



Raising Our Information And Communications Technology Game By Larry Sampson, New Brunswick Business Journal I stumbled upon something surprising while reviewing the World Economic Forum's Global Information Technology Report for 2010-11. The World Bank ranked Costa Rica the fourth-largest technology exporting country - at 39% of all exports - in the world.

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While its definition of high-tech includes pharmaceuticals and aerospace, it's still an impressive number. Costa Rica also ranked fifth for foreign direct investment and technology transfer. There are 705 companies working in the Costa Rican information and communications technology (ICT) sector. About 50% provide "direct ICT services," about one-third provide "software products," and the remainder offer "IT-enabled services" and "hardware components."

The sector employed 2.4% of the Costa Rican labour force in 2007, generated US\$3.1 billion in exports and made up about 11% of the GDP. Putting that in perspective, at US\$30 billion, the Costa Rican economy is approximately the same size as the Canadian province of New Brunswick's. Its standard of living is lower (2010 GDP per capita was US\$7,800), but Costa Rica's ICT employment is about 20% higher, its ICT sector two-and-a-half times bigger and exports are roughly 20 times ours. It didn't get there by accident. In the 1980s, the Costa Rican government initiated a series of programs to support the emergence of a strong ICT sector.

Recognizing the role a skilled labour force would play in attracting ICT companies, it introduced

the National Program of Educational Informatics, which familiarized the population with informatics, improved access to technology and leveraged technology to develop student abilities around the use of knowledge and information, logical thinking, creative problem solving and collaboration.

These and other innovations allowed Costa Rica to more than double the rate of high-school graduation and quadruple the percentage of Costa Ricans with a university degree over the past three decades. Playing to its strengths of political and business stability, government reduced internal taxes and trade barriers on technological products and liberalized foreign trade by creating a free-trade zone and negotiated eight free-trade agreements (FTAs) with key players in the hemisphere, including Canada.

It has recently signed FTAs with China, Singapore and the European Union. Anticipating the need to continually raise its game, in 2010 the Costa Rican government formed the Presidential Council on Competitiveness and Innovation, which is charged with providing advice, guidance and co-ordination of public policies around human capital, innovation, foreign trade, infrastructure and red-tape reduction. As a sovereign nation and low-cost centre, Costa Rica has cards to play that we do not. Still, there are lessons worth taking.

- Lesson one: Play to your strengths. Fredericton and Moncton are the two lowest-cost cities for ICT functions in KPMG's 2010 Global Competitiveness rankings, but if we're going to compete with a country such as Costa Rica, it needs to be on total value, not just cost.
  
- Lesson two: Talent can be the differentiator. The digital economy places a premium on the supply of problem solvers, critical thinkers, innovators and collaborators. As we saw in Ireland and again in Costa Rica, it can make the difference to investors.
  
- Lesson three: Market access matters. While we can't negotiate FTAs, we can anticipate them. And FTA first movers have an advantage. Let's identify and act on the opportunities represented by the E.U., China and India before the deal is announced, not after.
  
- Lesson four: It takes time. Costa Rica (and Korea, Israel, Ireland ... ) recognized ICT as strategic, developed a vision and stayed with it until it became a reality. But this didn't happen overnight. Costa Rica still has a way to go to reach "have" status, but ICT is playing a major role in helping it get there. And doubling the GDP in the last decade is nothing to sneeze at.