker having extensive knowledge and experience in helping banks build new revenue streams by leveraging transaction switching technology.

According to Greg Marsh, CIO of CashDingo, "A switch makes interoperability between banks possible as long as standards and best practices are followed." Currently in Kenya there are several small silo switch projects but no overall solution geared to interoperability between all banks and throughout the region.

Part of the challenge will be to introduce appropriate standards."

One of Marsh's concerns is the possibility of even more projects geared to blocking competition. A typical result of this is that expensive projects get deployed, such as rolling out POS devices or ATMs on proprietary networks. The result is inefficiencies, duplications, wasted resources and the risk of 100% loss in the future.

Currently in Kenya there are several small silo switch projects but no overall solution geared to interoperability between all banks and throughout the region.

Greg Marsh CIO CashDingo

According to Mark Sibthorpe, CEO of CashDingo, competing groups see the market as a zero sum game and deploy solutions without consideration about how they will speak to each other to the benefit of all banks. The result will be either stunted growth and limited competition or the risk and waste if many silos or



Speakers Mitchell Elegbe, MD InterSwitch and Mark Sibthorpe

fiefdoms, built without consideration for standards or interoperability.

Ignoring the issues could mean that banks which already speak to at least 5 separate systems have to speak to 10, maybe 15 different fiefdoms, each with different parameters and additional risk issues..

Alternatively, banks might get trapped on a network that suddenly decides it can increase prices because they own the market. CashDingo is your insurance policy that device managers can easily access entire bank networks for the benefit of all banks and clients./

To find out how CashDingo will change your business contact: cashdingo@cashdingo.com ;)

OUR EXPERIENCED TEAM SPEAKS VOLUMES. A PERFECT SCORE SOON TO BE REPEATED.

24 out of 24 Nigerian banks use the CashDingo solutions. 100% market penetration in one of the most challenging markets in the world.

Our switch does not go down. 100% uptime is not an option when it comes to bank transactions.

From nearly zero to 20,000,000 cardholders is a few short years.



With experience in Africa and North America, CashDingo bring the best practices of the world to one of the most exciting markets in the world.

Full marks for vision, we are standing on the shoulders of giants, of course we see far into the distance. But we are well grounded in the reality of today.

Our goal is to provide exponential revenue growth for banks and better access and more services for consumers. We want you to score 100% with your customers too.

CASHDINGO'S SWITCH SUPPORTS MULTIPLE CHANNELS AND TRANSACTION TYPES

Payment instruments	Transaction types	Payment channels
Magnetic stripe	debit and credit cards	POS terminals
EMV debit and credit cards	Purchase with cashback	integrated PIN pads
In-house purchasing cards	Cash withdrawal	Stand-alone POS terminals
Reloadable and non-reloadable gift cards	Balance inquiry	Self-checkout terminals
Stored value cards	Gratuity	Internet
Private label cards	Mini-statement	Kiosks
Staff discount cards	Refund	Call centers
Loyalty cards	Void	Mobile phones
Checks	Electronic benefits transfer	
Vouchers	Other value-added services	
Cash		
EBT		
Fleet and fuel cards		

INTERNATIONAL STANDARDS AND INTEROPERABILITY = INCREASED FEES FOR BANKS

Your cardholders can access ATMs from any device manager and new players will be integrated without expensive evaluation and testing.

Banks can partner with merchants for easy deployment.
Proven revenue models, standards and inexpensive devices make deployment straightforward.



How many taxi owners would appreciate the ability of a POS device to help audit daily volumes.

SETTLEMENT ISSUES STOPPING KENYA FROM TAKING STRONGER LEADERSHIP ROLE.

CashDingo has identified 3 key elements to establishing Kenya as a regional payment gateway:

- The first issue is interoperability between institutions. Without this all financial service institutions will be subject to severe inefficiencies
- Risk management is another key issues. Who assumes the risk of a transaction and how it is mitigated are questions that must be resolved.
- The third pillar is settlement. Currently in Kenya there are 4 main settlement agencies. The first is the Central Bank of Kenya which is responsible for Kenya Electronic Payments

Settling at multiple institutions is a good example of a factor that increases exposure: source FSD

(KEPS). KEPS is geared to large value low volume daily. Settlement through KEPS goes through SWIFT.

