

# MISQ Archivist

## Optimal Market Entry Timing for Successive Generations of Technological Innovations

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### Abstract

Determining the optimal market entry timing for successive product generations is a critical decision for firms. Pioneering studies on market entry timing have focused on purchase-to-own (PTO) products (e.g., computers) and assumed that an old product generation can continue to be sold after the release of a new generation. In this study, both PTO products and subscribe-to-use (STU) products (e.g., Office 365) are considered, and an old generation can either coexist with or be completely replaced by the new generation. We develop a multigeneration diffusion modeling framework to help determine the optimal market entry timing for a new product generation under such diverse business scenarios. Unlike the prior literature, we find that for PTO products, the optimal entry timing for a new generation can be any time during a finite planning horizon; not introducing a new generation may be optimal only if the old generation will be completely replaced upon the introduction of the new generation. Under an infinite planning horizon, the second PTO product generation should not be released until the first generation has reached full market penetration. Of greater interest, for STU products, a new generation should either be released *now* or *never* be released, regardless of the length of the planning horizon and whether the old and new generations can coexist in the market or not.

**Keywords:** Multigeneration diffusion, market entry strategy, purchase-to-own, subscribe-to-use