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Social Technologies That Support Consumer Control in Internet Banking

CAPSTONE REPORT

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Abstract

for

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Internet banking is one of the fastest growing online activities (Fox, 2005). Internet social technologies provide users with increased control of the online experience (Charron, Favier, & Li, 2006). Based on analysis of literature published between 2000 - 2006, social technologies designed to increase consumer control are selected from non-bank retail websites and presented to bank channel managers for potential use within retail Internet banking websites. Types include blogs, chat, forums, personalization, podcasts and wikis.

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CHAPTER I – PURPOSE OF STUDY

Brief Purpose

The purpose of this study is to identify Internet social networking (Li, Charron, Bernoff, & Lonian, 2004) and social computing (Charron, Favier, & Li, 2006) technologies, often referred to interchangeably as social technology (Charron, Favier, & Li, 2006, p.4), that could be incorporated within a retail Internet banking distribution channel (Singer, 2005). The goal is to recognize a set of features that could enable consumers to increase control of the Internet banking experience (Silva, 2006).

According to a survey by the Pew Internet and American Life Project (Fox, 2005), since the year 2000, Internet banking has grown the fastest of all major Internet activities. Current banking customer behavior analysis indicates a desire for more choices related to control of the Internet experience (Silva, 2006). However, banks continue to be criticized by industry analysts for showing early interest in new technologies, but, being slow in adopting them (Bruno-Britz, 2006). Banking industry priorities remain consistent with a long-standing focus on growing revenue, cutting operating expenses, and complying with regulations, with only the order of these changing from time to time (Eckenrode, 2006). Leading industry research firms, such as The Tower Group, urge that the "[b]anks' ability to react to, and embrace, change will separate the winners in the industry from the also-rans" (Eckenrode, 2006, p.8).

The emergence of consumer and professional Internet social networking sites, such as MySpace™ and LinkedIn™, and social computing technologies, such as RSS and blogs, are helping people connect and influencing buying decisions (Ragsdale, McDonnell, & Harrington, 2005). The term social networking is defined as technology and services that

create unique personal profiles, map out relationships, and leverage connections to accomplish a task (Li, Charron, Bernoff, & Lonian, 2004, p.2). The term social computing refers to a social structure in which technology empowers individuals or communities as opposed to institutions (Charron, Favier, & Li, 2006, p.2).

This study is conducted as a literature review (Leedy & Ormrod, 2005) of sources published between January 2000 and April 2006, with the exception of certain sources deemed key to providing relevant background or in support of the research method. Literature is analyzed using a content analysis (Leedy & Ormrod, 2005) strategy to identify Internet social technology features as well as specific examples of social technologies employed by select non-banking retail websites. The findings are first summarized in a table that presents types of Internet social technologies identified within the literature to provide a base of understanding of the various types of social technologies that exist today. Next, results from the examination of the select non-banking retail websites are summarized in a second table, including a description of how the identified examples support increased consumer control, particularly in relation to features. Finally, the data are reframed into the final outcome of the study —a table that presents retail banking Internet channel managers with a set of social technology features that could be used to support increased consumer control within a retail banking website. The outcome is intended to provide retail banking Internet channel managers with a set of social technology features for consideration when pursuing a more active approach (Singer, 2005, p.2) to utilizing the Internet channel to attract and retain customers.

Full Purpose

The purpose of this study is to provide retail banking Internet channel managers with an understanding of how Internet social technologies (Charron, Favier, & Li, 2006, p.4) could be used within a retail Internet banking website to improve customer control of the online experience, particularly in relation to feature offerings. Select non-banking retail websites are chosen for comparison because, like retail banking, the Internet is a primary distribution channel for selling products or services directly to consumers. Twenty non-banking retail websites are selected for examination based on a 2005 customer experience study conducted by Keynote Systems, a leading provider of customer experience research services, aiming to identify best-of-breed sites; retail company examples include Amazon™, Barnes and Noble™, and eBay™.

Since Internet banking made its debut in the mid-90's, surveys of general Internet use show that the average user is gaining experience and confidence online and is increasingly going to the Internet to perform tasks important to their daily lives including conducting financial transactions and seeking information about finances (Horrigan & Rainie, 2002). The financial services industry was one of the first to recognize the potential of the Internet as a means of interacting with customers, however, current data compiled by the Web Marketing Association shows that banks are falling behind other industries with respect to innovation within their Internet channel (Bruno-Britz, 2006c).

