

Case Study



Microsoft collaboration technologies deliver cost savings, productivity increases for Kenya's Postbank

A leading financial services organisation in the East African country of Kenya has replaced open source and IBM technologies and standardised on Microsoft technologies to improve the security, performance and reliability of its technology systems.

Kenya Post Office Savings Bank (Postbank) is headquartered in the Kenyan capital of Nairobi and operates a network of over 80 branches countrywide. Established in 1910 as a savings department within the then East African Common Services, the Bank was established in its own right when the East African Community broke up in 1977, as an initiative by the Kenyan government to create its own saving services.

The bank was therefore incorporated in 1978 to mobilize savings for national development, but retained the agency services of the then Kenya Posts and Telecommunications (KP&TC), and now its successor Postal Corporation of Kenya (PCK).

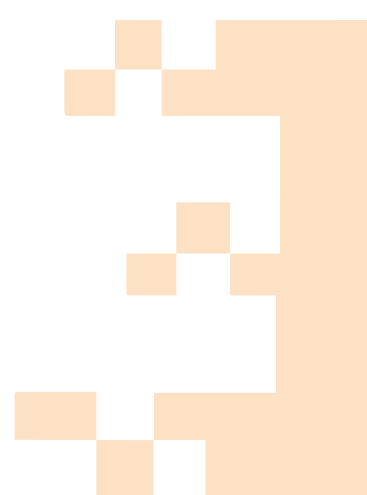
Augustine Chemorei, Assistant Manager User Support and Service Delivery, at Postbank, says the company's decision to select and standardise on Microsoft solutions was directly linked to its corporate vision and strategic direction. The solutions include Microsoft Exchange Server 2003, Microsoft Windows 2003 Active Directory, Windows Directory infrastructure, the Microsoft Windows Software Update Service, and Microsoft Internet Security and Acceleration Server.

"It is our vision to be the bank of choice. Our mission is the provision of accessible and sustainable banking and other related financial services, through innovative delivery systems for wealth creation to the benefit of customers and other stakeholders. Our technology systems play a central role in enabling the Bank to deliver against these criteria," he explains.

Chemorei says the Bank's corporate strategic direction depended on the support of a secure technology environment in which to deploy its business applications. "Specifically, the core banking application required an appropriate platform for its effective hosting, support and management. Setting up Windows 2003 Active Directory was deemed an essential requirement to creating this secure operating environment."

Client
Kenya Post Office Savings Bank (Postbank)

Solution Platform
Microsoft Collaboration Technologies



Noting that the Information and Communications Technology Department delivers essential services which support the Bank's corporate goals, he explains that his department's objectives include providing mechanisms which can improve service delivery to internal and external customers. The department is also tasked with enhancing the integrity and accuracy of the bank's databases, improving business systems and processes using available technology while also reducing operational and overhead costs. "We had recognised the potential of Microsoft's technologies to support these strategic goals; hence the selection and implementation of the Microsoft suite of solutions is integral to achieving the department's objectives," he says.

The Challenge

Prior to the engagement with Microsoft, Postbank's personal computers were configured into workgroups, with the exception of two domains. This presented problems in terms of managing the environment. "The deployment of business applications required the physical delivery of software to the site, whether it was for a server or a client," notes Chemorei, adding that there were security concerns.

The Bank's computers were also vulnerable to virus attacks as the operating systems were not patched with the latest updates. "Given the changing nature of threats, we also identified an urgent need to deploy the Microsoft Windows Software Update Service throughout our environment," Chemorei adds.

Further issues contributing to complexity and inhibiting communication was the presence of two mail systems from separate suppliers, one proprietary and the other based on Linux. Explaining the reason for the presence of two separate systems, Chemorei says license limitations on the number of clients necessitated the introduction of a second mail server to cater for the demand for an e-mail service.

With its country-wide wide area network, these limitations presented serious cost, functional and resource issues.

Implementing Microsoft Technologies

Explaining the importance of a regional presence and the availability of presales support and advice, Chemorei says the Bank engaged the local Microsoft office around the challenges presented through the deployment of enterprise solutions across its existing infrastructure. "Having gauged our environment, the issues we were facing and matching appropriate technologies, Microsoft East Africa worked with our department to present recommendations."

