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The Evolution of a New Technological University in Terms of Policy Definition and Control of Implementation

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The Evolution of a New Technological University in Terms of Policy Definition and Control of Implementation

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Abstract

This paper derives from a Doctoral case study completed in the Dublin Institute of Technology (DIT) in 2008. The main issues of the case study are still being addressed today as DIT prepares to amalgamate with the Institute of Technology Blanchardstown (ITB) and Institute of Technology Tallaght (ITT) in 2015. The combined new institute will become a university in 2016 and is in the process of a move to a green field site. The rate and scope of these changes are challenging for all concerned. Through a series of interviews and focus groups in 2008, a story of DIT emerged. The McNay model was used as a Conceptual Framework and Analytical Tool to examine various types of university model and compare them with the cultures, practices and understandings of stakeholders in DIT. The classic entrepreneurial model from the USA was shown to be unlikely to be successful, largely because of the Institute's inability to raise money on the scale of the US model. The corporate model using managerialist practice was also rejected by stakeholders. It was concluded that a European style of University with Collegial Innovation was appropriate, that bureaucracy needed be greatly reduced and that the culture and power residing within the organisation must be acknowledged in the process of change.

Introduction

This paper will briefly present the changing external environment for the combined institutes intended to form the new Technological University for Dublin (TU4D). The question will be asked, how should DIT change so that it might become better able to respond quickly and appropriately to the fast and radically changing environment it faces, whilst fully engaging staff in the change process.

The original research, conducted in 2007/8, examined the implications of such a change for stakeholders in DIT and investigated how potential university models for DIT were viewed. The research was intended to assist staff and management in understanding the realities and meeting the challenges of such a transition as they were perceived at that time. Perceptions held by the various stakeholders were presented, interpreted, contrasted and analysed. It is argued here that many of these challenges and findings are still relevant today.

Barnett (2000) writes about the realization of the university in what he describes as an age of *Supercomplexity*. He suggests that universities must not only respond to changing environments but they must also make a full creative contribution. He refers to three challenges for university leaders and slight variations on these challenges were at the heart of this research:

1. Enabling staff to understand the challenges and to recognise that these challenges would continue to multiply. To recognise that there was no stable state and the only constant was change.

2. To motivate staff to address these challenges in the incessant turbulence of academic life.

3. To identify a form of leadership that engaged staff and brought intellectual groupings together in order to understand the challenges posed and to engage with one another in efforts to successfully address them.

Methodology

Various types of university model, namely collegial, bureaucratic, corporate and entrepreneurial were examined and compared with the cultures, practices and understandings of stakeholders in DIT at a time when significant change was signalled. A story emerged about DIT and in this story, the type of change model best suited to DIT's culture was explored and examined with stakeholders. *Fourth Generation Evaluation* as described by Guba & Lincoln (1998) was used to address the substantive issue. This methodology seeks to address the concerns and issues of all stakeholders and not prioritise the opinions of any one group, including senior management.

The Changing External Environment

Before considering any change, an organisation must examine the external environment. Below is a brief summary of some of the main challenges for this new combined institute.

Changes in External Environment	**Driving Forces**	**Likelihood of Increase in Driving Force**	**Likely Impact**
Increased demands for better service and greater efficiency	Credit crunch *Do more with less*	High	Pressure for change on academics and academic managers and change to terms and conditions.
Becoming a University	To enable DIT compete on a level playing field	High	DIT may lose research funding and its reputation may be damaged unless this is successfully negotiated.
Moving to a green field site	Demand for increased space and growth potential	Medium	DIT would not be able to grow student numbers or research capacity otherwise.
Changing Irish Economy	Globalisation	High	Movement to higher end of value chain and better qualified workers.
Changing society needs movement towards a learning society	Government demands for alignment of higher education with needs of economy & society.	Very High	Changing student profile with varying age, ability, socio-economic background and in some cases with disabilities. Demand for LLL & improved diversity.
Increased participation rates for school leavers	Industry and societal demand	High	Increasing costs of higher education (HE) demanding greater efficiency & flexibility
Changing needs of students	More varied student ability and learning strategies & techniques with mass education	Very High	Students will opt for programmes which use modern L & T methods that take account of their needs and provide transfer and progression in a flexible, modular format with focus on the learner.
Change in governance and greater demand for entrepreneurial universities	Increased autonomy for universities and reduced public funding	High	Possibly less individual academic autonomy and increased pressure for activities that generate revenue.

