

**Doing More with Less? Comparing the
Effectiveness of Traditional versus Technology-Based and Participant Media
Communication**

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Abstract

There is considerable variation in the extent to which firms use different types of marketing communication to increase the success of new products. This is because managers generally lack the knowledge of how communication channels affect the success of new products. In this article, the authors describe and explain the relative contribution of traditional (e.g., TV, radio, print), technology-based (e.g., banner, SMS) and participant media communication (e.g., online brand communities, Twitter) to increase new product success. The paper presents a review of the way in which the different communication efforts have been conceptualised and how they impact upon product launch success.

Keywords: marketing communication strategies, old and new media, product launch success

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Introduction

Microsoft's revenues surged to a record high in the first half of 2010 after launching the Windows7 operating system. Microsoft claims that the success of its new product launch can, to a large extent, be attributed to the firm's investment in social, or participant media communication. Marketers spent more than \$1.54 billion on social media marketing initiatives in 2008—an amount that is expected to rise to \$3billion in 2013 (PQ Media, 2009).

Two independent surveys, however, conducted in 2009 by the Association of National Advertisers (ANA 2009) and McCann Erickson (2009) reveal that a majority of U.S. marketing managers are unsure about how much should be really invested in this form of media. This uncertainty is partially due to the limited research that has examined how different types of marketing communication (e.g., participant media and traditional media) compare in terms of their effect on firm performance. Taking a new product performance perspective, we address this issue and explain how the most commonly employed types of marketing communication—(1) traditional communication (e.g., TV, print), (2) technology-based communication (e.g., banner, SMS) and (3) participant media communication (e.g., online brand communities)—are likely to affect new product success differently. We predict that each type of communication differs markedly in its ability to increase new product success.

Our study is valuable for effective resource allocation across the three main types of marketing communication aimed at increasing the success of new products. Numerous studies have highlighted the need for more research in this area (e.g., Chien-Wei, Chung-Chi & Wan-Yu, 2006; Di Benedetto, 1999; Lee & O'Connor, 2003; Pfeiffer and Zinnbauer, 2010). In the next section, we classify different types of communications and summarise previous, related research. Then we develop a set of propositions and discuss the research and managerial implications.

Research Background

In the product launch literature, marketing communication is considered an important function for increasing new product adoption and, therefore, new product success (e.g., Bass, Krishnan, and Jain, 1994). For example, advertising may create awareness or knowledge of a new product and inform customers about new product advantages, which, in turn, may lead to new product success (Prins and Verhoef, 2007)¹. On an aggregate level, many studies have shown that marketing communication efforts can have a significant effect on adoption rates of new products (Prins and Verhoef, 2007; Bass, Krishnan, and Jain, 1994). This indicates that a firm that successfully communicates the positioning of its new products can maximise its chances of achieving profitable product acceptance in the target market (Guiltinan, 1999).

¹ Communication strategies can also have persistent effects on sales (Dekimpe and Hanssens, 1995) and, for instance, increase shareholder value and volatility of cash flows (see Srivastava, Shervani, and Fahey, 1998). In most cases, however, the effect is short term with 90% of it dissipating after three to fifteen months (Vakratsas and Ambler, 1999). Thus, our research focuses on the success of new products as a result of the immediate effect of communication strategies.

We found that research largely supports a positive relationship between marketing communication and new product success (e.g., Lee, O'Connor, 2003; Kozinets et al. 2010; Di Benedetto, 1999). Prior studies, however, have typically focussed on either one type of communication only, or the effect of integrated marketing communication campaigns. The impact of different types of communication (as part of an integrated marketing communication campaign) remains largely unexplored. Our research aims to fill this gap in the literature.

Traditional communication. Traditional marketing communication often represents the biggest part of firms' communication investments (Eagle and Kitchen, 2000). Businesses that focus on this communication strategy mainly invest in one, or a combination, of the following mass-media channels: TV, radio and press (see Nielsen Media Research, 2009). Using these traditional media to deliver key product messages is considered an important tactic for product launch (Bass, Krishnan and Jain, 1994). Mass-media exposure helps to develop product awareness and elicit initial product trials (e.g., Steenkamp and Gielens, 2003). Despite the importance of integrating traditional communication with other communication channels (e.g., Wakolbinger, Denk and Oberecker, 2009), however, a large portion of empirical research is still limited to considering only traditional communication when exploring the relationship between new product success and marketing communication (e.g., Di Benedetto, 1999; Lee, O'Connor, 2003; Narayanan, Manchanda, Chintagunta, 2005).

