

How Academics in an Engineering Faculty at a newly formed University of Technology Perceive Entrepreneurship

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Principal Topic

This research examines the view that academics hold regarding the entrepreneurial perceptions of Cape Peninsula University of Technology (CPUT) students. In South Africa, the higher education challenges that students face seems enormous, the shortage of engineers continues to place a huge demand on Higher Educational Institutions (HEI) to deliver specialised skills also, the profound global technological change compounds the educational problems. This challenge is typical to a faculty structure, which by its definition suggests narrow focus and prescriptive activity. The entrepreneurial liberals in the engineering environment are arguing for an engineering school. Under the definition of "school" there seems to be more room for effective diversification. Here the challenge is focused on the academic - industry relationship. A push-pull effect under threat from entrepreneurship simply because industry demands graduates with specialised technical skills while entrepreneurship produces graduates with both technical and non-technical skills.

The dwindling engineering job market is evidence to the academic-industry relationship being out of sync with the national labour objective. SA industry is in a constant state of reengineering. This promotes engineering skills to immigrate hence increasing the demand for local specialised skills. This pressure is placed on the HEIs to deliver specialised technical skills. However, in the international skills market, the SA engineers are in demand because of their technical and non-technical ability.

Entrepreneurship is not yet embraced in the SA economy often leading to decision-making processes which clearly the industry and academics in the engineering environment are not comfortable with. This research leads that in order to reverse the unemployment situation in South Africa; that HEIs interpret the balance between industry job creation and entrepreneurial wealth creation.

Global Entrepreneurship Monitor (Gem) reports that South African graduates have the potential to reverse the negative growth in the job market, by way of wealth creation and job creation. The environment for effective decision-making may still be non-existent and academics would do well to put in place the structures to effect choice.

Academics in the engineering environment subscribe to "one right answer" and are generally narrow focused. Entrepreneurship challenges the science of "one right answer" causing mayhem amongst academics that understand their environment to be clearly defined. Entrepreneurship seems to be met with great resistance, and rightly so. Entrepreneurship within the engineering fraternity is vague and like project management, it challenges the role of industry and in some ways, develops new ones.

To adopt entrepreneurship into the strong CPUT culture is not easy but the empirical data will highlight the view that academics hold regarding the importance of nurturing an entrepreneurial culture.

Methodology/Key Propositions

The sample, taken from the engineering faculty on both the Bellville and Cape Town campuses at CPUT, will be taken as the area of study. The sample comprises of the entry-level and exit-level engineering students. The advantage at hand, is that CPUT has a continuum which extends B-Tech (graduate students) and beyond. CPUT is assessable to the researcher, a factor that will limit the cost of personal interviews. The engineering academics are interviewed and surveyed to establish a principal view that would be used to measure future entrepreneurial growth within the faculty of engineering at technological institution.

The largely available literature for a good research structures hence the quantitative research methodology also; the research question is relatively predictive. The research question, having been widely researched, nullifies the exploratory research methodology that is the study of niche-area research. The experimental and

quasi-experimental methodology addresses research questions concerning causality; that is not the focus of this research.

Results and Implications

The initial impression from research done during 2005 suggests that engineering academics had developed distaste for entrepreneurship. This persuasion was fuelled by the "one right answer" paradigm, which engineers embraced. During the initial research, the researcher looked to establish a backdrop for the evidence of an entrepreneurial culture at CPUT. The researcher was not looking to draw the connection between the views held by various academics but sought to establish a broad view. Following general debate and informal discussions it appears as if the stance of many academics in the engineering environment was open for limited compromise. The researcher, at a business plan competition, was supported by the Dean of the engineering faculty who encouraged the Head of department and others to assist in the creation of an entrepreneurial climate within the faculty. By implication this researcher expects that a new stream be introduced into the engineering faculty, which looks at wealth creation and technology innovation. To introduce entrepreneurship into a once exclusive engineering environment is a huge task and one that would require further support from senior academics and staff.

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