However, in the case of settlement, each switch has a different settlement process. Settlement vehicles apart from the CBK include the following:

- Visa: according to an FSD report, Visa members settle through the Central Bank. This is the most secure settlement process available in Kenya. The drawback of Visa according to the FSD being, “Interchange fees for Visa-member banks are high in comparison to national and international benchmarks, making Visa-member banks effectively a non-interoperable environment. 2
- Device owner Kenswitch settle through CBA, a medium-sized bank. Settlement has also proved a problem according to the FSD. “Settlement is not conducted over weekends and holidays, exposing banks to liabilities for extended periods of time. To cover these liabilities, banks are required to deposit extra collateral at CBA. This has caused significant resentment, as Kenswitch-member banks are required to hold collateral at CBA, as well as the central bank, who benefit from the funds.” A further criticism cited by the FSD is that

Kenswitch fees are so low that it discourages banks to deploy additional ATMs. 3



Device owner PesaPoint members settle through NIC Bank and are required to hold collateral at NIC. This is added to the collateral held at the central bank. Holding collateral at the central bank and at NIC can become expensive for banks in terms of forgone interest income.

Checklist of issues:

- Exposure risk compounded when a small bank settles.
- With CBK, limited ability to manage their exposure to other banks by settling outstanding liabilities when they reach a predetermined threshold.
- Resentment of larger banks to settle with smaller banks.
- Limited incentive for settling device owners to add competing ATMs.
- Positioning Kenya as a regional and even continent wide financial player not possible under current structure.
- Only VISA members have introduced POS systems. 4

FSD recommends modifications to settlement rules:

1. Switch all settlements to the CBK. This provides a stable bank for settlement as well as reducing collateral.
2. Facilitate netting of positions outside the daily settlement cycle. This will reduce exposure between banks in the payments system and reduce collateral./

4,2, 3, 4 Financial Services Deepening report: KENYA'S PAYMENTMARKET Identifying an Enabling Environment for Government to Person Transfers Through the Banking Sector APRIL 2007, page 11, 24

PRESS - OCTOBER 20, 2008,
NAIROBI

East Africa readies for transformation in banking.

Cash Dingo, the global banking technology company is gearing up for rollout of a East African banking switch. A regional switch is geared to connecting banks and making financial transactions more efficient. Banks, ATM operators and virtually all payment types including point of sale (POS), government payments to citizens, booking of airline tickets and much more will be possible. Effectively it will transform Kenya from a cash based economy to electronic.

"Through an advanced switch, CashDingo will allow straight through processing of transactions between participating banks, both local and international to take place efficiently and in a cost effective manner," said Mr. Mark Sibthorpe, CashDingo's CEO.

According to George Mutua from NIC bank, "Its an interesting and engaging idea."

"With the world cup of football coming to Africa in 2010, integrated financial services linked to Europe and North America and other strategic regions is essential. Tourism, a major contributor to the Kenyan economy, demands electronic payments. Substantial transaction volumes in western countries are card based.

Mr.Sibthorpe said, "The main result of the project will be new and expanded distribution channels, and

increased access to financial services for consumers.

This is a critical time for Kenya, and essential for economic growth. According to Richard Muraya, Habib Bank, Its an ideas whose time has come." For example, bank clients will be able to use their cards on any POS system or ATM in Kenya and the entire East African region.

