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**University Institutional Research and Student
Recruitment Performance: Utilizing Marketing
Communication for Knowledge Heterogeneity**

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Abstract. Institutional research constantly generate useful but heterogeneous knowledge for university administrations. Thus the effectiveness of institutional research depends on the communication of those heterogeneous knowledge to major stakeholders (e.g., parents, students, teachers, etc.). A conceptual paper is developed in regards to the influences of institutional research, word-of-mouth (via internal students and faculties), quality signaling (to external prospect students and stakeholders as potential customers), and customer relationship management, on student recruitment performance as a special form of customer decision. Grounded on the marketing communication perspective, we propose that the student recruitment performance is largely affected by word-of-mouth, quality signaling, and customer relationship management as strategic marketing communications, which are facilitated by institutional research. Institutional research is interpreted as a strategic marketing tool that can help identify, communicate, and visualize the strengths of a university. The conceptual model contributes to the search for marketing mechanisms through which institutional research can generate impact to external stakeholders. Formal propositions and their implications for future, larger-scaled surveys were discussed.

Keywords: Institutional research, Word-of-mouth, Quality signaling, Customer relationship management, Student recruitment.

JEL. C40, H43, J68.

1. Introduction

From a non-profit organization's marketing perspective, higher education institutions (HEIs) promote itself by actively communicating the strengths, features, unique positions, and so forth, to its internal and external "customers," including existing and prospect students and parents, the surrounding community, and governmental units (Kotler, 1982; Licata & Frankwick, 1996). For example, the decision making of that a prospect student in determining if s/he is attending a college can be treated as a cognitive psychological process involving the interaction between a college's quality signaling and a customer's evaluation of that signaled quality. Put differently, the "customer decisions" of whether accepting services sold from an university can depend on the result of university-stakeholders communications.

With the extant progress in educational theory and practices by adopting a

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marketing perspective, there are significant unresolved issues in research and practices that warrant more systematic investigation. Knowing the importance of marketing communication, for example, what is the foundation for universities to communicate with internal and external stakeholders? Through what mechanisms and occasions can universities communicate with and signal to stakeholders? To respond to such gaps in the literature, WE proposes that institutional research of a university (Knight *et al.*, 1997; Jedamus & Peterson, 1980) plays a role of strategic communication in facilitating internal and external stakeholder communication, engagement, and cognition building.

2. Theory and Propositions

The true effects of processed knowledge cannot be maximized unless such knowledge is widely and well known by all related stakeholders. Hence, we argue that as a complementary theoretical perspective in the broadly defined management research area, the Strategic Marketing Communication theory can facilitate the investigation of institutional research. Specifically, we propose that the effects of institutional research on significant university performance, such as the student recruitment outcomes here, will be mediated by strategic marketing mechanisms including signaling, word-of-mouth, and customer relationship management.

2.1. Institutional Research (IR)

Modern educational environment characterizes generalization and wide availability of education, heightened university autonomy, internationalism, market-like governance structure, lowered new-born rate, embedded in open systems where diverse stakeholders exist, etc. (Bartell, 2003; Mok, 2006; Zhang & Wei, 2009). Such environment demanding highly complicated university affairs, higher quality standard of teaching, research, and services becomes a better fit to policy and stakeholder expectations, utilization of information and communication technology, etc. Such demands implicate for the importance of the following capabilities of university to achieve excellence and competitive advantages. First, universities should know more about themselves and their environments. Secondly, universities should be able to communicate with and respond more to internal and external stakeholders. Thirdly, the knowing and communication should be able to be linked, corresponded, and provide feedback to university strategies.