Technology-based communication. In 1996, Hoffman and Novak identified large-scale, technology-based networked environments as an efficient channel for advertising, marketing and information services. Since then, many authors have explored the effectiveness of technology-based communication on new product success (e.g., Tripathi and Siddiqui, 2008). Whether or not this type of communication is effective on its own to support a product launch, however, is not yet clear. Mobile marketing, for example, has been found to be effective as a technology-based marketing channel—it is increasingly used both as a stand-alone tactic and integrated with traditional communication (Jensen, 2008; Rettie Grandcolas and Deakins, 2005). There are few empirical studies that have explored the relationship between technology-based communication and new product success and—to our knowledge—none that explore its effectiveness in relation to other types of communication.

Participant media communication. Media communication increasingly progresses from an information-centricity to the creation, dissemination and coordination of collective intelligence (Singh and Cullinane, 2010). This social, or participant media, also makes use of technology-based communication platforms, but differentiates itself by adding means and opportunities for previously unconnected others to interact and communicate (Haythornthwaite, 2002). Researchers are increasingly interested in communication strategies that include a form of communication with the customer which allows for two-way interactions and, hence, relationship building between customers and firms (Nail, 2005). With the fragmentation of mass markets, targeted online communication has become an important tool in reaching customers. Jensen (2008) suggests that firms should pay particular attention to online relationships and interactive communication.

Trusov, Bucklin and Pauwels (2009) have found that two-way WOM marketing efforts have substantially longer carryover effects on consumers than traditional marketing communications and hence produce substantially higher response elasticities. Similarly, Kozinets et al. (2010) and Singh and Cullinane (2010) have identified the stimulation of online WOM, blogging and online communities as influential commercial tactics. As is the

case for traditional and technology-based communication, however, the impact of participant media on new product success, as part of an integrated strategy, remains largely unexplored.

Overall, the effectiveness of different types of communication has—to our knowledge—not been conceptualised and compared in the context of increasing new product success. Typically, marketing and communication has been treated as a control variable in previous studies. This study differs from the abovementioned work in both research objective and application.

Theoretical Framework

In the following section, we posit that traditional communication and technology-based communication have nonlinear effects on new product success; and that participant media communication has a linear effect.

Traditional Marketing Communication

Traditional marketing communication is a means of persuasion that mainly involves one-way communication (Waterschoot and Van den Bulte, 1992) and no mutual, interactive relationships between firms and customers. It does not allow for the development of social networks where the actors feel engaged and tied to one another (see Haythornthwaite, 2006). Steuer (1992) defines the extent to which a person feels engaged in such a network (or mediated environment) as telepresence. Telepresence theory explains that a medium's structure influences users' sense of medium usage (Steuer, 1992). Two-way, interactive communication is a key aspect of telepresence which we posit is largely absent in traditional marketing communication. At some point, customers, who are receptive to one-way communication, have been reached and additional advertising spending creates only minimal effects (see Prins and Verhoef, 2007). Hence, the positive incremental return of traditional marketing communication is limited. Too little traditional communication is insufficient, but too much doesn't lead to sufficient new product success either (see Danaher or Rust, 1996). We predict that, for a given level of communication quality, an initial increase in spending on traditional communication will enhance new product success. Beyond an optimal point, however, the effect on new product success will diminish. More formally, this can be described by diminishing marginal returns of traditional communication on new product success, which results in a logarithmic relationship:

Proposition 1: For a given level of communication quality, traditional communication will have a logarithmic relationship with new product success².

Technology-based Marketing Communication

Technology-based communication refers to promotional messages sent over multimedia channels. No distinct categorisation of this type of marketing communication exists. For the purpose of this study, we confine this form of communication to one-way promotional efforts sent through technology-supported media channels. These communication efforts include online advertising such as banners, pop-ups and interstitial, as well as mobile advertising such

² New product success is conceptualised through several performance dimensions. Our marketing metrics, consisting of relative sales, relative market share and relative profitability were adopted from Im and Workman (2004) and Song and Parry (1997). Our financial metrics, consisting of cash flow level, acceleration and variability were adopted from Morgan and Rego (2009) and Srinivasan et al. (1998).

as promotional SMS. They are the most commonly employed technology-based marketing communications (Rettie, Grandcolas, and Deakins, 2005).

