



Faculty of Engineering and Applied Science

Chemical Engineering Seminar Series



Distinctive Ideas, of Value, Put to Practice: Revisiting Innovation and Entrepreneurship in Universities and the Societies That Support Them

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Dupuis Hall, Room 215



ABSTRACT

Distinctive ideas, of value, put to practice, is a useful definition of innovation, whether expressed in a for-profit or social change context. Distinctive is the foundation for competitive advantage and the rationale for implementing in a positive social change context, while value can be economic and/or positive social change. In this talk, we will talk about a good working definition for innovation, and a useful systems-oriented model for businesses (the Business Model Canvas). Links will be made to the systems thinking approach inherent in chemical engineering analysis and understanding, and engineering more broadly, and we will demonstrate that this approach can be applied in a wide variety of contexts, both physical and social. I will make the argument that this is an innate ability that chemical engineers in particular, who are used to working with diverse systems, can apply more broadly. We will discuss the Design Thinking approach, which is a human-centered, observation and insight-based approach for both identify the "right" problem to solve, as well as a disciplined approach for coming up with the best solutions. Design Thinking has gained considerable traction over the past decade, and can be viewed in a business context as offering a disciplined and effective means for strategic advantage from value creation as well as value capture. I will give a few examples of how this approach can be used both in a business-to-consumer approach, as well as in a business-to-business approach.

The second half of the talk will be focused on the journey we have taken at Queen's to help champion innovation and entrepreneurship, and the exciting point we have now reached with strong synergies and partnerships between efforts in a number of programs (e.g., in the Smith School of Business, in Chemical Engineering and Electrical and Computer Engineering, and the Dan School), initiatives within the Dunin-Deshpande Queen's Innovation Centre, initiatives within the Vice Principal Research and Innovation through their Office of Partnerships and Innovation, and the City of Kingston and region (particularly through the Mayor, Bryan Patterson).

Part of this discussion will focus on the shifting role of universities in society, as more explicit anchors for innovation and entrepreneurial activity, and a re-visiting to the how ideas developed at universities can be put to practice in our society, in a sustainable way.

I will close with a discussion of the opportunities these initiatives present for graduate students and postdocs, undergraduates, faculty and staff.