Table 1 The changing external environment

Analysis of Academic Change Models

The key aspects of organisational change from an academic perspective must be explored in order to adequately address the challenges posed by the external environment. In this analysis, four main theoretical models will be examined in connection with the decision making structures, university autonomy and changing higher education policy. These are Collegial, Bureaucratic, Corporate/Managerial and Entrepreneurial.

In his case study in eight countries in Europe, Felt (2001) considers the collegial and managerial models as two polar extremes. He suggests the collegial university, combining professional autonomy with high levels of staff participation in management, was the ideal on which many universities were structured up to the 1970s. The main criticism of this model was the lack of flexibility towards external change and slow adaptation to the demands of stakeholders. There was a lack of accountability and often no clear responsibility for decision making. He concluded that the price to pay for increased amounts of public funding was an increase in accountability to the state and to the taxpayer.

Diametrically opposite was the corporate/managerial model. This used a management style often found in the private corporate sector. It was often a top-down executive-management hierarchical system. There were no collegial decision making structures. Goals were set by external sources and academics had very little say or academic freedom. This model results, at best, in talented and intelligent academics waiting to be told what to do and not contributing to decision making; or at worst of manoeuvring expertly to oppose change they do not agree with. The only power they are left with is negative power which they use expertly through unions and other means.

Felt (2001) placed between these two extremes two further models:

- A bureaucratic model providing relative autonomy with the individual, but in a mechanistic and bureaucratic institution. Rules and procedures slow down the rate of change and hinder adaptation to new needs.
- An entrepreneurial model which exists in the USA and parts of the UK and searches for new markets and maintains financial security by maximising external funding.

Similarly, McNay (1995) had earlier expanded on this with a model using two dimensions:

- Dimension 1 (vertical) Policy definition;
- Dimension 2 (horizontal) Control over implementation.

<table>
<tr><td></td><td colspan="2">POLICY DEFINITION LOOSE</td><td></td></tr>
<tr><td rowspan="2">CONTROL OF IMPLEMENTATION LOOSE</td><td>A
Collegial</td><td>B
Bureaucratic</td><td rowspan="2">CONTROL OF IMPLEMENTATION TIGHT</td></tr>
<tr><td>D
Entrepreneurial</td><td>C
Corporate</td></tr>
<tr><td></td><td colspan="2">POLICY DEFINITION TIGHT</td><td>McNay Model</td></tr>
</table>

Figure 1 The McNay Model

With this there are four University types:

- Type A, Collegium, this model has the freedom to pursue university and personal goals unaffected by external control; it has loose policy definition and loose control of implementation.
- Type B, Bureaucratic, this model focuses on regulation, consistency and rules; its management style is formal with a cohort of senior managers wielding considerable power. It has loose policy definition but tight control of implementation.
- Type C is the corporate university where the management style is commanding and sometimes charismatic. There is a crisis driven competitive ethos and decision making is political and tactical. Students are units of resource and customers. It has tight policy definition and tight control of implementation. It uses managerialist practices.
- Type D is the enterprise university, orientated to the outside world it espouses continuous learning in a turbulent environment. Management style is one of devolved leadership where decision making is devolved and its dominant unit is the small project team. Students are seen as clients and partners. There is tight policy definition but loose control of implementation.

McNay (1995) concludes that all universities draw on each type of management. There are considerable similarities between Felt's (2001) conclusions and McNay's in this regard. Indeed many other writers such as Clark (1998 & 2004), Davies (2001) and Shattock (2003a) refer to universities as one or some combination of these models. Coaldrake & Stedman (1999), suggest that internationally, most universities are moving from loose policy definition to a policy that is more firmly determined; away from organisations featured by collegium and bureaucracy to one closer to the corporation or enterprise models. For this reason, the McNay model was seen as appropriate for use as a conceptual framework when questioning interviewees about how DIT needed to change and as an analytical tool when analysing the data collected from over 20 individual interviews and focus group sessions.

