Why the modernisation of Middle East banking is driving opportunities for video upgrades
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1. Introduction

A historic transformation is taking place in Middle East banking with institutions, encouraged by regulatory authorities, looking to strengthen themselves to compete on global financial markets. Proactive video surveillance providers are well placed to play an important role enabling this change by supplying the key tech for one specialist, but vital element: video security.

In this IDIS e-book, we look at how best to meet this opportunity. We share our experience of having delivered the most successful video solutions during the first wave of this transformation, supporting our integration partners with projects planned throughout 2022 and beyond, including the largest-scale video upgrade ever undertaken in the sector.

And we look at the essential elements now needed for security managers, systems integrators and consultants looking to meet compliance with the next wave of video implementations and upgrades.

What’s driving the change?

The region’s banking landscape is shifting up a gear because both retail and corporate banks have recognised the need to invest in digitisation and analytics, and to embrace the opportunities of fintech in order to remain competitive.

They are also responding to wider changes, including the diversification of the region’s economies away from oil – spurred on further by oil price dips during the pandemic – bringing with it the need to raise capital on global markets to
support long term transition.

And across the region the banking sector is looking for new opportunities, for example with extended personal loan portfolios putting more emphasis on mortgages and lending to SMEs; and with efficiency savings through a continuing reduction in the number of branches and exponential increased use of ATMs. Retail banks have been leading the way, and corporate banking is not far behind.

But security, as ever, is key to the financial sector. Authorities have acted to tighten compliance, aiming to counter perceptions that the region was lax when it came to money laundering and financing of terrorism – again, the reassurance is key if banks are to raise capital on global markets - and compliance includes physical security measures.

Seizing opportunities to deliver enhanced video protection

With any sector-wide transformation there will be opportunities for physical security upgrades, but that’s especially true in this case. The sector, globally, is conservative and risk-averse. For institutions in the Middle East, compliance with national, regional and global security regulations is non-negotiable.

Video has been recognized as one of the key risk reduction measures, addressing both external and internal threats, deterring crime and enabling investigation of historic activity. Systems integrators who can deliver the best-fit video solutions and the most proven technologies stand to win major, ongoing contracts. The investments now taking place are multi-year journeys, and institutions have shown themselves willing to commit significant time, manpower and resources to achieve the best long term return on investment (ROI).
2. A wide spectrum of challenges and risks

The banking sector needs to mitigate against most of the risks that other multi-site enterprises face the world over, and cover priorities including internal and external theft of assets; protection of facilities; duty of care to staff; the need to tackle lower level crime; and the increasing threat posed by severe weather events. Cities across the world are prone to flash floods, which have become more frequent in financial hubs such as Dubai, London and New York, while the Middle East also experiences regular sandstorms that can have a significant impact on customer and staff safety as well as business continuity. While most local security planners and systems integrators will be well-versed in applying video surveillance technology to overcome these risks, compliance challenges add another layer of complexity.

SAMA’s role and influence

The Saudi Arabian Monetary Authority (SAMA) led the charge in 2018 when it set out a new regulatory framework for banks. Its aim was to push financial institutions to ensure appropriate governance and to build robust infrastructures that would enable necessary detective and preventive controls.

The framework included physical security measures, and in particular video surveillance and cybersecurity. The most immediate impact
was that Saudi banks had to update their video surveillance capabilities to full-HD 24/7/365 network surveillance by 2020; but the enhanced standards have had a wider influence too and encouraged reform in banking across the region.

While each Gulf State’s compliance differs, most regulations now include: live streaming; retrieval of footage; system administration; and management and control of entire estates (including ATMs) from centralised control environments. In addition, banks need to provide the distributed functionality that branch managers and associated security personnel need in order to monitor and manage day-to-day operations and deal with safety and security events locally.
3. The critical importance of smooth migration

Smooth migration - with uninterrupted video monitoring and recording during the upgrade process - is desirable in any sector but in banking it is critical. No part of the bank’s operations or estate which needs surveillance coverage from the old system, should be left exposed during the upgrade.

The key to achieving this secure transition is to deploy technology that enables a phased approach, supporting both new and legacy cameras, and ensuring live streaming and recording without interruption through each stage. Without this approach, any gaps in the footage could result in security failures, losses and penalties for non-compliance.