Therefore, universities need to be efficient in collecting diverse and rich data from the students, teachers, administrative staffs' and stakeholders information, just in order to conduct precise analyses of, providing evaluation for, and offering feedback to the operations and management of the university. In such premise, institutional research (IR) of university serves as a good strategic learning and communication mechanism to construct the abovementioned three capabilities. Strategic management concept can improve strategic capabilities development of universities such as flexibility, learning, market positioning, etc. (Eastman, 2003). Institutional research is mainly implemented by researchers of universities under the guidance of university's strategic goals (Borden & Banta, 1994; Jenkins & Healey, 2005) as well as to provide good assistance to higher management decision making. It can improve management quality and planning (Jedamus & Peterson, 1980). Here, WE argues that the two major functions of institutional research are the assistance in organizational learning and the assistance in strategic marketing communication, which may in turn affect the managerial decision effectiveness of higher management jointly. In addition, institutional research can facilitate university's self-understanding of its history, developmental trajectories, major constituents, and systematic designs for organizational structure, boundary, and others. In other words, institutional research helps the university explicate all

knowledge generated alone ways of the university's and the students' development (Astin, 1977; Knight, Moore, & Coperthwaite, 1997). As a fact, knowledge management is the critical core of the institutional research essence (Serban, 2002). On the other hand, institutional research need to contact internal (e.g., students, teachers, staffs, etc.) and external (e.g., policy unit, parents, industries, media and press, etc.) stakeholders for implementing the studies and therefore feedback and information to these stakeholders are in need for their future use (Saupe, 1990). From this point of view, institutional research is given a strategic communication role that may affect the cognitions and recognitions of stakeholders on the universities.

As for the situation in Taiwan, the development of institutional research falls behind those in other (mostly western) and developed countries. Nonetheless, in responding to an increasingly pressured educational scientific environment now, it is a good timing for both higher education and research institutes and related policy units (e.g., the Ministry of Science and Technology, and the Ministry of Education) to commit resources in understanding how the institutional research might function in Taiwanese context.

Proposition 1. Institutional research outcomes (i.e., created knowledge) generates significant impacts on students recruitment performance

2.2. Strategic Marketing Communication

Signaling

Rooted in Information Economics, a field of study in Microeconomics, (Allen, 1980), marketing signaling has been long developed as an important organizational behavior that may influence consumer intentions and behaviors. For instance, Erdem & Swait (1998) noted that brand equity can serve as a signal to consumers in forming the cognition of the firm's credibility. Eliashberg & Robertson (1988) also examined how new product preannouncing behavior as a formal communication technique that can offer signals to the market (consumers), as well as how such signaling behavior is rationed. Signaling is also an instrument which firms can build and affect their own reputation (e.g., Herbig, Milewicz & Golden, 1994) and their competitors with predictions for competitive moves (Heil & Robertson, 1991).

The thesis of signaling through a marketing space from someone to another can be suitably applied in educational market context. The signaling perspective has been largely applied and extended to other areas of science, such as the labor market. Spence (1974) established a thesis arguing that employees often signal their skills or knowledge by acquiring symbolic certification such as an education degree. Following such approach, an increasing number of studies adopt a marketing signaling view for educational institutes, especially when such signaling becomes critical to student career development (Bedard, 2001). Thus, WE argue that signaling needs to be well implemented by some of the major university functions, such as the institutional research. During all the processes of institutional research, universities have many opportunities to make signaling happen. In this proposed study, the detailed contents and results of such signaling by institutional research are explored.

Word-of-mouth

Word-of-mouth is "a form of interpersonal communication among consumers concerning their personal experiences with a firm or a product (Richins, 1984)" It is a non-traditional approach for marketing communication (Trusov *et al.*, 2009). Through increased accessibility, opportunities for social learning, intentions of sharing information, such mode of strategic communication can increase persuasiveness to, and satisfaction of, consumers' buying (Anderson, 1998; Hartline & Jones, 1996; Herr *et al.*, 1991; Sundaram *et al.*, 1998). Word of mouth

can bring both potentially positive and negative effects to companies (Richins, 1983; 1984).