The Entrepreneurial or Enterprising University

Dating back to its strategic plan of 2001, senior management has consistently indicated a preference for an entrepreneurial or enterprise model for DIT and it would appear to remain the ideal for many senior managers. Clark (1998), in his study of entrepreneurial universities in Europe, claims that these universities are capable of responding to changing environments by searching for special organisational identities suited to their culture and background. They play to their strengths and risk being different; they take chances in the market, are innovative and have confidence in themselves.

In a later review of universities in the USA and elsewhere, Clark (2004) describes the entrepreneurial university as a compromise between the flatter controls of the traditional university and the more hierarchical controls of a managerial university. He sees sustainable entrepreneurialism as coated with collegial forms of authority. He states that this type of organisation has shared governance where those who do the work of policy implementation also participate in policy formation. This is in stark contrast to corporate universities. Shattock (2003b) refers to Clark's picture of the Entrepreneurial University as achieving almost iconic status amongst university models for the 21st century. Marginson (2007) believes that the Ivy League universities in the US are closest to Clark's model. Edwards

(2004) compares the university in Europe with that in the US. He argues that there are no large private benefactions in Europe such as those which have enabled the top universities in the US to prosper. Even Oxbridge receives only small benefactions by comparison with US universities, he contends.

Whether the Holy Grail of the Entrepreneurial University, so long coveted by senior management, was attainable, or indeed desirable to the stakeholders, needed to be investigated. How the DIT would have to change to be more responsive to a volatile environment needed to be understood. In addition, the DIT's aspiration to become an entrepreneurial university had repercussions for stakeholders that may not have been fully considered. What about collegiality and bureaucracy and how were all of these factors seen by stakeholders? Change in HEIs often proves difficult because HEIs are bureaucratic and bottom heavy with academics who are intelligent and act strategically when they decide to resist change.

From the data collected in 2008, there was agreement amongst interviewees and focus groups that DIT was an overly bureaucratic organisation set in a public sector environment. It had a strong union culture that was built in an adversarial setting. Notwithstanding the bureaucratic culture, programmes and courses largely evolved from the bottom up with academics identifying niche areas and adapting curricula to external demands. Many such bottom-up innovations were cited in this regard and such activity at third level was seen to be collegial and widespread in many areas, though not all. Overall, however, it was agreed that DIT was not a collegial organisation in the same way as some of the traditional universities because of its hierarchical structure and its tendency to keep close control of implementation. DIT was viewed as overly bureaucratic by the stakeholders; however, there was unanimous support for continued bureaucracy in some aspects of operation such as student assessment, particularly examinations, as it was viewed as a means of protecting both students and academic staff.

Figure 2 illustrates how interviewees viewed DIT. Positions in this and other diagrams following are colour coded in traffic lights format with green indicating evidence of a lot of activity, yellow indicating evidence of some activity and red indicating little or no activity.

<table>
<tr><td></td><td colspan="2">POLICY DEFINITION LOOSE</td><td></td></tr>
<tr><td rowspan="2">CONTROL OF IMPLEMENTATION LOOSE</td><td>A
Collegial
Not as an organisation but in many parts of third level activity</td><td>B
Bureaucratic
YES - Overly bureaucratic in public sector with strong union culture</td><td rowspan="2">CONTROL OF IMPLEMENTATION TIGHT</td></tr>
<tr><td>D
Entrepreneurial
NO</td><td>C
Corporate
NO</td></tr>
<tr><td></td><td colspan="2">POLICY DEFINITION TIGHT</td><td>McNay Model</td></tr>
</table>

Figure 2 Stakeholder's view of DIT in 2008

Even if the suggestion for DIT to become an entrepreneurial university was viewed by some staff as unrealistic, there was considerable support amongst staff and management for a loosening of control of implementation and for more innovation and collegiality. The

academic staff's support for this move, however, was on the understanding that this did not mean running DIT like a business, although most saw the recruitment of international students, for example, as being legitimate and important in raising revenue.

