

HED 703 Critical Issues in Higher Education
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Schmidt, G. M., & Druehl, C. T. (2008). When is a disruptive innovation disruptive? *Journal of Product Innovation Management*, 25(4), 347-369. doi:10.1111/j.1540-5885.2008.00306.x

Abstract

Christensen's (1997) disruptive innovation theory describes: (a) why new products underperform mainstream expectations; (b) perform better in underserved market segments; (c) improve to the point of mainstream acceptance; and (d) ultimately disrupt the market by unseating incumbent organizations with an acceptable, lower-cost product or experience. Despite the prevalent use of the term, managers often struggle to identify disruptive innovations. To address this challenge, the authors present the encroachment framework as a complement to Christensen's (1997) disruptive innovation theory. First, the authors link the disruptive innovation theory to the encroachment framework and outline a three-step process for assessing potential disruptive innovations. Second, the article analyzes the encroachment framework against Christensen's definition of a disruptive innovation and tests the consistency of the encroachment terminology against 75 innovations. Last, the authors offer practical implications for managers and firms in applying the encroachment framework. From this analysis, the authors hope to provide a simpler, more convenient framework for assessing potential disruptive innovations.

Personal Reflection

The use of the disruptive innovation term is common in higher education popular press, especially in periodicals that circulate among executive teams at colleges and universities. In my experience, this leads to a misinterpretation of the disruptive innovation theory and mislabeling of certain innovations. Consequently, many administrators lack the skills to identify, assess, and

even implement disruptive innovations, which leads to missed opportunities or potentially harmful strategies. To clarify Christensen's (1997) disruptive innovation theory, this article provides a complementary framework and terminology to assess potential disruptive innovations.

Schmidt and Druehl (2008) offered the encroachment framework as a complement to Christensen's (1997) disruptive innovation theory. This framework differentiates the various innovations by how specific products diffuse or disseminate in a particular market (Schmidt & Druehl, 2008). Schmidt and Druehl provided two specific examples to illustrate market diffusion. First, Apple's iPod entered the technology market as a high-end, high-cost product that exceeded customer expectations; thus, the technology was a sustaining innovation for Apple by extending its market share. Second, the 3.5-inch floppy disk entered the technology market as a low-cost product that failed at the beginning to meet the demands of mainframe computer users; however, the product gained acceptance as smaller, personal computers became the predominate market. Therefore, the 3.5-inch floppy disk represents a low-end product that ultimately diffused into the mainstream.

Schmidt and Druehl (2008) contended that the disruptive innovation term leads to confusion because of its immediate tone; whereas, some innovations (e.g., the 3.5-inch disk) do not immediately disrupt an industry (e.g., computer). To address this confusion, the authors presented encroachment as an alternate term in the form of low-end (i.e., disruptive innovations) and high-end (i.e., sustaining innovations) encroachments, which align with Christensen's (1997) disruptive innovation theory (Schmidt & Druehl, 2008). This distinction in Schmidt and Druehl's article provides a meaningful definition of disruptions; such innovations may not immediately receive acclaim or demonstrate disruptiveness. It should be noted, however, that failing to assess these innovations could result in a possible disruption of one's business.

Another significant contribution of the article is the three-step process for assessing a low-end encroachment (or disruptive innovation). Schmidt and Druehl (2008) contended that incumbent firms apply the following framework to identify innovations that might disrupt its market share; similarly, entrant or incumbent firms could utilize the framework to assess opportunities. First, firms should identify market segments that utilize a particular product and order these products from low to high-end. In higher education, this might reflect the following continuum in order of market diffusion: (a) elite, residential campuses; (b) traditional, residential campuses; (c) traditional, commuter campuses; (d) adult learner campuses; (e) online learning programs; (f) regional campuses or extension sites; and (f) competency-based education programs.

Second, Schmidt and Druehl (2008) noted that firms should assess the extent to which each market segment would pay for a particular product. Utilizing the same continuum, colleges and universities would experience a decreasing willingness by consumers to pay higher prices for lower-capacity programs (e.g., competency-based education [CBE]) versus elite, residential campuses). Last, the authors suggested that firms should assess which market segments would purchase a given product over time. Although consumers may pay less for CBE programs, a decreasing number of students would pay for an elite, residential campus. If the encroachment framework holds true, consumer willingness to purchase products of lesser quality would increase over time as lower-end products increase in quality and mainstream acceptance (Schmidt & Druehl, 2008).

Overall, this article provides an excellent model to guide practical discussions on disruptive innovation, particularly in higher education. In addition, this article provides an opportunity for a quantitative analysis of the disruptive innovation theory, which Christensen

(1997) and his colleagues based on qualitative research. Further analysis of the disruptive innovation theory in higher education will require a more comprehensive approach, including variations in research methodologies as well as terminology. This article significantly adds to innovation literature and offer meaningful implications for practitioners and researchers.

References

Christensen, C. (1997). *The innovator's dilemma: When new technologies cause great firms to fail*. Boston, MA: Harvard Business School Press.

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