

# ***Land Surveying: has technology fundamentally changed the profession?***

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This study traces the rise of professions and the criteria that defines the requirements for an occupation to be granted such status. It then recognises the origins and importance of accurate measurement in antiquity before following the developments in land surveying that changed the occupation in late medieval England from that of an estate manager or overseer to one of an expert in land measurement. The research identifies this period as a paradigm shift, the first, making the following period the 2nd paradigm in land surveying. There follows a comparison between the present institutional arrangements for surveying and the criteria established for the status of a profession. It is concluded that land surveying meets the requirements of a profession.

Following a discussion on the nature of modern surveying consideration is given to the changes that have taken place in the preceding 60 years approximately. The challenges faced as a result of technological change, through first the electronic age to the digital age, are identified. The question of whether these challenges have fundamentally changed the profession, heralding a 3rd paradigm, is then addressed. What represents the “core” of surveying today is then discussed. It is concluded that land surveying remains a profession with unique expertise in the management of all aspects of measurement data, its gathering, its analysis, its presentation and its storage. No new paradigm is identified.

Attempts to change the image by the adoption of a new term, geomatics, in the late 20th century has not delivered the anticipated improvements, and dissatisfaction with the term was identified in all of the jurisdictions visited. In the meantime it was apparent that the term “geospatial” was gaining popular use and was replacing, by stealth, references to geomatics.



Image references:

[http://www.surveyantiques.com/old\\_photos\\_gallery.htm](http://www.surveyantiques.com/old_photos_gallery.htm)

(top left) and <http://www.trimble.com> (bottom right)

School of  
**Surveying**  
Te Kura Kairūri

**12:00 noon, Thursday, 24 August 2017**

**L1 Lecture Theatre  
School of Surveying  
310 Castle Street**

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