Clark (2004) at times uses the word innovative for entrepreneurial with respect to European universities but Shattock (2003b) believes this word does not capture the concept adequately. He believes what is needed is a "stand up" or self-reliant university, confident in what it does and that is autonomous. Nonetheless, nobody interviewed was opposed to the word innovation for DIT in area D of the McNay model. Interviewees agreed that DIT had to become responsive to the ever changing environment and needed to be innovative to do this, with the caveat that tight policy definition was sensible at times in order to protect the organisation from obvious risk. In general, top-down decisions on policy were supported provided there was prior consultation with staff on major issues.

Figure 3 below summarises how stakeholders interviewed in this research saw future activity at third level and Figure 4 summarises interviewee views for fourth level in the future for DIT.

Third Level Activity for the Future

With regard to third level activity, there was considerable support from interviewees for DIT to operate more from the left hand side of the McNay model as shown in Figure 3 below. It was thought that response to external demands would happen most effectively with academics on the ground responding appropriately in a bottom-up fashion. This was viewed as a very good model where it happened in DIT at the time. There was also considered to be a need to be innovative and responsive to the changing external environment. This would require increasing activity in the D quadrant with policies set by DIT in response to government policy and HEA requirements, for example, with regard to international student recruitment and diversification. Despite the suspicion on the part of many stakeholders regarding corporate operation, it was considered that resource allocation should operate within a tight policy definition and tight control of implementation. The views of all stakeholders should be taken into account as this would provide transparency and would allow, for example, resources to follow students in a fair and equitable way. Bureaucracy should be greatly reduced as it was seen as an inhibitor to innovation but it was considered important in some areas such as student assessment. The potential of modularisation could be exploited further and in the view of some, tight policy definition with loose implementation would maximise its benefits.

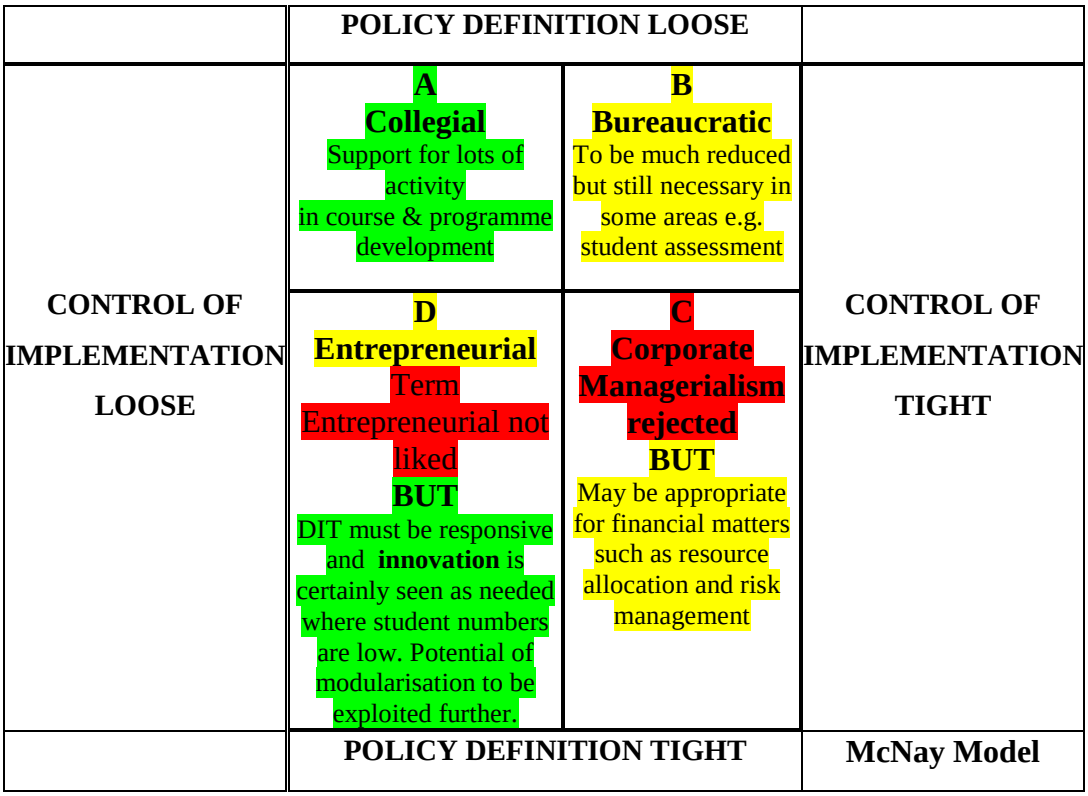

Figure 3 Stakeholders View of Third Level Activity in the Future for DIT

Fourth Level Activity for the Future

DIT's application for university status in 1998 highlighted the need to increase numbers of post graduate students and to increase research. In 2008, most interviewees believed that this should be closely linked to third level teaching, which DIT was seen to be doing well.

