Book Review

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INTRODUCTION

The Innovator’s Dilemma: The Revolutionary Book That Will Change the Way You Do Business tries to capture the reasons behind failures of well-established, well-managed companies that pay attention to their customer’s requirements. All of Clayton Christensen’s research and analysis suggests a repetitive pattern of failure, which he lays out as the “principles of disruptive innovation.” The terms “technology” and “innovation” have been used in a broader sense to include not only engineering and manufacturing changes, but also transformation in labor, capital, material, and information to create products of greater value. His findings suggest that companies fail due to their inability to assess future markets and not having separate value networks and resource allocation systems for disruptive technologies, rather than the more popular “mismanagement” idea.

The book is divided into two parts. Chapters 1 through 4 describe how there could be failures in spite of sound decisions by good managers. The detailed examples regarding the disk-drive industry provided in Chapters 1 and 2 are more relevant to Accounting Information Systems (AIS) students than examples in Chapters 3 and 4 where the same dilemma is explained with respect to the mechanical excavator and steel industries. In the second part of the book, from Chapters 5 to 10, the five principles of disruptive technology are proposed with examples from the hard-disk-drive industry, excavators, steel, personal digital assistants, motorcycles, accounting software, insulin, etc. The second half of the book has been devoted to going into details of these five principles to help managers understand the circumstances under which companies fail.

The highlight of the second half of the book is a hypothetical case about electric-powered vehicles, which are considered to be incorporating a disruptive technology, relative to gasoline cars. The case is discussed in Chapter 10, which ties in everything discussed in the previous chapters including discussions about new and emerging markets and disruptive technologies. Christensen acknowledges that there is no particular “right” answer to the problems related to disruptive technologies, but uses the case study as a tool to provide some possible solutions. He provides extensive discussion about how to understand whether the technology is disruptive, where the market is, what should be the strategy for product distribution, and whether an independent organization is the best answer for disruptive technologies. I recommend this book be used as a supplementary text for graduate or undergraduate courses on technology management, AIS, managerial accounting, as well as market studies.

SUMMARY

Christensen begins by asking the question “How can great firms fail?” He starts by describing the hard-disk-drive industry where well-established market leaders fail to succeed when a
“disruptive technology” arrives. To gauge the impact of technological change on the hard-disk-drive industry, he tests his “technology mudslide hypothesis” (i.e., coping with relentless onslaught of technology) and concludes that this hypothesis was wrong. He mentions two kinds of technology changes: a sustainable one, which improves product performance, and a “disruptive” technology, which leads to innovation. He recognizes that the failure of established firms to develop “disruptive” technologies was not due to the fact that they lacked the technological capability of producing these drives, but due to the fact that they delayed making the strategic commitment to enter an emerging market.

In Chapter 2, Christensen proposes a theory on why good companies fail based on the concept of value network. His findings show no trouble for established firms developing technology, but those firms failed to allocate funds necessary to sustain projects. This led to opening of new companies, usually set up by frustrated engineers who then found markets for the disruptive technology and moved upmarket. However, more often than not, established firms were too late to catch up as in the cases of Quantum, Micropolis, MiniScribe, Control Data, Seagate Technology, and many others. Similar examples can be cited regarding the excavator industry and disruptive hydraulics, as described in Chapter 3.

The second part of the book, spanning Chapters 5 to 11, deals with managing disruptive technological change. Creating independent organizations solely to nurture disruptive technologies like in the cases of IBM, Kresge, and Hewlett Packard is described as an option available to the management of large firms. The other option is to convince everyone in the firm that the firm should pursue the technology since it has potential in the long run, despite lower profitability in the present date.

In Chapter 6, Christensen rationalizes that it is much easier for a growing company to justify their investments in new products as opposed to larger, well-established companies whose growth has stopped. Companies that become large and successful find it increasingly difficult to maintain growth and, based on his observations, he explains three approaches to tackle this problem. The first approach suggests increases in the growth rate of emerging markets so that they become big enough to influence positive revenue and growth of a large company. Christensen discusses Apple’s product history, introduction of a new product, Newton, in the PDA market and its failure as an illustration of the first approach. Specifically, selling 43,000 units of the Apple II was a success for a smaller-sized Apple Company in 1979; whereas, selling 140,000 Newtons was considered a failure for a bigger Apple Company in 1994. Christensen considers that this particular Apple failure was not due to inappropriate management, but rather due to the fact that small markets cannot satisfy the growth requirements of big organizations.

