

# PUTTING GEOGRAPHY ON THE BUSINESS MAP

WITH LOCATION-BASED ANALYTICS PREDICTED TO GROW TO \$14.3 BILLION BY 2020, A GROWING NUMBER OF COMPANIES ARE TAKING A GEOGRAPHIC APPROACH WHEN IT COMES TO DECISION MAKING **PAUL SYNNOTT**, COUNTRY MANAGER, ESRI IRELAND TELLS AMBITION.

Paul Synnott.



Where we live; where we work; where we send our kids to school; where we do our shopping; where we go on holidays; these are some of the questions that we ask and make decisions on a daily, weekly and annual basis.

What sets these decisions apart from any other is the simple word 'Where'. Where requires us to think 'spatially' and thinking spatially requires us to visualise, analyse

and optimise information that is directly associated with location.

Answering these questions require us to think analytically in the context of location and our geographic surroundings. Some decisions, we make in the blink of an eye, others we may choose to think and reflect on a little more deeply. For the most part many of these decisions come naturally to us because we are so in tune with the geographic context of our personal lives.

Playing a central role in this is Environmental Systems Research Institute (Esri), a global leader in the field of Geographic Information Systems tools.

The privately owned global organisation is an international supplier of Geographic Information System (GIS) software, web GIS and geodatabase management applications. Its customers are spread across a range of sectors including utilities, transportation, retail, banking, insurance, central and local

government and construction, all of whom leverage geography and place within their data to help them make better decisions.

The \$1.5 billion company is headquartered in Redlands, California with offices all over the world including Ireland which oversees a division based in Northern Ireland in Holywood, Co Down.

GIS software allows companies to use mapping and geography to visualise, question, analyse, and interpret data to understand relationships, patterns, and trends relevant to their business. There is a growing interest in and awareness of the economic and strategic value of GIS to businesses of all sizes and in almost every industry.

Paul Synnott of Esri Ireland says if we can think spatially in our personal lives why is it so challenging to think spatially in our businesses?

"Whether you are working in a public sector organisation or a private sector business harnessing the power of location, place and geography provides greater business insights and the potential to make better business decisions.

"Over the last three years it has become more and more evident that employing a geographic approach to decision making makes sense for business. Spatial information (geography) is the new working language for business; a new business intelligence tool and a means of turning location into a valuable source of competitive advantage.

"Given the unique ability for spatial information to provide a common canvas on which to make complex business decisions, 'geography' should now be considered a new business platform for change and transformation at local, national and global levels of business. Taking geography into consideration when examining key performance indicators, evaluating current market conditions, and analysing trends brings to life patterns and influences that are otherwise difficult to recognise when using tables or graphs."

Paul says the concept of geography as a platform may be new to the business world but evidence suggests there is no better way to assimilate and communicate business information and market trends than understanding and knowing 'where' things are – a picture paints a thousand words.

"The power of 'place' provides valuable insights for business. Knowing where things happen, where your coverage is poor, where your assets are located, where your resources are best deployed, where you have under-supply, where you are prone to certain problems, where your services are needed, where demand is coming from and where it's likely to increase, are all fundamental 'location' based questions

that businesses need to answer. And, if we accept this proposition, then every aspect of driving business success and maximising return on investment should be considered "location" dependent," says Paul.

"Geography, encapsulated as spatial information helps ensure that we are asking the right questions by visualising, analysing and optimising the impact and evidence on which to make better business decisions.

"Geography is a powerful way to connect people to place, transactions to actions, responses to trends, and customers both to where they do business and what kinds of business they do. However, in today's constant battle for customers, it is the customer and the consumer that are holding the cards. It's no longer a case of 'build it, and they will come', it's no longer about bringing the consumer to your business, it's more about bringing your business to the consumer. You can only do this if you know where the consumer is."

As a result businesses and Government, are recognising that 'geography' is an increasingly important variable in the provision of value for their customers. The fundamental premise behind this realisation is the need to deliver a marketing message that is localised to where the target user is located. By knowing 'where' customers are and, just as important, 'where' they are not, allows businesses to build up a micro-geographic view of their markets and their future potential.

"We all know that better business decisions are made by asking the right questions. 'Geography' facilitates more powerful information via map-driven analysis providing a new way to tackle an old problem—how to query and manipulate data. For example businesses and Government can instantly see where to maximise their investments thus reducing the risk associated with investment decisions. They do this by asking new questions and getting precise answers. Financial institutions manage loan books, liability and risk to better understand consumer behaviour and inform new consumer services. Transport companies can optimise their routes to reduce operational costs and ensure a more cost effective and efficient delivery service for their customers," says Paul.

"And by using geography as a platform to make better sense of complex business problems, decision makers now have the ability to stand over any proposed investments in people, time and effort, providing clear evidence of more prudent use of company resources and cash reserves."

The result is access to more complete information and analysis at every level to help better understand business performance.

Paul stresses that by not utilising the 'geographic intelligence' that is contained in their data, businesses may only be getting half the picture, and could be losing ground to the competition. He says that geography provides deeper insights so that you can see your business data in new ways.

"Location based data analytics lets you visually explore and craft business intelligence far beyond putting dots on a map. For example insurance companies perform location based risk assessment that in turn inform our premiums. The Department of Agriculture and Rural Development perform location based analysis of farms in Northern Ireland to ensure that appropriate farm subsidies and grants are paid out to the farming community. In this way they use geography to identify relationships and patterns that charts and graphs simply don't reveal.

"Geography delivers richer understanding to ensure that businesses get the complete picture. Geo-Enrichment allows you to take advantage of location in every type of decision. When you tap into demographics, lifestyle, business, and weather data, you create a more accurate and actionable plan for success. For example retailers can analyse and localise marketing effectiveness and add real-time visualisations of their market share and target audiences when they need them. Healthcare can identify chronic illness and pandemic patterns such as with the recent and ongoing Ebola crisis."

Furthermore, geography allows companies to take back control of their big data holdings. Paul says that no matter the size and complexity of data, businesses can make the difficult easy and the complex consumable when they employ location based data analytics. Location and place brings it together by exposing geographic patterns, finding spatial relationships, performing predictive modelling and mapping consumer sentiment through social media.

"Perhaps there is no better system than 'geography' to understand the interconnectedness of business and Government in the twenty-first century," says Paul.

"Knowing where things happen matters and separates the usable from the unusable demonstrating that not only is knowing 'where' the answer but, in this fast moving world of commercial activity, it's fast becoming the only answer that matters."