

SURVEY

Dear <>,

We a group of researchers¹ in the Product Development and Research Laboratory (University of Illinois-Urbana/Champaign) and the Center for Entrepreneurship and Technology (University of California-Berkeley) are conducting a study to understand the relationship of sustaining and disruptive technology types on university licensing. We propose that this categorization will impact the type of licensee chosen for a specific technology and potentially the subsequent revenue earned for the university. We would like you to answer one question and then comment on a number of statements regarding sustaining and disruptive technologies with regard to licensing practices. This should take no more than 35 minutes to complete. We appreciate you taking time to participate in this study.

ABSTRACT: We establish a framework which considers how the categorization of technology as sustaining or disruptive by the university technology management office during screening may impact the choice of licensee, number of expected years until success, and potential revenue to the university. We test this framework on 135 patented or copyright protected technologies assigned to the University of Illinois, Urbana-Champaign. The initial results indicate that successful sustaining technologies are most-likely licensed to well-established market leaders. The successful disruptive technologies were licensed to well-established market leaders as well. We also observed that the break-even time-period of disruptive technologies was shorter than that of sustaining technologies.

We have defined sustaining and disruptive as follows:

Sustaining Technology – These technologies have attributes more akin to improvements in the current state-of-the-art. The improvement is intended to increase the competitiveness of a product. Examples – Improvement in disk hard-drive capacities, Improvement in resolution for photo-cameras or sensors, increasing bandwidth for communication technologies, etc.

Disruptive Technology – These technologies reconfigure existing state-of-the-art technology to serve new users or create new usages. Often cheaper and simpler; disruptive technologies make new markets possible, even though they are not better than the older technology in every way. They initially satisfy the needs of smaller niche markets prior becoming mainstream accepted. Examples – (1) Records replaced by Compact Disc or (2) Film cameras replaced by Digital Images), (3) Inkjet vs. Laser printing. (4) Tabletop copiers vs. floor standing heavy duty copy machines.

Below you will find one question and five propositions regarding university licensing activity. Please comment on them as appropriate and forward to Joe Bradley at jabradly@uiuc.edu.

QUESTIONS AND PROPOSITIONS

Please comment on the types of technology disclosures that your office typically receives (e.g. 20% biotech, 30% software, 50% engineering). Feel free to use your own categories.

Please read and comment on the following statements:

Proposition 1: *University-based technologies categorized as sustaining are more likely to be licensed to well-established market leaders². Do you agree or disagree? Please explain (use examples if possible).*

¹ Ali Yassine and Joe Bradley (University of Illinois-Urbana/Champaign) and Ikhlaq Sidhu (University of California-Berkeley)

² Market Leader –An entity that is ranked in the top 5 in market share and/or revenue for a specific category of technology. For example, Intel is the overall market leader in microprocessors, but could rank 15th in programmable microprocessors; however, Company X could be a Top 5 market leader for this category. If a programmable processor is licensed to Company X it is licensed to a market leader

Proposition 2: *University-based technologies categorized as sustaining are more successful if licensed to a well-established market leader. Do you agree or disagree? Please explain (use examples if possible).*

Proposition 3: *University-based technologies categorized as disruptive are more likely to be licensed to a start-up/new venture. Do you agree or disagree? Please explain (use examples if possible).*

Proposition 4: *University-based technologies categorized as disruptive are more successful if licensed to a start-up/new venture. Do you agree or disagree? Please explain (use examples if possible).*

Proposition 5: *University-based technologies categorized as disruptive will break-even (recover cost) faster than those categorized as sustaining. Do you agree or disagree? Please explain (use examples if possible).*