There are a variety of offerings that support this route – making it possible for installation teams to connect and configure existing legacy and a variety of new network cameras with a choice of video management software (VMS) – but it’s worth remembering that cost and affordability are considerations for banks as for any other customer, but particularly when they are making major transformational investments across their entire organisation. So, unsurprisingly, Middle East financial institutions are looking for cost efficiency and low total cost of ownership (TCO), and not all upgrade options deliver this.
For example, using a mix and match of cameras and software from multiple vendors and supply routes brings increased complexity, with confused lines of responsibility often leading to installation delays. If compatibility problems occur for example, or glitches with individual system components and devices, integrators can be left dealing with multiple vendors in the hope of getting issues resolved. The mix and match route exposes any project to these vulnerabilities, and where projects are large in scale that exposure increases.

So there are recognised advantages to single-source end-to-end solutions for banking applications, where they support true plug-and-play set up of cameras and NVRs connected to enterprise-class video management software; and where they enable simple migration by using cost-effective encoders to retain and manage existing legacy cameras.

The advantages of mutual authentication and automated network services

This approach reduces complexity and is a major advantage with the scale of projects in the region’s banking sector which can involve hundreds of engineers working across vast estates implementing thousands of cameras, NVRs, encoders and associated devices. If these devices automatically mutually authenticate, this makes installation faster and more straightforward – a capability that also closes common cyber loopholes by eliminating the need for manual passwords.

Specialist automated network services are also particularly beneficial. These can allow engineers to simply connect branches and remote ATMs back a centralised control room, eliminating the need for engineers to be confident with networking skills or to have specialist knowledge of tasks such as port forwarding or hole punching.

With a single-source solution engineers only need to deal with one tech support team for ongoing help with design, deployment, commissioning or any key stage of the implementation.
Choosing the right technology to meet compliance

Reducing the storage and bandwidth burden

System consultants and designers – and integrators bidding for banking upgrades - need to be clear about the storage capability of their proposed solution, with requirements in the sector now ranging from a minimum of 120 days up to a full year. While costs have come down in recent years, the introduction of longer retention periods for compliance means that video storage still makes up the lion's share of upfront and ongoing costs for most upgraded surveillance solutions.

For older facilities and ATMs with bandwidth constraints there are advantages to using 2MP cameras that can nonetheless deliver high quality images and deal with a range of lighting conditions. Using H.265 and H.264 dual codec allows a further significant reduction of storage and bandwidth burdens – with it, users can still choose H.264 to live view and playback, eliminating any immediate need to upgrade older but still serviceable monitors, tablets or smartphones.

Going further, check if your vendor offers additional compression technology. Many remote ATMs rely on low-bandwidth, yet expensive satellite connectivity, so without dual codec and high-performance compression, banks could face significantly higher costs from satellite providers if they need to pull large amounts of data to view footage remotely.
Carefully consider the features within video management software (VMS). These can also optimise performance such as bit rate analysis and device storage projection, reducing the storage burden and ensuring continuous availability of recorded data. Look for features that make operation possible within low bandwidth environments of less than 25kbs; dynamic video stream buffering to ensure no video loss; automatic bandwidth control that automatically adjusts resolution and frame rates so users never need to worry about latency; and ensure system and device health monitoring to enable proactive maintenance and uninterrupted operation.

High-performance surveillance for branches and ATMs

Any solution also needs to provide a comprehensive audit trail, allowing security staff to match transactions with high quality images.

Where extensive estates are to be covered by video, to ensure flexible options for every location, users need to look for vendors with a comprehensive range of full-HD or higher spec cameras. This extended choice will make it possible to manage varied branch types, parking lots, and ATMs, including remote drive-throughs.

The use of high-performance pinhole, modular cameras combined with robust and compact NVRs is ideal for cash machines, including those located in hot and dusty environments. Easy integration with ATMs is essential to
NDAA Compliance

The United States John S. McCain National Defense Authorization Act (NDAA) in 2019, which prohibits the use of several Chinese surveillance and component manufacturers at federal agencies at businesses that receive federal loans or grants, which includes swathes of the U.S. banking system. As a result, there is increasing demand for NDAA-compliant hardware for Middle East banks that operate in the U.S. as well as those that have mid to long term expansion plans.

