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Background

The role of an engaged, entrepreneurial university is to act as a co-creator of knowledge, informed by, and in collaboration with, external organisations, and to ensure that graduates emerge with the academic excellence, practitioner knowledge and entrepreneurial skills and capabilities which ensure that they are well-placed to identify or create employment opportunities for themselves and to maintain employability. While there is strong awareness of the potential for, and of, collaboration between higher education, enterprise and communities to contribute to economic renewal and social innovation this is often difficult to achieve, as the higher education institution can present a fragmented interface for the external organisation. Worse, the interface often comprises a confusing array of academic disciplines and acronyms representing research units and centres. This fragmentation can result in lack of consistency and coherence in developing relationships and interactions with enterprise. In addressing these issues, Cork Institute of Technology (CIT) have put in place a number of structures which seek to make it easier for external organisations to engage in mutually beneficial interactions with academics, researchers and students. This paper presents a visualisation of the nature and range of interactions between CIT and one MNC in the South of Ireland and in doing so draws attention to the necessity for such structures.

Methodology

A qualitative approach to this research was adopted. The relevant structural units in the HEI were identified and the head of each unit was interviewed. In total, the research involved a series of 22 semi structure interviews with the relevant stakeholders in the HEI. The purpose of the interviews was to seek to identify interactions that had occured between that particular unit and the company in question over the past 3 years. The interviews lasted no longer than 30 minutes, and in some cases far less, where it became evident almost immediately that there were no interactions between that particular unit and the MNC in question. While the interview process was highly effective in generating the required data, the researchers recognised that as there was no one process of recording interactions in place in the HEI, the data collected was reliant on individual knowledge and memory and was unlikely to be exhaustive. Analysis of the data enabled the types of interactions to be categorised and the various units/individuals involved to be identified, as well as detail on the interaction to be recorded.

Following this research phase, a further interview took place within the HEI with the Head of the CIT Extended Campus Unit; a unit that acts as an interface to support interactions

between the college and industry. In this way, the structures that are in place to support the visualisations depicted in Figures 1 and 2 were explored in detail.
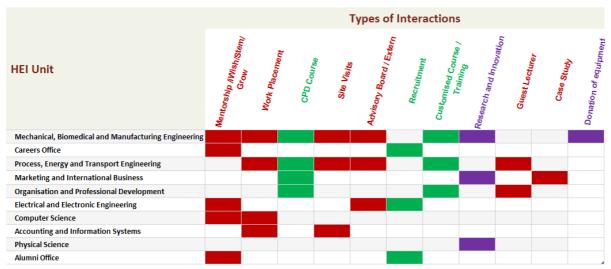
Findings

Collation of the data enabled the generation of two visualisations as presented in Figures 1 and 2. Figure 1 presents the Number of Interactions that have occurred between the HEI and the MNC in the past 3 years, and Figure 2 presents the Types of Interactions that have occurred between the HEI and the MNC in the same period.

Figure 1: Number of Interactions

HEI Unit	MNC Unit							Total by CIT Unit
	Human Resources	Engineering	Research and Development	Quality	Facilities	IT	Other / Multiple	
Mechanical, Biomedical and Manufacturing Engineering	2	8						10
Careers Office	4	3				1		8
Process, Energy and Transport Engineering	2	2			2			6
Marketing and International Business	2			1				3
Organisation and Professional Development	3							3
Electrical and Electronic Engineering	1	1			1			3
Computer Science	1					2		3
Accounting and Information Systems	2							2
Physical Science			1					1
Alumni Office							1	1
Total by Boston Scientific Unit	**17**	**14**	**1**	**1**	**3**	**2**	**2**	**40**

Figure 2: Types of Interactions

HEI Unit	Mentorship /Wish/Stem/ Grow	Work Placement	CPD Course	Site Visits	Advisory Board / Extern	Recruitment	Customised Course / Training	Research and Innovation	Guest Lecturer	Case Study	Donation of equipment
Mechanical, Biomedical and Manufacturing Engineering	red	red	green	red	red		green	purple			purple
Careers Office	red					green					
Process, Energy and Transport Engineering		red	green	red	red		green		red		
Marketing and International Business			green					purple	red		
Organisation and Professional Development			green				green		red		
Electrical and Electronic Engineering	red				red	green					
Computer Science	red	red									
Accounting and Information Systems		red		red							
Physical Science								purple			
Alumni Office	red					green					

Examination of Figures 1 and 2 allows us to determine that a complex relationship exists between the HEI and the MNC. Analysis of the data revealed that many interactions were of

a recurring nature on a yearly basis; that the Careers Office and HR were central to many interactions and that key personnel in both organisations ensured the continuation of collaborations on an ongoing basis. In addition it can be concluded that the types of interactions fall into three broad categories; in Figure 2, red presents interactions that assist in Graduate Formation, green shows interactions that fall into the category of Workforce Development and purple show interactions in the Research and Innovation space. Essentially, the research enables us to conclude that appropriate structures need to be in place to support industry-university interactions and to enable the benefits of engagement to be more fully realised.

These structures exist in the CIT Extended Campus and in the CRM system that it uses. The CIT Extended Campus was developed and launched as an interface to support interactions with all of the various parts of the institution. The role of the Extended Campus is to facilitate initial needs analysis and consultation sessions for external organisations. Following this initial phase the external organisation is introduced to the appropriate internal unit(s). In the case of the MNC researched for the purposes of this paper for example, it is likely that while the Extended Campus unit was involved in some of the interactions, many of the interactions occurred as a result of the existing and developing relationship between CIT and the MNC.

At all stages in the interactions between the Extended Campus unit and industry, a customer relationship management (CRM) system supports the collation of appropriate information and the compilation of information on queries and interactions. Such activity provides a rich source of business intelligence for the strategic management of the institution. Essentially, the CRM system allows the collation of information and the generation of reports.

Conclusions

The concept of applying CRM techniques more commonly found in the business world within higher education, supports the development of useful management information sets to inform strategic planning and cross-disciplinary responses. To be truly effective in this regard however, it is concluded from this research that a policy on college wide use of the CRM system is essential. While the Extended Campus office and the CRM system is essential in tracking queries, and collating information on activity with Industry, a significant opportunity exists for cross disciplinary use of the CRM system. This would give an overview of the current interactions at any point in time and importantly the key personnel involved. Moreover, it would enable visualisations such as those depicted in this paper to be produced without the need for an extensive in-depth interviewing approach. It would also serve to maintain knowledge and organisational learning in situations where personnel are often changing. In conclusion, effective use of the CRM system would support further engagement and would work to establish appropriate benchmarks and measures of engagement activity. In this way, the existing structures that support industry engagement would be reinforced and enhanced, positioning the HEI to differentiate itself even further in its engagement mission and activities.

References

Molas-Gallart, J., Salter, A., Patel, P., Scott, A. and Duran, X. (2002) Measuring Third Stream Activities: Final Report to the Russell Group of Universities, SPRU, University of Sussex.

Sheridan, I. and Fallon, D. (2015) "An Exploration of a Higher Education Institution's Response to the Need for Enhanced Engagement with Enterprise", Proceedings of the Higher Education in Transformation Conference, Dublin, Ireland, 2015, 349-357