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Embracing the IS culture: from GIS to GIM

BY SEPPE CASSETTARI

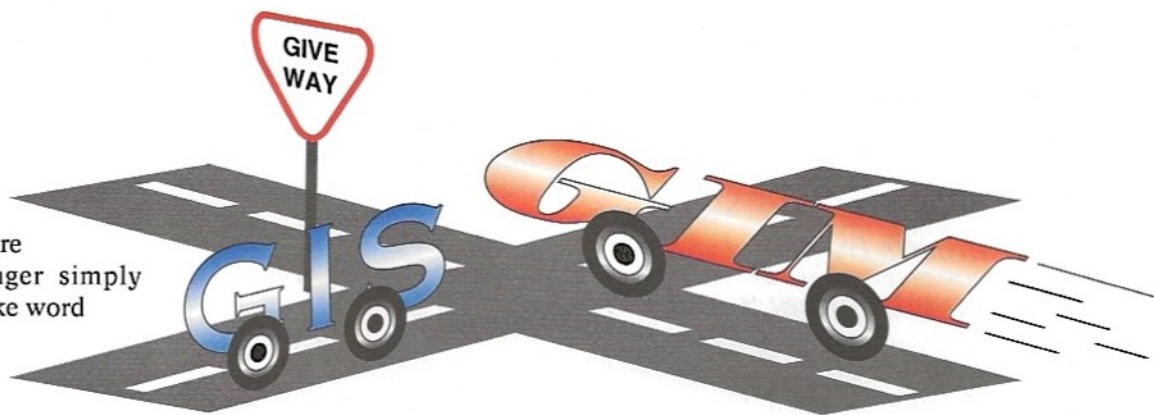
It's a fact: the days of GIS are numbered.

From the Ordnance Survey in the UK, to ESRI in the United States, changes are afoot. GIS is no longer simply a computer-based tool like word processing—it has evolved into something far greater. It's time for the 's' in GIS to give way. Geographical information management (GIM) now reflects the future of the subject far more accurately.

Early developments in GIS during the 1970s and '80s were largely technology-driven. Advances in computer-processing power, memory and graphics capabilities made computer-based mapping a reality. The quality of the screen image has rapidly come to parallel that of the printed map. This is nothing new; it is an accepted part of the GIS story—as is the fact that GIS is underpinned by concepts of spatial interaction which geographers have been developing throughout the century.

GIS is the product of a collaboration between computer scientists and geographers. Depending on your viewpoint, the two groups worked hand-in-hand to develop GIS as we know it, or computer scientists hijacked the technology for economic gain while geographers abdicated responsibility for the development of their own subject. Whatever the merits of this debate, there is now a third group of players—the information scientists.

The growth in information systems over the last three decades has led to a wealth of research into how best to use



computer technology to enhance decision making. The focus of this debate has moved away from hardware and software to data: information—and how we manage it—is the key. GIS has started to embrace the information revolution and move towards integration with other technologies. It is now forming a central plank in the development of integrated information management solutions with such daunting labels as 'spatial decision support systems'.

There is no doubt that spatial information has some unique qualities. On the other hand, it also has many similarities with other data types, and the best applications in GIS are those that are able to accommodate the full range of data types. How people use this information to solve everyday problems is the key to the changes now occurring. GIS is being taken on board by people who have only a limited understanding of spatial information, and yet wish to utilize the potential it offers. The development of GIS must learn from the experiences of the information scientists and change from a technology-driven to an information-driven subject.

GIM is not just another new label repackaging the same old box of tricks; it expresses the fundamental evolution of GIS into a new subject—one which embraces geography, computer technology and information systems. I wonder how many expert practitioners will now rush to change their title from 'GIS user' to 'spatial information manager'?



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