

## Business Education

# Making a chain of connections throughout Latin America

MIT has teamed up to create an education and research facility to address the region's poor infrastructure, writes **Mark Mulligan**

Latin America has come a long way since the military dictatorships of the 1970s and the "lost decade" that followed.

Although there are exceptions, most countries in the region enjoy unprecedented levels of political and economic stability.

Nonetheless, their potential continues to be stifled by poor infrastructure. From the chaos of mega-cities such as São Paulo, Buenos Aires and Mexico City to the poverty and isolation of rural outposts and regional centres, chronic lack of planning, inadequate transport systems and outdated business practices conspire to impede the smooth flow of goods and services.

Conscious of these shortcomings and with an eye to expanding its global influence, MIT's Center for Transportation & Logistics (CTL) teamed with the Bogotá-based consultancy LOGyCA in 2008 to create an education and research facility in the city aimed at helping graduates and educators to tackle the issue.

It is the second such venture by MIT, following the launch in 2005 of the Zaragoza Logistics Center in northern Spain.

Called the Center for Latin-American Logistics Innovation (CLI), the new school offers a graduate certificate in logistics and supply chain management as a specialisation within a standard masters programme in industrial engineering, business administration, or similar discipline at selected universities in the region.

The CLI is set within a five-acre logistics complex. Students study at

the centre for three weeks before completing the certificate in a later module at MIT's Boston, Massachusetts campus.

As part of the project, faculty from MIT and Zaragoza have also designed a programme to teach the teachers and so gradually inculcate current ideas and training methods in supply chain management into the institutions. Apart from regular feedback between the CLI and affiliate universities, there have been four academic workshops – in Boston, Bogotá, São Paulo and Panama – and the MIT CTL also offers visiting research fellowships.

University teaching in Latin America is heavily theoretical, says CTL's global co-ordinator, Edgar Blanco, and often lacking in instruction on practical application and in opportunities for complementary on-the-job experience. While this may still work for traditional careers in law or the civil service, it produces business administrators and engineers who are ill-prepared to innovate or manage supply chain systems, he says.

This means that until the MIT centre opened, expertise and development in logistics came largely from the developed world.

"When we... look at the curriculum and look at how the faculty is teaching, and the sort of projects they are doing, we find it all very theoretical," says Mr Blanco. This traditional approach to tertiary education partly reflects the lack of interaction between academia and business in the region.

The CLI, however, turns this teaching style on its head, following the MIT syllabus closely – which emphasises analysis, problem-solving, use of technology and leadership – backed up with practical case studies and close links with entrepreneurs, small business and large multinationals.

Five Colombia-based companies have already stumped up \$250,000 to be corporate partners at CLI and more

## Teaching and research

The MIT Center for Transportation & Logistics was launched in 1973 with the aim of becoming a global leader in supply chain management education and research.

Part of the Engineering Systems Division of the MIT School of Engineering, with strong ties to MIT Sloan School of Management, it offers executive education – custom and open – and a range of masters programmes. Through a nine-month MIT supply chain management programme students gain a Master of Engineering in Logistics degree. The MIT Zaragoza Logistics Center offers a 19-month supply chain master-international MBA dual degree with IE Business School in Madrid.

are set to follow. In return, they have a say in projects undertaken by the CLI's four-strong research team, which will be expanded.

One of the nine projects under way has a researcher accompanying drivers from eight transport companies around the region's largest megalopolises. By monitoring the transport companies' delivery patterns, reaction to the chaos and congestion of the cities and the interaction between them and other supply chain players, the CLI study hopes to attack the problem from the bottom up.

"The main driver for creating the CLI came from the private sector," says Mr Blanco. "They felt that traditional universities' way of doing things wouldn't meet their needs for the future."

The CLI's inaugural certificate programme, which started last July, was

completed recently by 14 students from universities in Brazil, Colombia and Mexico. Although slightly younger than the average MIT masters student, all had some years' experience in the labour market. Selection criteria were particularly strict.

"We started out with 10 universities that had already joined the CLI," says Mr Blanco. "Of those 10, only seven had masters programmes that were up to the standard we wanted. Those seven all put forward their best students. From 20 applicants, we accepted 15, one of whom couldn't make it in the end."

At the academic level, the programme has already had important repercussions: top universities in Chile, Colombia and Panama have presented new logistics programmes to the CLI for review and others are expected to follow.

Stuart Briers

The long-range objective, according to a report by the CLI, is to encourage innovative thinking and find solutions to supply chain problems in Latin America by changing the way governments, universities, companies and graduates view the issue.

"It is imperative that countries in Latin America upgrade their distribution networks and improve [their transportation] planning processes," says the report.

"Government agencies need guidance from academia and private-sector organisations as they put policy in place that will lay the foundation for more efficient supply chains."

Identifying the problems, however, will always be easier than resolving them. Provision of essential services such as health, education and disaster relief remain the priority in countries where living standards are still well below those of developed societies.

For some, good transport links, modern ports and efficient logistics centres are viewed as unaffordable luxuries. However, money for infrastructure is increasingly being made available by multilateral lenders such as the Inter-American Development Bank and World Bank.

"Companies always tell us to explain logistics to governments in terms of economic development," says Mr Blanco.

Nor is it just public administrators who are failing to grasp the importance of infrastructure and transport

**'It is imperative countries in Latin America upgrade their distribution networks and improve planning processes'**

co-ordination. A culture of distrust that prevails across much of Latin America means retailers, wholesalers and suppliers often treat each other "like the enemy", says Mr Blanco.

They, too, are being encouraged to change their thinking by attending regular executive-level conferences and workshops organised by the CLI around the region. A "leaders' summit" held for the first time in Bogotá last year will be staged again this month and will look at how emerging economies can harness the competitive power of supply chains.

The CLI's first graduates appear better equipped to deal with local supply chain issues, having impressed MIT faculty in the final module of their course.

"The human capital is there – we just have to nurture it," says Mr Blanco.