And with U.S. President Joe Biden signing the Secure Equipment Act of 2021, this means the Federal Communications Commission (FCC) will no longer approve new Chinese surveillance technology toward the end of 2022. This is putting greater pressure on banks globally to be compliant with U.S. regulations to ensure they remain well-positioned to play a major role in the global financial market.

Redundancy, resilience, and failover – essential reassurance

Banks switching from legacy analogue CCTV to network surveillance for the first time are likely need assurance that network surveillance will still give them the same guarantee of 24/7 recording without gaps in footage.
To address this concern, VMS failover technology provides complete protection against a range of fault conditions, including network instability or power failure, without the complexity and cost of custom-designed redundancy.

Compliance requirements often encompass cameras with SD card failover, while NVRs need to come with proven low HDD failure rates, native RAID 1 and RAID 5 to protect against storage failure, and equipment backed by extended warranties will that give banks an additional level of confidence that their new recording infrastructure is robust, stable and reliable long-term even in harsh environments.
5. Powerful multitask performance VMS

Fairer pricing to make a strong business case

An enterprise-class VMS should allow banks to manage an unlimited number of devices and sites, giving them the high-performance they need without the traditionally associated price tag of perpetual device connection costs and ongoing annual license fees. The widely used licensing structures of many VMS vendors are increasingly viewed by many corporate enterprises as excessive.

For Middle East banks looking to invest in enhanced security measures to comply with evolving regulations, the op-ex savings ensured by fairer VMS pricing are particularly compelling, as they are transforming to meet the long-term vision and goals of diverse, growing economies.

So, system integrators should also beware of bundled packages that mean users could wind up paying for functionality they don't use, or banks could find themselves stuck with unnecessary high annual costs for functionality such as federation services.

Yet reduced ongoing costs should not mean a trade off for performance or functionality.
Security teams will be looking for powerful multitask VMS operations to give managers and operators the tools for proactive live monitoring, faster incident response, and more efficient investigations.

Security managers will also want to see a feature-rich yet intuitive interface with drop down menus, smart PTZ controls, interactive maps and simple navigation tools. They will also need a choice of service modules, such as dynamic video wall services, that are easy to design around user processes and requirements, allowing automation of important surveillance tasks for control room operators to increase operational efficiency.

Software will also need to support compliance with standard operating procedures and protocols and simple database integration for advanced, yet efficient role management and multi-user access rights.

The region continues to maintain strict hygiene measures and infection control, so if managers identify regular non-compliance at specific sites, a VMS that comes with analytics that can support compliance with social distancing, mask wearing, and occupancy control at a branch-level cost-effectively is likely to be an advantageous selling point.
6. Reduced waste and a new vision of future-proofing

VMS should provide customers with a long lasting security management platform that makes it easy for them - long into the future - to upgrade to newer cameras while retaining older devices in service. Make sure software is designed to match the promise of more robust, prolonged-life hardware. It's worth remembering that many Gulf States have ambitious environmental targets and that increasingly there will be an advantage to using software that does not force a damaging ‘rip and replace’ policy when banks expand their estate, add new cameras or adopt AI-powered analytics.

And while video surveillance upgrades are a the first step in modernising security capabilities, they will not be the last, because priorities will change.

For example, banks are looking to take advantage of new deep learning analytics that give them the ability to improve customer safety at branches, parking lots, and ATMs as well as automate key monitoring tasks across their estates, to improve security, and gain business intelligence to improve customer service.

And finally, Middle East banks are increasingly wanting the assurance that their video solution and VMS will allow integration of third party tech, such as access control and intruder systems, to eliminate siloed systems, increase operational efficiency, initiate faster responses, and make it easier to adapt to new risks.
IDIS and its technology partners across the region have extensive experience in migrating Middle East banks, including the Saudi National Bank and the Central Bank of Jordan, to the latest compliant network surveillance solutions.

For support, contact the IDIS Middle East team by emailing sales_mena@idisglobal.com.
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