As what is reviewed above, words-of-mouth is one productive result of strategic marketing communications, whether such communications are good or bad, positive or negative in nature (Richins, 1983; 1984). In such viewpoint, good and bad things of universities can be extensively broadcasted and impressed via words-of-mouth. Nonetheless, the words-of-mouth effect can be led or influenced purposefully (Richins & Root-Shaffer, 1988). Thus, university can provide clear information base for the perceivers about the goodwill and capability of value creation for university's stakeholder, in order to result in positive words-of-mouth communications. Meanwhile, universities should also try to communicate and explain about the potential weak points of it self to the stakeholders. Anyhow, the major goal of institutional research is to identify both the strengths and weaknesses of a university, here especially for the R&D/innovation aspects. Thus WE expects that institutional research's influences should be observed also from the word-of-mouth perspective.

Customer (community) relationships management (CRM)

Universities are major research and development (innovation) institutions of a nation, which is embedded in a networked environment constituted by a variety of stakeholders. From a marketing communication perspective of organizations, universities have the responsibilities to communicate with these various stakeholders as current or potential "customers." Customer relationship management (CRM) is fundamental for retention and development of customers (Verhoef, 2003). To use such management model strategically can enhance customer and stakeholder values (Winer, 2001), in physical (Payne & Frow, 2005) or electronical markets (Brown & Price, 1999). Inherently, successful CRM relies on successful understanding and application of customer knowledge (Mithas *et al.*, 2005), which is gained from research efforts of an organization (Campbell, 2003). Therefore, institutional research as focused research efforts can generate important insights for university CRM.

Overall, we can reasonably propose that the effects of institutional research of the three strategic marketing communication mechanisms can be influential to university's performance in student recruitment. The better the communication works an organization can do with its potential customers, there will be a higher chance that the customers will choose the product/services of that organization (Kotler & Levy, 1969). From our discussions above, institutional research facilitates the multi-dimensional marketing communication of an university, thus can affect students' decisions when choosing the university as a knowledge and learning product/service giver. We propose that:

Proposition 2. The impacts of institutional research on student recruitment performance is mediated by strategic marketing mechanisms, including quality signaling, word-of-mouth, and customer relationship management.

Extant studies have noted that signaling, word-of-mouth, and CRM can influence on one another and interactively (e.g., Chen & Xie, 2008). In the context of institutional research, signaling of the strengths of a university can be a cornerstone for the spread of word-of-mouth, and in turn the construction of CRM. That is, when students and parents conceive the signal of university strength brought by a profound institutional research result, such conception is magnified when there is a word-of-mouth about similar characteristics of university strengths from surrounding people. Similarly, a university can develop better relationships with students and their parents based on institutional research and the consequent improved understanding of them; the effects of better relationship, again, can be magnified through signaling and word-of-mouth. Overall, we expect that the

influences of institutional research is not mediated merely by any single mechanisms of strategic marketing communication, but rather by the interactions among them. Here, we propose:

Proposition 3. Quality signaling, word-of-mouth, and customer relationship management intervene interdependently on the effects of institutional research on student recruitment.

3. Discussion and Conclusion

This conceptual paper explains the mediating strategic marketing mechanisms that interactively affect the institutional research-student recruitment relationship. It is suggested that the role of institutional research should not be merely as a practice adopted respondent to policy request. Rather, institutional research is a tool for universities to take stock of intellectual capitals and strengths in order to benefit latter marketing communications.

In such view, institutional research and strategic marketing communication should be complementary mechanisms universities can utilize for better performance. As we proposed, institutional research is the foundation of stimulating quality signaling, word-of-mouth, and customer relationship management, that can improve performance in student recruitment for universities. It is not only the universities' intention but also the responsibility to explicate its own tangible and intangible capitals, for self-review and external recognitions, through strategic marketing mechanisms. In our conceptual discussion, a knowledge-marketing communication-performance nexus is formed in the context of higher education marketing.

Furthermore, the performance for student recruitment is only one of the significant dimensions for university governance. Future studies can incorporate the discussions of the consequences of institutional research and IR-supported marketing communication in terms of other performance aspects, such as students learning outcomes, R&D productivity, and/or industry-academic collaborations.

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