



# THE INVISIBLE HAND OF KNOWLEDGE-INTENSIVE COMPANIES

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*Trading goods has moved to virtual space. Market boundaries have collapsed as digital solutions are being sold worldwide, pushing the knowledge-based economy to thrive. **Christian Keszthelyi** discusses the internationalisation potential and successes of Malta-based companies with lecturer **Joe Schembri** (Faculty of Economics, Management and Accountancy, University of Malta).*

For such a small country, Malta has been immensely successful in exporting knowledge and internationalising digital solutions.

Why? 'I have always been curious about how Malta-based companies can be successful in

internationalising their products and growing despite all the barriers, hindrances, and disadvantages that come with being a small island nation,' lecturer Joe Schembri (Faculty of Economics, Management and Accountancy, University of Malta) says. This curiosity drove him to carry out a two-year study on seven local knowledge-intensive firms.

## THE KNOWLEDGE BEHIND KNOWLEDGE-INTENSIVE FIRMS

Any company that sells a product or service depends on the knowledge of its human resources. Schembri has found that, apart from the core innovation behind the solution, excellent internal communication is necessary for a company to internationalise their solutions successfully. Also, being heavily digital is a vital prerequisite for success.

'As I spent more time with the researched knowledge-intensive companies and interviewed them, I realised that knowledge flows internally within these companies much

faster than traditional businesses. This helps them approach their clients, develop new opportunities, gather new leads, and enter new markets,' Schembri explains.

## KNOWLEDGE IS POWER

Technical and digitally switched on entrepreneurs naturally create internal systems where employees can record knowledge that is accessible for everyone. This can manifest in shared databases of reports about client interactions or hands-on customer relationship management (CRM) software, all of which help to capture the necessary knowledge. Establishing such systems and practices can help retain knowledge in the company, ensuring that it does not migrate if a key employee leaves the company.

'A lot of the companies I studied tend to organise internal management meetings, where the salesperson is expected to do a presentation on a trade fair they attended, for example. Therefore, a person needs to first reflect on the attended event and the knowledge they acquired, process it, and then present it to their colleagues who did not attend. Such simple practices support fast knowledge flow within the organisations, allowing them to learn faster,' Schembri outlines.



While prices compete against each other in our economies, traditionally, keeping production costs at the lowest possible level to increase profits is of utmost importance. In knowledge-based economies, the mechanism differs significantly. If a knowledge-intensive company produces a unique service and offers solutions to a niche market, the solution itself trumps the price. In such circumstances, a company can charge premium fees for its services.

'Charging a premium means that the company can grow faster because it has better cash flow. People are paid better; they typically work flexibly. Therefore, operations are typically greener and more sustainable. Working this way in the digital space allows employees to communicate seamlessly across countries and time zones. Such an approach is in line with the idea of a circular economy,' Schembri describes, offering a possible way to create sustainable models.

### **COMMERCE WITHOUT BORDERS**

The knowledge-based economy can offer a viable alternative in situations where traditional business models fail temporarily. The COVID-19 pandemic forced borders to close, which hurt countries like Malta that are dependent on trade and tourism. 'If you base your economy on people coming from abroad and consuming locally, your GDP does grow, but that also has a substantial impact on your infrastructure and environment. However, if you are selling software or any other knowledge-based service abroad, such an impact is nearly negligible. You are selling the capability of your human capital to provide a solution, not the location,' Schembri explains.

The issue is a worldwide one. Knowledge-intensive approaches currently seem crucial to the European continent's competitiveness, especially as the pandemic has severed supply chains, halting globalisation. Conversely, knowledge-intensive businesses can deliver high value-added services in the digital space, even if borders are closed, a fundamental difference from our traditional economic models.

According to Schembri, 'Knowledge-intensive services are produced and consumed remotely. While the debate about globalisation and companies moving to low-cost countries is present, the opportunity to participate internationally thanks to the digital world is much better with knowledge-based companies. I do not believe that the relocation of businesses that we see in some sectors will affect the knowledge-based economy model significantly.'

With the emergence of this knowledge-based economy model, businesses can withstand external physical shocks, such as grounded planes and crippled international transport. Does this mean that traditional economic models could be replaced in the future?

'I do not think there is a conflict between these models. Rather, the knowledge-intensive approach will start complementing traditional models. Even in the most traditional sectors, there are certain activities already utilising knowledge-intensive software and solutions,' Schembri says.

### **THE FOURTH INDUSTRIAL REVOLUTION**

Essentially, knowledge-intensive businesses are powering the fourth industrial revolution, or Industry 4.0. As companies

integrate new technologies into their manufacturing and distribution processes, we shall see more intelligent allocation and use of resources. With this approach, technologies such as the internet of things (IoT), artificial intelligence (AI) and machine learning, cloud computing, and analytics are being improved faster than ever. Ideally, it will be a self-generating cycle – as digital solutions improve, our traditional processes will get better, increasing the need for even better technologies. The growth of knowledge-intensive companies depends on their competitiveness. These businesses are plugged into the same value chains as traditional corporations; in fact, they embellish each others' workflows.

Based on his findings, Schembri argues that businesses typically go through three phases of opportunity-driven international growth. First, a company usually learns about the business model, service, and industry it wants to participate in from an early international opportunity, often serendipitously. This period of 'clarifying the opportunity space' typically includes the establishing or re-design of the company's core service offering based on an initial project, sometimes even a local project.

Once some clarity is established, and especially following a strategically significant opportunity, firms typically start replicating that opportunity. This is the second phase, a process of learning in which they use client feedback to identify new opportunities. It is also the period when the company sets up some basic structure to accelerate this replication. It is here that new persons are typically employed to help lead generation and new tools and practices are introduced.

As time goes by, the company increases its commitment to international markets as it formalizes its organisational structure and adopts a hybrid approach between seeking replications of past opportunities and being open to totally new ones. This represents the third phase, in which the company is an international enterprise.

'Knowledge-intensive companies are very good at developing opportunities based on the network of people they know in a particular industry. Also, they are focused on delivering a specific solution that fills a gap in their market.



**Joe Schembri**  
**Photo by James Moffett**

Suppose you have a good product and a good service that targets a global niche. In that case, you strive to build a positive reputation, become dominant in the market, and grow as the company becomes more and more of an insider in that market niche,' Schembri summarises.

The term 'knowledge economy' has come a long way since it was popularised by business management consultant Peter Drucker in his books *The Effective Executive* (1966) and *The Age of Discontinuity* (1969). Today, the knowledge economy has become the primary trading arena between developed nations, resulting in the rising significance of ICT industries as the engine for economic growth. While traditional economic models have depended on unskilled labour, the knowledge economy has created an insatiable need for highly skilled employees. Education systems, innovations, and research practices all need further investment and professional attention so we can ensure a better future.

These companies show the way to a sustainable economy for Malta. Based on human capital and less dependent on transport and physical space, they offer innovative solutions to international clients, commanding margins that translate into quality jobs. This is a transformation that requires some serious thinking on the level of education, government aid, and our international positioning. **T**

## WHAT IS THE KNOWLEDGE-BASED ECONOMY?

The knowledge-based economy is fueled by intellectual capital and has become a significant component of economic activity in developed countries. Companies involved in fund management, human resources, and software all produce knowledge-based products and services. Beyond capitalising on scientific discoveries and applied research, the knowledge-based economy is moved by the international trade of intangible, intellectual assets from innovation and research.