Technology-based communication can—just like its traditional counterpart—create awareness and knowledge of products and inform consumers about product advantages. Moreover, the costs of generating and transmitting information with technology-based communication are typically low. This, in turn, leads to increases in new product success. Although benefits accrue to this form of communication, the costs can, with increasing communication intensity, outweigh the benefits. Costs include consumers' wasted time and energy, difficulty evaluating the claims of the suppliers, choice overload, and psychological costs like frustration, irritation and disenchantment with their technical devices receiving unsolicited marketing communications (Fear, 2008).

We suggest that increasing levels of technology-based communication positively affect a firm's new product success, but not in a linear fashion. With reasonable amounts of technology-based marketing communication we expect initial positive effects on new product success, which become negative for large amounts of communication. In particular, we suggest that after a specific optimal point, increases in technology-based marketing communication lead to decreases in new product success. This can be described as an inverted U-shaped relationship:

Proposition 2: For a given level of communication quality, technology-based communication will have an inverted u-shaped relationship with new product success.

In summary, traditional and technology-based marketing communication often fail to effectively increase the success of new product introductions over the full range of communication expenditure. As outlined, this is partially due to their one-way approach towards communication and subsequent failure to establish a participatory network, or relationship, with customers.

Participant Media Communication

Participant media communication includes a number of interactive activities through online applications or websites that support the maintenance and development of personal relationships. In a marketing context, participant media communication is a firm-initiated and interactive online dialogue between firms and customers. This type of communication allows users to contribute to discussions, usually in an open online forum.

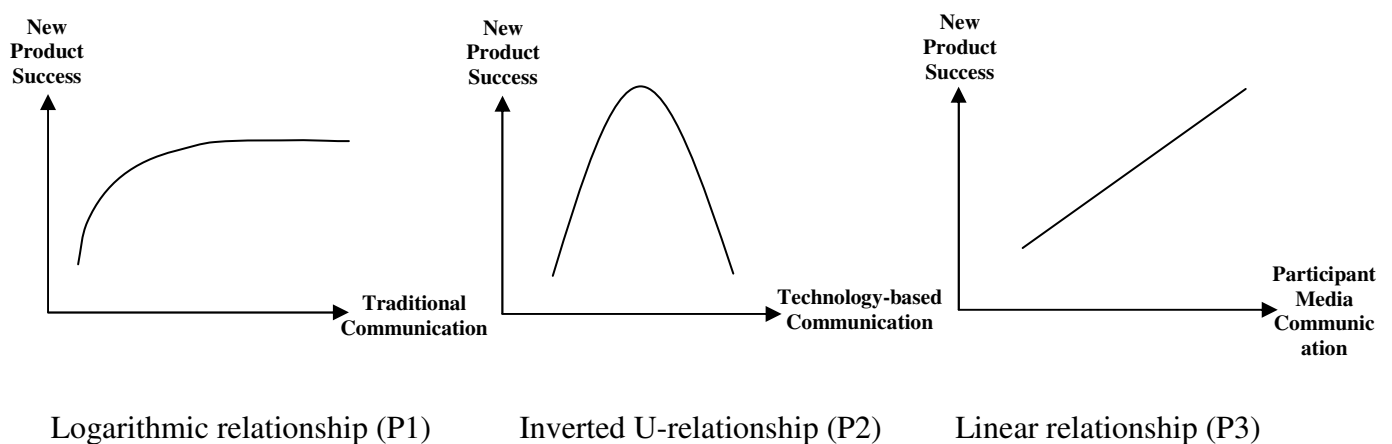
Communication efforts need to serve means other than persuading and informing, namely listening and answering. Some firms encourage a dialogue rather than a mere referral between customers and firms about a product (Villanueva, Yoo and Hanssens, 2008). This dialogue allows for the development of interpersonal, strong ties connecting communicators through social networks (Haythornthwaite, 2002, 2006). The medium's structure allows for a high sense of telepresence (Steuer, 1992) where mutual, interactive communication between a firm and customers, as well as between a customer and another customer, are possible.

It has been proposed that too much communication causes a relationship to be dysfunctional (e.g., Fournier, Dobscha, and Mick, 1998). This, however, is only the case for one-way communication, as consumers, we suggest, do not resent a dialogue they voluntarily engage in. Thus, participant media can be more persuasive than traditional communication (e.g., Herr, Kardes, and Kim, 1991). Accordingly, we propose that participant media communication is linearly and positively related to new product success:

Proposition 3: For a given level of communication quality, participant media communications will have a linear relationship with new product success.