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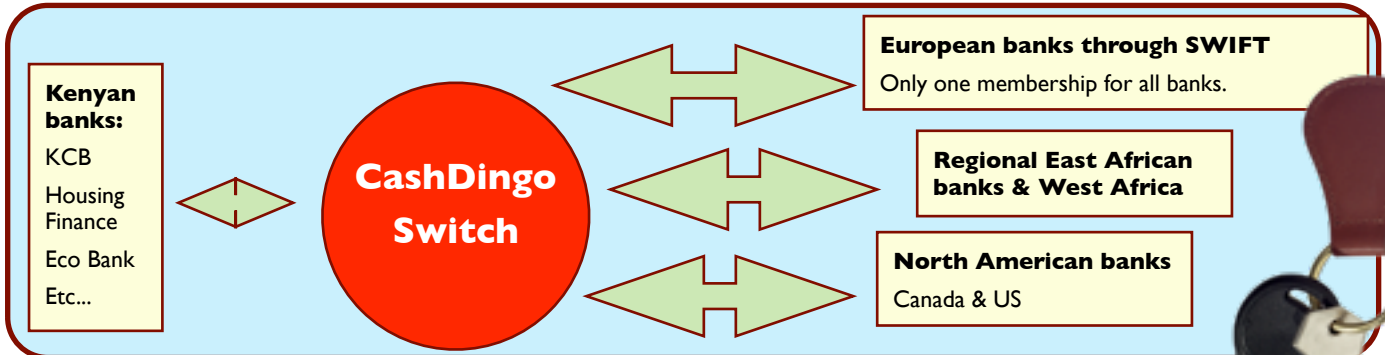
Mr.Sibthorpe said this project is long and similar projects have revolutionized banking in other economies with both banks and business being primary beneficiaries.

"Consumers will be the prime beneficiary as **continued page 6**

Benefits of CashDingo regional switch:

- POS can be easily implemented by 3rd parties for increased competition.
- Data available for credit scoring
- Using a debit card issued by a single bank a client would be able to:
 - Access funds from any Kenya ATM.
 - Use point of sale devices (POS)
 - In a later phase deposit cheques at any ATM.
 - Automated credit tracking and controls.
- Dramatic improvement in customer's ability to clear cheques due to customer profiling.
- Increased customer loyalty.
- Increased merchant fees.
- Reduction in merchant losses.
- Dramatic increase in fee revenues after customer acceptance period.
- Increase in product offerings.
- Expand market without incurring infrastructure costs.
- Using a debit card issued by any bank a client would be able to:
 - Access funds from any Kenya ATM and regionally through phased integration with regional and international switches.
 - In a later phase deposit cheques at any ATM.
 - Loyalty Programs can be implemented and easily managed.
 - Automated credit tracking and controls.
 - Increased customer loyalty by allowing banks to track individual client transactions and target campaigns based on their ability to capture and manage data.
- Offer revenue generating services to merchants that will lead to increased merchant fees.
- Reduction in merchant losses through advanced risk management features.
- Dramatically increase user fee revenues though transaction charges.
- Ability to deliver additional services and products.
- Expand market reach without incurring infrastructure costs.
- The switch will offer secure transactions from multiple

CASHDINGO UNLOCKS WEST AFRICA'S ATM NETWORK FOR KENYA



CashDingo announces it will integrate its switch with Nigerian banks. As part of its commitment to extend payments and transactions beyond the borders of Kenya, CashDingo has agreed to extend its agreement with InterSwitch of Nigeria to include international payments between both countries; InterSwitch provides technical expertise and a significant African experience to CashDingo. This provides a double benefit in that Kenyan banks will be able to profit from the knowledge gained over several years in a tough market and also can soon

provide cardholders an ability to use Nigerian ATMs when they are on the road.

InterSwitch has recently won several awards for achievements as a major player in the African banking industry. On August 1, InterSwitch was awarded and award for outstanding achievement. The basis for the award was in enabling the latest EFT technology, and their professionalism in doing this. This is encouraging for Kenyan banks as InterSwitch will bring consulting during the implementation of the Kenyan switch./

continued from page 5

they will be able to access funds from multiple locations and also have access to many new channels of payment and electronic cash management.

A national switch will also improve the way cheques are handled. Banks in Kenya have to engage in physical cheque clearance which takes up to five days, and have to incur huge transportation costs to the clearing house on a daily basis besides customer delay in accessing funds.

The CashDingo switch is already in use in use in several African countries. Nigeria, West Africa's leading economy has already embraced the switch where all 24 banks are participating members. Nigeria's fee based transactions have grown by over 900% in 4 year since 2004 as a result of the switch.

channels to and from participating banks in Kenya and most banks internationally.

"The most exciting aspect of the switch is straight through processing for bank to bank transfers with the possibility of real-time settlement for Kenya," said Mr. Sibthorpe.