Where research was mainly underpinning teaching and carried little risk, it might operate best in quadrants A or D on the left hand side of the McNay model as shown in Figure 4 with very loose control of implementation and varying policy control depending on the nature of the research.

It was agreed that research could be self-funding and that risk assessment should be undertaken with regard to financial and ethical matters. Where research carried significant risk, financially or otherwise to DIT, then policy definition and control of implementation should be tight, operation should be mainly from quadrant C, but not to the extent of inhibiting innovation or a collegial spirit. This might happen through campus companies. This should also happen in the case of potential for significant profit. Generally though, it was thought that research would best evolve in a collegial and innovative environment. Figure 4 below summarises how interviewees saw the future at fourth level as DIT moved forward.

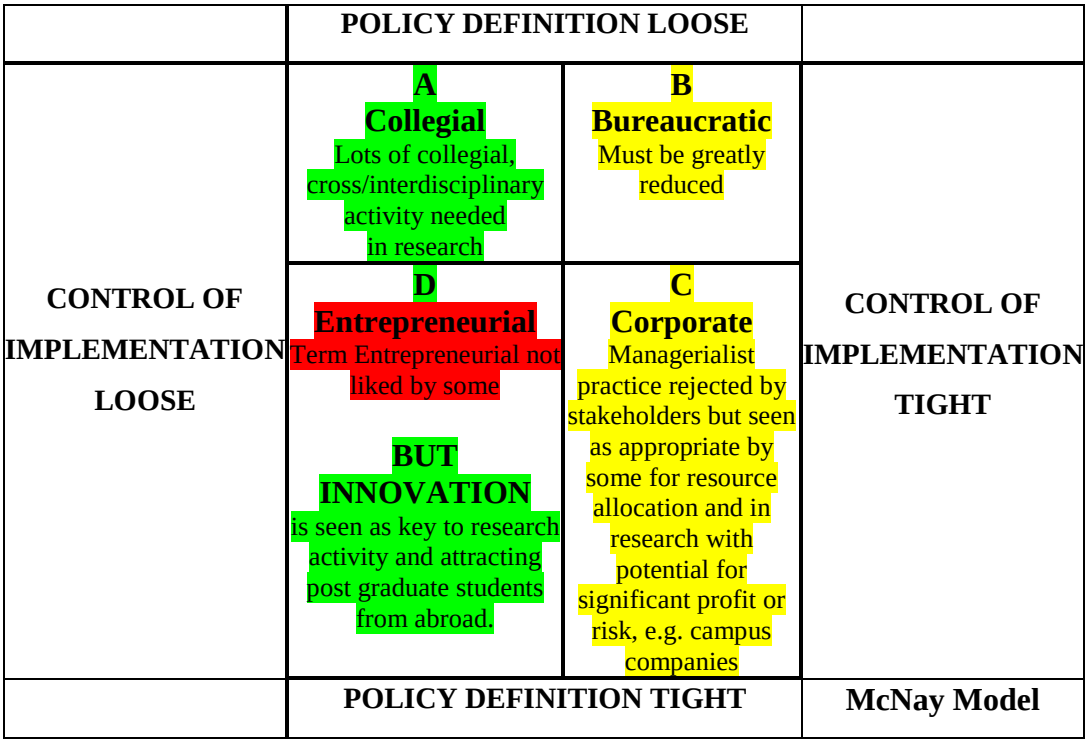

Figure 4 Stakeholders View of Fourth Level Activity in the future for DIT

Discussion

In this research we gain an insight into stakeholder constructs, we see how stakeholders view past and present practices in the Institute and what their imagined future holds. Although no individual could see their ideal for change in the McNay (1995) model, or use this model to describe their situation perfectly, it did offer a conceptual framework and a focus for questioning. Interviewees adapted the model, and their adaptations are revealing in terms of stakeholder values, the culture of DIT and interviewee ambitions for the Institute. It became clear that change would be a driving force for DIT's future.