Throughout the study, we control for the level of communication quality, as research has shown the quality of an argument to be an important variable affecting communication outcomes. Communication quality influences receivers' cognitive efficiency which, in turn, determines their perception and response to communication. For effective communication to occur, messages should fit the cognitive capability of the target audience and be delivered through coordinated, integrated marketing communications (see Eagle and Kitchen, 2000). In line with O'Reilly (1982) and Stohl and Redding (1987), we suggest that the assessment of the overall quality of communication is a function of the completeness, credibility, accuracy, timeliness and adequacy of communication flows.

Figure 1 illustrates the proposed relationships (logarithmic, inverted U and linear) between the different communication types and new product success.



Discussion and Implications

This research is the first known effort to conceptually distinguish any product-launch effects that may exist between the main three types of marketing communication used by contemporary firms. In particular, the proposed diminishing effect of traditional and negative persistence effects of technology-based communication have not yet been well researched. The next step is to empirically test our propositions. Empirical results will help managers compare and interpret the effectiveness of the three main types of marketing communication described here. After all, it is not only firms' overall communication expenditure that determines product success, but also the efficient allocation of the expenditure across different communication types. Our analysis suggests that firms' product launch communication efforts are most efficient when resources are confidently directed towards participant media activity as well as to traditional and technology-based communication, rather than merely focussing on the latter two, as is traditionally the case.

References

- Aaker, D.A., Carman, J.M., 1982. Are You Overadvertising? *Journal of Advertising Research* 22 (4), 57-70.
- ANA (Association of National Advertisers), 2009. "Marketing Study," (accessed March, 2010) [available online at <http://www.ana.net/>]
- Bass, F.M., Krishnan, T.V., Jain, D.C., 1994. Why the Bass Model Fits without Decision Variables. *Marketing Science* 13 (3), 203-223.
- Cacioppo, J.T., Petty, R.E., 1985. Physiological Responses and Advertising Effects: Is the Cup Half Full or Half Empty? *Psychology & Marketing* 2 (2), 115-26.
- Chien-Wei, C., Chung-Chi, S., Wan-Yu, C. 2007. Marketing Communication Strategies in Support of Product Launch: An Empirical Study of Taiwanese High-tech Firms. *Industrial Marketing Management* 36, 1046-1056.
- Cooper, R.G., Kleinschmidt, E.J., 1994. Determinants of Timeliness in Product Development. *Journal of Product Innovation Management* 11, 381-296.
- Danaher, P.J., Rust, R.T., 1996. Determining the Optimal Return on Investment for an Advertising Campaign. *European Journal of Operational Research* 95 (3), 511-21.
- Di Benedetto, A.C., 1999. Identifying the Key Success Factors in New Product Launch. *Journal of Product Innovation Management* 16, 530-544.
- Eagle, L., Kitchen, P.J., 2000. IMC, brand communications, and corporate cultures Client/advertising agency co-ordination and cohesion. *European Journal of Marketing* 34 (5-6).
- Fear, J., 2008. Go Away, Please: The Social and Economic Impact of Intrusive Marketing. The Australian Institute Ltd., Discussion Paper (104).
- Fournier, S., Dobscha, S., Mick, D.G, 1998. Preventing the Premature Death of Relationship Marketing. *Harvard Business Review*, 44-51.
- Guiltinan, J. P. 1999. Launch Strategy, Launch Tactics, and Demand Outcomes. *Journal of Product Innovation Management* 16 (6), 509-529.
- Haythornthwaite, C. 2002. Strong, Weak, and Latent Ties and the Impact of New Media. *Information Society* 18 (5), 385-401.
- Haythornthwaite, C. 2006. Learning and knowledge networks in interdisciplinary collaborations. *Journal of the American Society for Information Science & Technology* 57(8), 1079-1092.

Herr, P.K., Kardes, F.R., Kim, J., 1991. Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective. *Journal of Consumer Research* 17, 454-462.

Hoffman, D.L., Novak; T.P., 1996. Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations. *Journal of Marketing* 60 (7), 50-68.

Im, S., Workman, J.P., 2004. Market Orientation, Creativity, and New Product Performance in High-Technology Firms. *Journal of Marketing* 68 (2), 114-132.

Jensen, M.B., 2008. Online Marketing Communication Potential: Priorities in Danish Firms and Advertising Agencies. *European Journal of Marketing* 42 (3/4), 502-25.

Keller, K.L., 1993. Conceptualising, measuring, and managing customer-based brand equity. *Journal of Marketing* 57 (1), 1-22.

Kozinets, R. V., K. de Valck, et al., 2010. Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities. *Journal of Marketing* 74 (2), 71-89.

