

ALTHOUGH A COMPARATIVE NEWCOMER TO ITS, **CHRISTIAN GIRARDEAU** IS DETERMINED TO SUCCEED. COMMON SENSE BUSINESS PRACTICE AND ADVANCED TECHNOLOGY, HE ASSERTS, WILL BE KEY

It's somewhat unusual for someone in the traffic industry to make reference to the Battle of Waterloo and business management literature within what is ostensibly an interview about ITS technology, but then Christian Girardeau is not your usual CEO.

A year since taking the reins at Citilog, the 47-year old has got to grips with this sector in an incredibly insightful way – something that he attributes to being a businessman, rather than a born-and-bred 'traffic' man. Holding both an MBA and an engineering degree, Girardeau's career path has taken him to Citilog via Thales, as well as companies involved in telecommunications, optronics and radar technology. His latest role, however, is his first real taste of the automatic incident detection (AID) sector.

"All markets are more or less the same," begins Citilog's top man. "My job is basically to join a company and work on strategies to develop it internationally. I often draw upon the thinking of three books and I have successfully applied certain theories from them in the past." The first is Kotler's work on the 'marketing mix'. The second, *Competitive Advantage* by Michael E. Porter, is a goldmine of concepts and tools to help companies get a clearer grasp of how to create a competitive advantage. The third, *In Search of Excellence* by Tom Peters and Robert H. Waterman Jr, is widely accepted as a 'bible' in business management circles."

Armed with such knowledge, one of Girardeau's first acts as Citilog CEO was to aggressively target sectors that might yield more potential in the future. With Homeland Security fast becoming the hot-topic for governments globally, the security and surveillance markets were pinpointed as key. Girardeau refers to the recent launch of MediaIntruder, showcased in the April/May issue of *Traffic Technology International*, as evidence of this business strategy.

#### PERFECTION IN DETECTION

AID remains Citilog's main focus, however, and in this regard things couldn't be going any better: "We have already launched what we call the second generation of AID, which answers the industry demands for mass roll-out. The company is now back into profitability, with a high growth in export sales and huge success in the USA and Asia. In the past two or three years, we have won some huge AID contracts, most notably the M-30 in Madrid. In this application, 600 video signals are being processed in real-time to inform the M-30 tunnel control center about potentially dangerous situations, such as stopped vehicles, drivers going in the wrong direction, or driving too slowly, etc. We've also just equipped a very large tunnel in Paris with 700 cameras."

Totally fresh in Girardeau's mind, though, is a brand-new deployment in Boston, Massachusetts, the finer details of which he is reluctant to reveal. "What I will say is



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that this covers the entire central artery. We won the contract in March 2008 and we'll be increasing the number of cameras in operation on Boston's network from 20 (the number deployed in the first phase of the project) to over 200 units in total.”

Technically speaking, such large-scale deployments bring about their own challenges: “If you have a lot of cameras in your network, then you will have a lot of triggers, so you need sophisticated fine-tuning of your software to cope with a mass roll-out otherwise it won't operate efficiently. We've conducted a lot of work on making the software more resilient.”

The result of this labor is VisioPaD – an AID software package that Girardeau describes as ‘plug and detect’ rather than plug and play. Here, video detection uses image-processing algorithms to extract pertinent information from surveillance camera images. “VisioPaD's main feature is to detect incidents on any PTZ camera, without the hassle of configuration. In the USA, the current trend is toward the use of more PTZ cameras than fixed cameras, especially outdoors but also in tunnels,” he says. “They [the US buyers] believe PTZ cameras allow them to do more and to make better use of their existing resources. This strategy of looking at return on investment (ROI) and equity is the American way of thinking. VisioPaD is the only product that allows this flexibility; it has no competitor.”

The system was recently deployed with great success in Fort Lauderdale, Florida. “Although they don't have a big road safety problem, there were a few high-profile incidents that remained undetected by the existing monitoring network,” Girardeau explains. “It wasn't the number of incidents *per se* – more those that were not being captured. We have added an extra level of intelligence to the existing system.”

VisioPaD provides Fort Lauderdale's traffic operators with an audible and visual alarm within seconds of an incident occurring, even before the consequences of the incident can be picked up by traditional methods. VisioPaD fits into any existing CCTV system without the need for extra or new cameras. Additionally, it does not require positions to be preset on PTZ cameras – cameras can be moved at will and within a minute or so the system automatically recalibrates and is fully



functional. “It turns a traditional surveillance system from a passive monitoring system to a proactive one,” Girardeau confirms.

### MANAGEMENT STRATEGY

Citilog has also been looking at other areas of the traffic management business, as highlighted by a product called MediaCity. “Traffic management is the ability to do things such as setting the video sensor to look at an intersection and change the lights from red to green if someone is waiting,” Girardeau explains. “We are going to invest in this field heavily, but will operate under different channels of distribution. This is a new market for us, with new customers.”

The company will therefore be taking on competitors such as Autoscope and Traficon, but Girardeau is happy to go in as a follower instead of a leader, citing the victory of Wellington over Napoleon at Waterloo. “Sometimes when you go in as a follower, you can win. We also have plans for an advanced algorithm for this market that may differentiate us from the competition, but I can't disclose too much at this point.”

Girardeau and his colleagues continuously keep an eye on the evolution of various technologies. He notes in particular the increasing power of CPUs, which will allow Citilog's products to offer more services for the same cost, as well as adding more intelligence at a features level.

The company is presently active in both analog and IP-based solutions. Girardeau believes that around 80% of the market will eventually make the switch to IP-based networks, but certain issues must be resolved first: “The North American market has embraced the technology, but in Europe IP's reliability is not yet totally accepted by

the ITS market, especially with regard to the security of the IP network itself.”

Girardeau also points out that more attention will need to be placed on the outdoor market, specifically equipping highways to manage incidents better, and that there is a need to form closer partnerships with the companies that actually make the cameras or transmission equipment. In a few years' time, Citilog will also look to work with other kinds of AID technologies, such as radar.

### UNPARALLELED INVESTMENT

However, Girardeau still feels that video will be the dominant technology for quite some time: “There is no other solution today that can provide the ROI and the necessary quality. Radar is not accurate enough, and inductive loops could be accurate, but the costs of deployment and processing would be too huge. For traffic data collection, you don't need to actually see the video, you just need the data from it. That's where the intelligence of video detection comes in. Systems are only as good as the software behind them – if you can't differentiate between a car, truck or bicycle, it is not going to work. Video needs intelligence added to remove false cases and errors.”

Girardeau also predicts a future where companies traditionally known for selling products become service providers: “If you look at what is happening in terms of the growth of BOT (build, operate and transfer) contracts, you see more and more private operators taking over a whole highway and operating it, retrieving costs through the taxpayer or via toll-collection fees. More large players will do that – as Kapsch is doing in Austria, for instance – but it will also filter down to the smaller players.”

If a company changes its *modus operandi* from selling a product to delivering a service, then it will need to adhere stringently to industry regulations and be bound within a service agreement. For a company such as Citilog, this will be a challenging undertaking. But for Girardeau, failure simply isn't an option: “You need to have very good technology and a competitive advantage to win these BOTs. After that, you will need to be a very good leader and have solid financials. It is ambitious, but if you have no ambition, then why bother going to work?” ■