There was agreement that bureaucracy was essential in certain areas of risk, such as student assessment, but that it needed to be considerably reduced. Collegiality in third level activity and in cross/inter disciplinary research should be increased. Research, in general, should be increased with tight control of policy definition and implementation where risk or potential profit was significant. Diversity and student numbers could be increased by maximising the benefits of modularisation and resources should follow students.

In most scenarios, all stakeholders, including senior management, were opposed to strictly top-down decision making. Indeed the corporate model of operation for DIT as a whole was firmly rejected by all but one interviewee. Most interviewees felt staff on the ground would be adversely affected and DIT would suffer by missing out on the significant bottom up change, creativity and the collegial activity that presently occurs.

Many interviewees were strongly opposed to the American style of entrepreneurial university where they believed all activity is dictated by money and the needs of the economy. A ***European model*** of entrepreneurial university where **innovation** was the key word seemed to be a better fit for DIT. Most stakeholders were quite supportive of increasing activity in the D quadrant with tight policy definition but loose control of implementation. As one dean put it, "agree the policy and then get out of the way to let the academics implement it". This appears

to be consistent with what Clark (2004) describes as ***Collegial Entrepreneurship*** where flexible capabilities weave together new and old, change and continuity, in a sustainable way. Clark (2004) argues for entrepreneurial action but in collegial forms – Collegial Entrepreneurship should be nailed to the masthead. Clark (2004) sees sustainable entrepreneurialism as having shared governance where those who do the work of policy implementation also participate in policy formation.

Figure 5 shows where the main academic activities in DIT might need to operate for the institute to respond adequately to change whilst keeping stakeholders committed to the process. The term ***Collegial Innovation*** might be more appropriate than Clark's Collegial Entrepreneurship for DIT and TU4D going forward. Most activity is on the left hand side of the McNay model as shown.

<table>
<tr><td></td><td colspan="2">POLICY DEFINITION LOOSE</td><td></td></tr>
<tr><td rowspan="2">CONTROL OF IMPLEMENTATION LOOSE</td><td>A
Collegial
Lots of activity in module & programme improvement and development encouraging bottom up change and Partnership. Cross/inter disciplinary research underpinning teaching to be increased</td><td>B
Bureaucratic
Reduce significantly but retain in some activity such as student assessment</td><td rowspan="2">CONTROL OF IMPLEMENTATION TIGHT</td></tr>
<tr><td>D
INNOVATIVE
Increased responsiveness to external environment, increasing diversity, attracting new types of students, improving programmes (QE), maximising benefits of modularisation and expanding research.</td><td>C
Corporate
For resource allocation and for in campus companies or where activity carries significant risk or potential profit</td></tr>
<tr><td></td><td colspan="2">POLICY DEFINITION TIGHT</td><td>McNay Model</td></tr>
</table>

Figure 5 Change for DIT/TU4D

The research supports the view of Fullan (2005) that a particular model of university, no matter how successful, cannot simply be lifted and applied to a HEI elsewhere. The history and culture of any organisation must be examined and change made in a way that will suit that organisation or institute. This supports the proposition put by Ramsden (1998) when he warns that the mistake many universities make is believing that structures are subordinate to cultures. He argues that no structure will work unless the culture also works.

From the perspective of academic staff, it is clear that they are facing new challenges and unprecedented change. They are required to be more efficient while meeting the needs of increasingly diverse groups of students, to be more flexible in their teaching, to redesign curricula and take account of the more rounded skills demanded by industry, to subject their teaching to evaluation, to use more formative assessment aligned to learning outcomes and

provide their courses online or by blended learning. There are pressures on academics to deliver more to the community by widening access and increasing social capital as well as through developing and delivering new innovations like service learning modules and supporting disadvantaged students. There is increased pressure for academics to produce research as DIT moves to become a university. Lecturers have to identify learning materials, filter information and guard against plagiarism. They also have to provide a human dimension and time to inspire, support and help students so that they can fulfil their potential and develop the disciplinary, cognitive and social processes necessary to enable them succeed in an advanced knowledge society competing in a globalised economy. And they are being asked to do this whilst teaching more hours for less pay whilst their newer colleagues are provided with contracts of lesser status and pay, or no contract at all in many cases.