Lee, Y., O'Connor, G.C., 2003. New Product Launch Strategy for Network Effects Products. *Journal of the Academy of Marketing Science* 31 (3), 241-255.

McCann-Erickson, 2009. "Press Release," (accessed February, 2010) [available online at <http://www.mccann.com/>]

Morgan, N. A., Rego, L.L., 2009. Brand Portfolio Strategy and Firm Performance. *Journal of Marketing* 73 (1), 59-74.

Nail, J., 2005. What's the Buzz on Word-of-Mouth Marketing? "Social Computing and Consumer Control Put Momentum into Viral Marketing," (accessed June 2010) [available at http://www.forrester.com/rb/Research/whats_buzz_on_word-of-mouth_marketing/q/id/36916/t/2]

Narayanan, S., Manchanda, P. Chintagunta, P.K., 2005. Temporal Differences in the Role of Marketing Communication in New Product Categories. *Journal of Marketing Research* 42, 278-290.

O'Reilly Iii, C. A., 1982. Variations in Decision Makers' Use of Information Sources: The Impact of Quality and Accessibility of Information. *Academy of Management Journal* 25 (4), 756-771.

Pfeiffer, M., Zinnbauer, M., 2010 'Can Old Media Enhance New Media? How Traditional Advertising Pays off for an Online Social Network. *Journal of Advertising Research* 50, (1), 42-49.

PQ Media, 2009. "Press Release," (accessed December 10, 2009) [available online at <http://www.pqmedia.com/>]

Prins, R., Verhoef, P.C., 2007. Marketing Communication Drivers of Adoption Timing of a New E-Service Among Existing Customers. *Journal of Marketing* 71 (4), 169-183.

- Rettie, R., Grandcolas, U., Deakins, B., 2005. Text Message Advertising: Response Rates and Branding Effects. *Journal of Targeting, Measurement and Analysis for Marketing* 13 (4), 304-312.
- Song, M.X., Parry, M.E., 1997. A Cross-National Comparative Study of New Product Development Processes: Japan and the United States. *Journal of Marketing* 61 (4), 1-18.
- Singh, T., Cullinane, J., 2010. Social networks and marketing: potential and pitfalls. *International Journal of Electronic Marketing and Retailing* 3 (3), 202-220.
- Srinivasan, S., K. Pauwels, et al. 2009. Product Innovations, Advertising, and Stock Returns. *Journal of Marketing* 73 (1), 24-43.
- Srivastava, R. K., Shervani, T.A., Fahey, L., 1998. Market-Based Assets and Shareholder Value: A Framework for Analysis. *Journal of Marketing* 62 (1), 2-18.
- Steenkamp, J.B., Gielens, K., 2003. Consumer and Market Drivers of the Trial Probability of New Consumer Packaged Goods. *Journal of Consumer Research* 30 (3), 368-384.
- Steuer, J., 1992. Defining Virtual Reality: Dimensions Determining Telepresence. *Journal of Communication Management* 42 (4), 73-93.
- Stohl, C., Redding, C.W., 1987. Messages and Message Exchange Processes, in *Handbook of Organizational Communication: An Interdisciplinary Perspective*, F. Jablin et al., eds. Newbury Park, CA: Sage Publications, Inc., 451-502.
- Thompson, S.A., Sinha, R.K., 2008. Brand Communities and New Product Adoption: The Influence and Limits of Oppositional Loyalty. *Journal of Marketing* 72 (11), 65-80.
- Tripathi, S. N. and M. H. Siddiqui (2008). Effectiveness of Mobile Advertising: The Indian Scenario. *Vikalpa: The Journal for Decision Makers* 33 (4): 47-59.
- Trusov, M., Bucklin, R.E., Pauwels, K., 2009. Effects of Word-of-Mouth Versus Traditional Marketing: Findings from an Internet Social Networking Site. *Journal of Marketing* 73 (9), 90-102.
- Van Waterschoot, W., Van den Bulte, C., 1992. The 4P Classification of the Marketing Mix Revisited. *The Journal of Marketing* 56 (4), 83-93.
- Villanueva, J., Yoo, S., Hanssens, D.M., 2008. The Impact of Marketing-Induced Versus Word-of-Mouth Customer Acquisition on Customer Equity Growth. *Journal of Marketing Research* 45 (1), 48-59.
- Wakolbinger, M. L., Denk, M., Oberecker, K. 2009. The Effectiveness of Combining Online and Print Advertisements. *Journal of Advertising Research* (9), 360-372.