By embracing the switch, the Kenyan banking industry will race past neighboring countries, which have embryonic switch initiatives on the go. positioning Kenya for the South Africa World Cup.

"The switch will allow Kenya to enhance its leadership position as the East African financial services center.

Industry insiders said the switch, besides facilitating international payments will offer superior cash flow management will minimize the possibility of banking fraud.

"The switch offers reporting (audit trail) for all transactions and

advanced security to prevent fraud and avoid errors enabled by advanced reporting of all transactions in multiple formats and report types," said Mr. Sibthorpe.

Industry experts attending the event said, "Banks will enjoy increased revenue with advanced transactions such as foreign exchange dispensing, dynamic currency conversion, and pre-paid top up, wire transfers, deposit automation, check deposit, cashing and money orders."/

Typical payment situation in Kenya for a university student

Step	Action	Time commitment
Step 1	Student goes to hi/her bank, obtains a banking slip.	20 min - 1 hour
Step 2	Student receives receipt and returns it to university for processing in their own faculty.	10 min - 30 min
Step 3	University records receipt files record with the finance office.	5 min
Step 4	University submits receipts to its bank.	1 day
Step 5	Payment processed	1 week

Processing costs: →

Risks: →

Manual data entry can lead to errors.
Receipts need to be tracked.

Verses

Alternative:

Payment situation possible with national switch in place

Step 1: Student chooses from a drop down menu available from his or her web banking platform or mobile payment widget.

Choose payee type: →

School fees
Utility
Retail
Telco

U of Nairobi
Uof
U of

Enter payment amount: 10,000 →

Submit

Done

Time = 5 min

Risk = 0

KBA's cheque truncation initiative will permit retailers to optimize their operations.

KEY POINTS AT A GLANCE

- CashDingo uses the Postilion check management solution which offers retailers comprehensive check management that can easily be used in-house
- This can be deployed in different ways, from supplying full authorization capabilities to acting as a cost-reduction mechanism, where checks that are unknown to the system are sent online to third parties (banks) for verification
- Check management is offered as a stand-alone capacity or can be combined with other payment offerings and integrated into national switch for Straight Through Processing (STP)
- Check acceptance can be integrated into the EPOS system, reducing the amount of time required to process a check tender
- Extensive management information, available as reports and online query capabilities, can be used to detect fraudulent activities

Overview

CashDingo offers a multi-institution check authorization system, capable of running check authorization programs for a number of distinct organizations on the same platform.

Anti-fraud

Within the system, retailers will have access to a detailed history of check writers and the checks that have been written. This forms the basis of any authorization performed. All of these data items are stored in a relational database, which is structured to provide as much coverage as possible against potential fraudulent check activity.

Easy management

- Check management is configured through GUI applications, available to the staff responsible for maintaining the system. Query tools are also available, enabling personnel to respond to customer or store queries. (Stores are also offered the ability to query transactions.)
- Banks and other agencies can provide retailers with lists of returned checks, and these can be imported into Postilion.
- Returned checks can be passed on to specialist check collection agencies via Postilion.
- For authorization purposes, Postilion can optionally connect to one or more providers of check verification or guarantee services.
- The check management offering can also be deployed alongside an existing payment infrastructure to provide check authorization functionality only. Here, transactions are transmitted to Postilion from the incumbent system rather than from in-store or terminal-based systems. In some cases, the originating device may support split-dialing and can dial the incumbent system for existing payment services and Postilion for check authorization transactions.
- Back-office processing, such as reconciliation and reports, is provided as standard.

Multi-channel

- Transactions can come from practically any source: originating from multiline stores and dial-up POS terminals in smaller locations.
- Third-party providers are another data source, and are used optionally to populate Postilion's check history. Typically, these organizations provide information about bad checking accounts to retailers who subscribe to these services. In return, retailers supply lists of bad checks written at their stores.

eSocket POS

This Postilion component is utilized for providing payment capabilities at retailer checkouts, supports both electronic and manual check entry. This component has been optimized to provide the functionality required to provide a full check management solution in the retail environment./

Key dates

November 1st

Begin installing infrastructure for switch

December 1

Integration with 1st 8 banks

January 1

Go live with first 8 banks

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