From the perspective of academic managers, they have to meet increased challenges with diminishing resources. They are frustrated that they are often not in a position to support change they might approve of because of a lack of resources. They are being forced more and more into crisis management as cyclical trends in the economy reduce student numbers in core areas. All of these challenges must be met with less resource. This means academic management needs to become more about entrepreneurship, leading change and inspiring innovation in staff. This is no small challenge for these senior academics who have received little training in this regard. It is difficult for these managers to find time to grow their own research and post graduate student numbers as they struggle to cope in an increasingly complex and demanding internal environment.

From the perspective of students, they are continually very positive about DIT and its staff but they see DIT as far too slow to react to students' needs and they see DIT as sometimes only "ticking the boxes" without really embracing change in the deep seated way that they view as necessary. Going forward, it is clear that this research needs to be updated to take into account the current sentiment of stakeholders in DIT, ITB and ITT as they embark on a shared future.

Conclusion

In summary, this all means reduced bureaucracy with increased collegiality, much increased innovation and some specific corporate activity as shown in Figure 5 earlier and this requires a trajectory as illustrated in Figure 6 below.

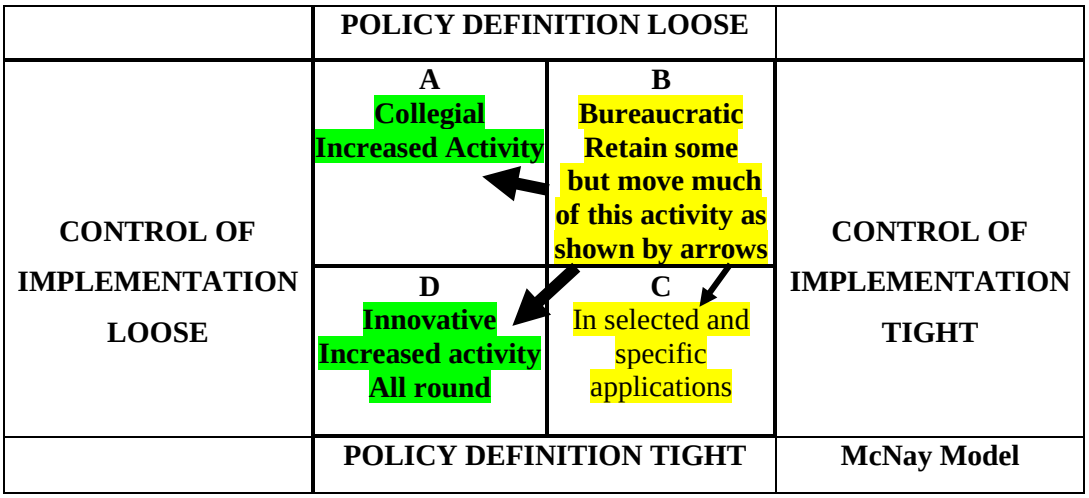

Figure 6 Trajectory Needed for DIT

This research provides significant evidence that academic staff in DIT have a strong sense of identity and wish to have a say in the future of the Institute. This indicates a strong culture that should be acknowledged with change implemented in a collaborative way. The imminent amalgamation of DIT with ITB and ITT will bring new stakeholders with their own experiences, expertise and concerns and these stakeholder's voices need to be heard too if the new technological university is to succeed.

The research is **not** intended to be satellite navigation, providing exact instructions at every point of difficulty to academic managers finding their way. Rather, it is intended to be more like a compass for managers and academics attempting to navigate through the tricky terrain of organisational change in DIT/TU4D. The compass points to a collaborative style of change model harnessing all of the ingenuity within the university towards an agreed end. It points to a university not focused solely on finances but a university that is willing to make appropriate decisions and not drift. A stand-up university that makes ends meet. The compass points to a new type of European, *Innovative Collegial University*, adopting bureaucratic and corporate business practice where this is appropriate. A university comfortable in its own skin, establishing an appropriate identity and confident to debate policies openly in a mature way with decisions made based on the strength of the argument and supporting evidence and not on the power or position of the person.

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