

Bridging the Gap between Geography and Marketing: Opportunities for CyberGIS

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There are three things that matter in property: location, location, location. —Lord Harold Samuel¹

The above-mentioned quote, coined by a 1950s British real estate tycoon and dating back to the 1920s or earlier based on a real estate classified ad in the Chicago Tribune, highlights the superiority of location in the property market. This notion cannot be more familiar to geographers, because they have accentuated space, place and spatial thinking for centuries. Grounded in the concept that geography and business share common overarching epistemology and ontology, this position paper first uses marketing (as a sub-discipline of business) to identify continuous scholarly efforts documenting business value of space and spatial thinking. Secondly, it compares and contrasts the curricula of one leading geography program and marketing program in the U.S. and highlights gaps in pedagogical strategies. Thirdly, it outlines ways that CyberGIS can contribute to bridging the gap between geography and marketing in this Information Age.

The Fact

There is only one valid definition of business purpose: to create a customer.... It is the customer who determines what the business is.... Because it is its purpose to create a customer, any business enterprise has two-and only these two-basic functions: marketing and innovation. —Peter F Drucker

As Peter F Drucker—the founder of modern management—stresses the importance of marketing and customer, we use marketing as a proxy for the general business discipline to illustrate the shared epistemology and ontology between geography and business as antecedents for the proposed synergy (Drucker, 1954). First, geography and marketing share a unified theoretical framework. The U.S. National Science Foundation (NSF) ascribes the Geography and Spatial Sciences Program to the Division of Behavioral and Cognitive Sciences, emphasizing the behavioral and cognitive traditions of geography. One school of Marketing is called consumer behavior, which blends theories from psychology, sociology, anthropology and economics to understand consumption behaviors amongst individuals or organizations and the impacts that those behaviors pose to the society. Second, geography and marketing anchor the same human-environment relations tradition. Geography aims to tackle the relationships between men and nature, while marketing cares for the societal impact of individual and firm behaviors. Essentially, both disciplines are about relations. Third, geography stresses the importance of scale (e.g., the modifiable areal unit problem, MAUP), as does marketing. Another school of marketing thought is named marketing strategy, which addresses how the hierarchical structures of marketing units attribute to different levels of firm strategies.

Empirically, spatial thinking and spatial modeling approaches have been expressed in leading marketing literatures since the recent decade (Mittal, Kamakura, & Govind, 2004; Bradlow et al., 2005; Jank & Kannan, 2005; Gauri, Sudhir, & Talukdar, 2008; Choi, Hui, & Bell, 2010). More recently, Wharton Professor David Bell published a book entitled *Location is (Still) Everything: The Surprising Influence of the Real World on How We Search, Shop, and Sell in the Virtual One*, where he analyzed thousands of U.S. zipcodes and millions of transactions from consumers and explained location-based conditions shape human behaviors and the physical and virtual environments intersect.

The Gap

Despite the common ground in epistemology and ontology, there are significant gaps in curricular design of both geography and marketing. Here, we use the current undergraduate programs in Geography

¹ Source: http://www.nytimes.com/2009/06/28/magazine/28FOB-onlanguage-t.html?_r=0

and Marketing at the University of Georgia (UGA) as an example to argue this notion. Chartered in 1785, UGA was the first state-chartered public university in the U.S.; the Geography Program is ranked in the top 20 programs in North America and the Terry College of Business is ranked among the top 30 programs in the U.S.²

For undergraduates majoring in geography, the only required business related course is *Principles of Macroeconomics/Microeconomics*. Although the upper-division curriculum structure includes *Introduction to Economic Geography*, *Location Analysis*, and *Advanced Economic Geography*, they are offered through the human geography track only, and lack the inclusion of techniques or concepts of geographic information science (GIScience). Meanwhile, the undergraduate GIScience track in geography fails to include business-oriented courses. For undergraduates majoring in marketing, the notion of geography is entirely blank, with only weak ties to courses such as *Digital Marketing Analytics*. Although the Geography Department will launch a certificate in Urbanization and Metropolitan Planning in Fall 2016³, partnering with multiple departments including the Terry College of Business, this is not enough to address the disconnect in geography and marketing curricula. This gap offers ample opportunities for CyberGIS to remedy this divide.

The Light

The gaps in both intra-geography disciplines and the geography-marketing interface can be mapped by CyberGIS. Essentially, CyberGIS bridges the digital divide through the synergy of high-performance computing (HPC), geolocal Big Data analytics and geovisualization. First, HPC is required to handle massive amounts of both geographical and business data. Second, given visualization has been centralized in marketing analytics and business intelligence, while cartography and geovisualization are emphasized in GIScience, CyberGIS can play a significant role in both disciplines. Third, the prevalence of Big Data, user-generated contents and crowdsourcing enables CyberGIS a unique opportunity to handle critical concerns of behavior and human-environment interactions in both fields.

In a nutshell, we have illustrated geography and business/marketing share overarching epistemology and ontology, as a foundation for a synergistic view. We then identified the gaps in curricula within undergraduate programs in Geography and Marketing in a leading U.S. university. Finally yet most significantly, we shed light on pathways that CyberGIS can contribute to bridging such gaps. We aim to ripple more discussion amongst GIScience experts towards expanding CyberGIS to meet growing needs of the Information Age.

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² Source: <http://geography.uga.edu/people-place-and-identity/>; <http://www.terry.uga.edu/about/rankings-statistics>

³ Source: http://www.redandblack.com/uganews/geography-department-pushes-for-certificate-in-urbanization-and-metropolitan-planning/article_cb933200-ce7c-11e5-97d3-bba697ef12f5.html