These Recommendations Were:

- Microsoft Exchange Server 2003
- Windows 2003 Active Directory Infrastructure
- Microsoft Windows Software Update Service
- Microsoft Internet Security and Acceleration Server

Noting that the Bank had the option of buying additional licenses for its existing e-mail system, Chemorei explains that with cost as the overriding consideration, the decision was taken that such expenditure would be unjustifiable. "There was no point in buying additional licenses for this system when we were already covered for Microsoft Exchange 2003 client access licensing," he says.

Furthermore, Microsoft presented a comprehensive suite of solutions from which would solve the Bank's issues while simultaneously improving productivity and manageability. As such, implementation began in early 2006.

Has Mukh Chudasama, Software Solutions Manager of First Computers – which handled the implementation and support of the solutions – says Postbank approached Microsoft East Africa to address the management of the

bank's personal computers running Windows operating systems. "These had grown to over 500 machines over a period of three years. First Computers become involved when we responded to a Request for Purchase."

The immediate issue of software updates was solved with the successful implementation of Microsoft Windows Software Update Service late in 2005.

Beginning with Microsoft Exchange Server 2003, the Bank concluded this implementation together with First Computers by May 2006, with Windows 2003 Active Directory Infrastructure deployment concluded by August and Microsoft Internet Security and Acceleration Server by October 2006.

Chemorei explains that Microsoft was the obvious choice for the Bank, given the limitations and issues it had experienced when using open source and other vendor products.

"The Bank uses Microsoft products, licensed through an Enterprise Subscription agreement. Microsoft was chosen as a preferred solution provider since the licensing agreement already covered some of the solutions we required. Furthermore, engaging with Microsoft resulted in added value to our existing licensing agreement and investments in desktop operating systems and Microsoft Office products; these technologies work seamlessly particularly with the Active Directory and Exchange solutions," he says.

While Microsoft was involved in the licensing of the software and acted in an advisory role, the projects were implemented by Microsoft partner, First Computers. "We do, however, look forward to Microsoft auditing the implementation," Chemorei notes.

Implementing solutions across a nationwide organisation presents considerable challenges. Chemorei says these included issues encountered with the upgrade of PCs to Windows XP (from Windows 2000), and difficulties with upgrading some applications to more recent versions. "Some applications had to be replaced," he notes. Further difficulty resulted in delays to the delivery of servers necessary for the project, as well as competition for limited technical resources.

Chudasama says one of the most important issues addressed related to interoperability between the directories and messaging systems while the migration was ongoing.

These challenges were, however, successfully addressed, while training equipped the Bank's staff to get the most out of their upgraded technology environment. "Members of staff were trained by a Microsoft Certified Partner for Learning Solutions on Planning, Implementing and Maintaining a Microsoft Windows Server 2003 Active Directory, Designing a Microsoft Windows Server 2003 Active Directory and Network Infrastructure, and Managing Microsoft Systems Management Server 2003. Initial user resistance to the new email application was also addressed," says Chemorei.

Chudasama adds that the support and collaboration between Microsoft, Postbank staff and First Computers played an important role in the project success. "We worked very closely with the account managers at Microsoft and they provided invaluable guidance throughout the exercise," he says.

Key Players

The Project received executive approval from the Managing Director, Kenya Post Office Savings Bank, Mrs. Nyambura Koigi. Key Members of the Project team were; Henry Omumia – Senior Manager ICT who was the Project Executive, Jairo Omwoyo, Manager – User Support and Service Delivery, Augustine Chemorei - Assistant Manager, User Support and Service Delivery – Project Manager.

Benefits of Modern Microsoft technology

Chemorei says there is no question that Postbank's investment in Microsoft technology is bearing fruit. "Since the deployment, there is a reduction in Microsoft Network Infrastructure administration costs due to efficient remote administration functionality. We have also been able to improve productivity for all Postbank employees by cutting service delivery times; this is matched with a reduced burden upon external IT support," he says.

