It was December 2009, the height of the Australian tourist season, when Maher Magrabi of Intrinsic Security received the call from the Facilities Manager at the National Gallery of Australia in Canberra. Intrinsic Security were presently updating the NGA’s entire surveillance operation, a recent turn of events however, now made it a matter of urgency. With a major international touring exhibition due to open in less than a week, it had transpired that the current CCTV installation did not meet the requirements of the loan agreement. In short, if the cameras located in the exhibition space were not replaced within the next seven days, the Masterpieces from Paris show would not go ahead. International blockbusters are a major draw to the NGA and audiences make up the majority of visitors to the Australian capital at these times. A cancellation at this late stage could have disastrous consequences for the gallery, and for the local economy.

MOBOTIX saves the day

With so much hanging on a successful outcome, Maher knew he needed to act fast. “I’d heard of MOBOTIX and thought they could be a good fit,” he explains, “We needed something which could be installed quickly and which would fit into existing gallery operations seamlessly. MOBOTIX technology allowed us to do that.”

Having decided that hemispheric cameras would work best for the exhibition space, he contacted MOBOTIX’ Sydney office to enquire about stock levels. The cameras, along with all other MOBOTIX products, are manufactured in Germany to the very highest quality standards. There were not enough available in the country at such short notice, so the team sprung into action. A few phone calls later and a special priority shipment was making its way to Australia direct from MOBOTIX HQ in Germany. In the meantime, Maher enlisted a local company to take care of the cabling, which would provide the Power over Ethernet solution to run the cameras and transmit images back to the control room. As soon as the cameras arrived, Maher raced down to Canberra to connect and install them. In just 4 days everything was up and running without a hitch.

The National Gallery of Australia

Opening in 1982, the National Gallery of Australia has amassed an impressive collection for its modest years. The youngest National Gallery of Art in the world houses the largest collection of indigenous art globally, alongside significant holdings of twentieth-century European and American art, and art from the Indian subcontinent and the Asia-Pacific region. Protecting 4.7 billion dollars’ worth of art, as well as monitoring and ensuring the safety of hundreds of thousands of visitors each year, is a huge undertaking for a security operation. “To be able to carry out this kind of surveillance effectively, we need to be able to monitor the entire gallery space in real time during opening hours, and have access to quality, easily manipulated footage out of hours,” the Security Manager explains.

See around corners and over walls

The hemispheric MOBOTIX cameras were deployed throughout the exhibition space and have allowed the control room to monitor the entire area with ease. “Whereas before we might have to play back recordings from several cameras in order to get see what is going on,
now we usually only need to access one camera to get the full picture,” the Security Manager continues. Using either day or night settings, depending on light levels available, the superior sensitivity of the MOBOTIX sensors means that even cameras placed in areas requiring low light levels, for instance to protect delicate artworks, provide outstanding image clarity. As a result the security team now have a much better awareness of what is happening on the ground and can quickly coordinate a response to an event, with nearby staff being sent to the incident location.

A work of art
Thanks to their sleek and compact design the cameras have had minimum impact aesthetically, an important consideration in a space dedicated to the visual arts. Indeed, the ability to blend in unobtrusively also made a MOBOTIX camera ideal for the most interesting aspect of the NGA upgrade, by being placed inside an actual work of art: ‘The Skyspace’ by James Turrell. In direct consultation with the artist himself it was decided that a MOBOTIX M12 dev kit would be built into the sculpture, along with a discreet speaker system. Thus, it would be possible monitor people inside and anyone seen to be acting inappropriately could be spoken to directly. Equally advantageous is that the M12, like all MOBOTIX cameras, is extremely robust and requires virtually no maintenance, thanks to a digital PTZ, no moving parts, and software which is managed and updated externally. As a result, it is possible to maintain and keep the device up to date, without needing to disturb the artwork. The M12 has since been superseded by the S15 for non-standard installations but “at the time,” Maher tells me, “there was no other camera in the world which we could have used”.

See around corners and over walls

Thanks to MOBOTIX decentralised technology and the integrated solution IP solution provided by Intrinsic Security, the NGA security team can now look to the future with confidence. Monitoring, maintenance and storage have all been streamlined and a highly effective surveillance system, offering unparalleled high-resolution image quality, has been provided. Being a publicly funded body means that a budget squeeze could always be lurking just around the corner. However, now the NGA security team can feel reassured in the knowledge that they will always be able to provide the same level of surveillance, even with reduced manpower. Furthermore, with plans to exploit the technology even further in the future, it will be interesting to see how they implement maximum eyes and an efficient reactive presence, for minimum feet on the ground.
MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.

MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.

MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.

The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.

The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-5 watts.

An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.