

GEOMATIC EDUCATION: TIME TO DO SOME RE-ALIGNMENT?

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ABSTRACT

There seems to be numerous Geomatic education and training programs around regionally, with government's institutions and agencies taking the lead. Private industries such as instruments vendors are also running specialized short courses, specifically hardware and software related. Yet, despite all this wonderful progress made, the Geomatic education and training is astonishingly lacking behind and - in our view - is mostly stuck on historical tramlines.

In this era of the so-called the New Economy era, knowledge and innovation is considered as a crucial input in the industrialization and development of any nations. The nation's economy is strongly influenced by the liberalization of international trade system worldwide where emphasis is given to competitiveness. With this scenario, the importance of knowledge as a factor determining the growth of nations is critically important. Malaysia for example, as a developing nation, sourced out its quest for high-tech knowledge from abroad, especially in the early stages of her development. But the New Economy changed how businesses are conducted and the new rules of the game require speed, flexibility and innovation. Geomatic education is not immune to all this.

This paper identifies Geomatic education and training program under the Land Surveying field of study. Geomatic education programs are evaluated vis-à-vis new-products. Data on Geomatic knowledge generation in the era of the space technology derivatives over the 1975 – 2000 period are examined. The emerging trends and patterns; in particular for selected Asian nations will be dissected in detail. The knowledge indicator used in this

study is the patent ownership against the background of emergence of new core technologies and innovations in the field of Geomatic.

The study reveals that an extreme form of knowledge generation concentration with just three nations of Asia, which account for the bulk of all innovative activities in Asia. This top three nation's of Asia, that is Japan, Taiwan and South Korea account for as much as 80% of Asia resources spent on R&D activity annually. In terms of knowledge output, the same top three nations have the most number of patents issued. They account nearly 98% of the knowledge output in terms of patents taken out in the United States. Hence, the concentration in terms of knowledge output is even more uneven than for the knowledge inputs.

The partnerships between various institutions are being formed to speed the development and commercialization of Geomatic technology and knowledge. As the life cycles of technology is rapidly changing, such partnerships will be needed increasingly. This is where the role of academia fits in. A sound and good governance of the government and academia will play a critical role in ensuring the success of this endeavor.