Of particular importance, he notes, is a reduction in network security exposures since it is possible to create or deactivate user accounts (using Active Directory) in a timely fashion. "The standardized Active Directory administration throughout the Bank further contributes to reduced requirements for reworks, and also streamlines business processes by automating many previously manual tasks. Our infrastructure also serves us very well through its conformance to current standards, regulations and policies applicable to the banking sector," he says.

While some users initially balked at the new email system, he says the adoption of Microsoft Exchange as improved usability and reduced frustration level compared with the previous configuration.

Management of the environment is also improved through the reducing of the previously separate domains and many workgroups into a single domain, single forest structure. Notably, too, the system is delivering previously unheard of stability and reliability.

Chudasama says there is considerable benefit from these systems to an organisation like Postbank in terms of scalability. "Postbank is a growing organization and Active Directory has provided it with a base to build on. Furthermore, investment in Active Directory and Exchange has provided returns that tie in with their business goals; following the successful implementation of these technologies, the bank released an RFP for proposal on Systems Management Server (SMS) and SharePoint Portal Server. This shows their satisfaction with Microsoft technologies and continued commitment to these solutions."

Competitive Advantage

Increased customer satisfaction has two aspects to it, Chemorei explains. "We have internal customers – our staff - who are benefiting from a more efficient operating environment. These internal customers, especially on the front desks, now have a more efficient environment in which to work, and at the same time benefit from a faster method of reporting any problems they encounter to the ICT department. That, in turn, enables our staff to deliver a better service to the external customers of the bank."

With a more efficient communication tool in Microsoft Exchange 2003 and a robust and stable Active Directory infrastructure, faster, more efficient service delivery is enabled which has direct business implications. "Of course this translates to a competitive advantage over our competitors; the Bank strategically relies on information technology to provide the competitive advantage to succeed in business as customers expect fast efficient service,"

Security is a major concern for any financial institution. Chemorei says the Active Directory solution enables single sign on and ensures a secure operating environment. Passwords are renewed monthly and complex passwords are mandatory, while a user access matrix has been set up and security policies applied.

To the future

Chemorei says in future, the Bank will continue to enjoy the benefits of single sign-on and will apply the concept to new business applications. Taking cognisance of the threats of the modern world of computing, he says enhanced antivirus and anti-malware support is essential, while Microsoft System Management Server 2003 will enable the support team to administer personal computers remotely. "Remote deployment will be handled with one central team, reducing the need for training and travel," he says.

The Bank will be implementing a centralized Storage Area Network which he says will increase the benefits of the existing Active Directory infrastructure. "There will be a definite reduction of storage costs in a more secure environment. This is expected to reduce replication traffic by 50% with availability of application partitions and the ability to limit the replication scope of Active Directory-integrated Domain Name System objects. This will directly impact network traffic. We intend to build around the existing Active Directory Infrastructure this calendar year by adding more value to the current investment. Active Directory and MS Exchange have provided us with a foundation with which to build on other Microsoft products and application that utilize Microsoft Active Directory for user authentication. As such, we will be implementing Microsoft SharePoint Server and Microsoft System Management Server 2003 this year."

Return on Investment

Most importantly, a significant cost saving has resulted through the Bank's selection of Microsoft technologies. "By settling for Microsoft Exchange 2003 the Bank has made a significant saving on the cost of licensing alone," says Chemorei.

Staff productivity is also improving. "Particularly ICT staff which was engaged in routine cleaning of infected PCs and reloading crashed operating systems is now engaged in more productive resource management and support activities. More members of staff now also have access to email accounts, which have grown from 150 to 500. Members of staff are able to work together more closely, achieving results faster and more efficiently. Memos detailing circulars are e-mailed for branches countrywide instead of going through the normal mail bag," he says.

And, since determination of a return on investment (ROI) on ICT-related projects is difficult, Chemorei says the Bank we will be seeking assistance for this and other ICT projects. "Suffice it to say, this project cost the bank far less that what we would spend in a year supporting users countrywide in the absence of the Active Directory infrastructure. We can comfortably argue then that the ROI will be achieved within the first year."