The second approach that Christensen suggests is to wait until the market has emerged and become better and big enough for a large company (e.g., IBM’s well-timed entry into the desktop PC business). The third approach is to place the responsibility of commercializing disruptive technologies to smaller companies. He provides further insight into this approach by citing examples like Allen Bradley and Johnson & Johnson, where the disruptive technology was nurtured separately through a different sister organization. However, his discussion of how established firms accurately predict sustaining technologies but face difficulty in spotting and predicting disruptive technologies gets repetitive in some sections in Chapter 7. His detailed analysis on identifying new and emerging markets and performance of managers could provide supplemental information to students, especially in managerial accounting.

Christensen’s analysis in Chapter 8 reveals that innovation often seems difficult for established firms because they hire very capable people, but let them work with preexisting processes and values. The Wal-Mart, Johnson & Johnson, and Cisco cases could benefit students by helping them to understand management from the technology-oriented perspective.
Christensen makes a very important point regarding oversupply in Chapter 9. When technological advancement more than satisfies the demands of the customer, then the product becomes a commodity. Conversely, if there are many competitors supplying that product, then it becomes a matter of convenience as to which product would be preferred by the customer. To illustrate this point, Christensen provides an example of performance oversupply in the accounting software market context. Intuit’s founder, Scott Cook, realized that all of the existing accounting software had enhanced functionalities, which made it difficult to understand and operate, despite far exceeding the requirements of the customer. Realizing that most of the users were small-business owners who did their own accounting, Cook launched QuickBooks, which was much more convenient to use and captured 70 percent of its market within two years. The strategies provided for controlling the evolution of product competition, along with the examples provided, are relevant to most to AIS students.

The hypothetical case study on an electric-auto manufacturer, appearing in Chapter 10, is particularly interesting. He discusses how the three approaches discussed earlier could be applied to the marketing strategy for the disruptive technology of electric vehicles. Written in a very clear, simple language containing illustrations through examples, this chapter brings together everything that has been discussed in the book.

Christensen ends the book by summarizing the dilemmas of innovation in the last chapter. He argues that disruptive technology should be treated as a marketing challenge and not a technological one. He concludes by saying that managers need to understand the intrinsic conflicts for bigger firms and then create a context such that the firm’s market position, economic structure, developmental capabilities, and values are in sync with that of their customers.

CONCLUSION

The Innovator’s Dilemma: The Revolutionary Book That Will Change the Way You Do Business concludes that managing better, working harder, and not making many mistakes cannot guarantee success with innovation. Detailed discussion to first set up the framework in the front half of the book and insights provided in the second half of the book are particularly helpful to understand the nature of the problem. This book is unique in that it concentrates more toward understanding the problem, rather than answering what is right or wrong. The case study provided at the end of Chapter 10 is particularly useful.

From a teaching perspective, the detailed examples provided regarding the hard- disk-drive industry as well as others like accounting software, motorcycles, and retailers help to understand the innovator’s dilemma. The statistical analysis and detailed discussions are lucid. Finally, the hypothetical case study provides a comprehensive understanding of the theoretical principles discussed in the book and can provide future managers with some insight on managing companies facing disruptive technological challenges. Similarly, case studies developed for other disruptive technologies not mentioned in the book can be useful to bring into the classroom. All of these factors add credence regarding the usefulness of this book as a supplemental text for managerial accounting courses at either the undergraduate or graduate-level AIS course (with a technology management flavor).

From a research perspective, the detailed analysis provided to setup the framework in the first four chapters can be useful for researchers interested in the “innovator’s dilemma.” Specifically, researchers in their respective fields could do detailed analyses of the innovator’s dilemma in their respective fields of interest. For example, a detailed analysis could be done on different varieties of auditing tools or other accounting tools available. The graphical representations and analysis on the target market, resource allocation, and value networks in Chapters 5 to 9 can be especially useful for managerial accounting-oriented studies or market studies.

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