This study is conducted as a literature review as defined by Leedy & Ormrod (2005, p.64) to identify and analyze the research and ideas of others related to the study topic. The literature is collected by searches conducted via University of Oregon library databases and indexes in addition to the Internet. Sources are determined relevant for the study based on any one or combination of the following criteria:

- the source discusses current trends and/or issues within the retail banking industry or retail Internet banking;

♣ the source addresses the topics of current Internet usage trends and technologies;

♣ the source addresses the topics of social networking and/or social computing;

♣ the source is a retail website identified within the 2005 Keynote Systems Customer Experience Rankings for Retail Web Sites study;

♣ the source has been quoted and/or referenced in other publications covering subject matters directly related to the research topic.

Library database and index searches are primarily conducted within Academic Source Premier, Business Source Premier, and Computer Source. Internet searches are primarily conducted via the Google™ and Google Scholar™ search engines and leading financial services industry research firm websites and online journals, such as, TowerGroup, Celent, Forrester, and *Online Banking Report*.

The data analysis strategy known as content analysis (Leedy & Ormrod, 2005, p.108) is employed to analyze selected sources for information relevant to the stated research purpose, goal and the aforementioned criteria. The analysis process is designed in two phases, in order to identify specific kinds of data:

♣ Phase 1: information that defines social technologies, as a way to initially define "types" of these technologies, specifically website features, for use in guiding the content analysis coding process;

♣ Phase 2: examples of social technologies within select non-banking retail websites, as a way to provide examples of successful implementation of features that increase user control.

Results derived through the first phase of the content analysis process represent types of social technologies (i.e., features) identified within the selected literature (see Figure 2). Data are summarized in Table 1. Next, results derived through the second phase of the content analysis process represent specific non-banking retail website examples of social technology features (see Figure 9). Figure 8 lists the twenty select retail websites, aligns social technology feature(s) used within each site, and explains how the social technology is used to support increased consumer control. Finally, the data are reframed into a second and final table (see Table 2) as a set of Internet social technology features that could enhance consumer control within a retail Internet banking website. The purpose of Table 2 is to provide retail banking Internet channel managers with a summarized set of social technology features for consideration when pursuing a more active approach (Singer, 2005, p.2) to utilizing the Internet channel to attract and retain customers. A discussion of Table 2 forms the bulk of the Conclusion chapter.

The primary audience of this study, retail Internet banking channel managers, work within financial organizations and are responsible for their institution's retail Internet website. Specific responsibilities include, but are not limited to, conducting user satisfaction surveys, reporting user satisfaction survey results to executive management, establishing and executing on a channel roadmap, and evaluating and recommending Internet technology solutions to executive management. The knowledge and experience base of these managers is typically within the banking realm, meaning that maintaining awareness of emerging Internet technology is not a strong suit. Thus, the audience tends to rely heavily on third party research and recommendations as well as Internet technology

deployment examples within other retail industries. The study outcome (see Table 2) can be used by retail Internet channel managers as a basis for considering how their retail Internet website could incorporate social technology features to enhance the customer experience. Table 2 could be used by the Internet channel manager as support the development of a recommendation, prepared for executive management, regarding types of social technology features that could be implemented to increase user control of the online banking experience.

Limitations

The resources provided in this study are published between January 2000 and May 2006. The timeframe selected covers the emergence of Internet banking, the evolution of Internet technology, and Internet usage trends influencing the current landscape of Internet banking. Sources are selected from professional and academic literature and websites. Professional retail banking industry-specific research literature and Internet usage trend surveys provide a significant foundation. Because professional research and survey material incorporates use of a rigorous research design, this material may have validity and credibility that may not be found in other sources.

This study seeks to identify and summarize successful examples of social technologies employed within retail Internet websites for consideration by managers who are responsible for determining the direction of retail Internet banking solutions. This study does not deeply examine the roots of social technologies nor the specifics of their technology bases.

The topic is limited to the website usability aspect of consumer control based on the results of recently published general Internet surveys indicating that today's increasingly savvy user is looking to "get what they need in shorter order than before" (Horrigan & Rainie, 2002, p.19).

Non-banking retail websites selected for examination for use of social technology features are limited to those identified within the 2005 Keynote Systems Customer Experience rankings for Retail Web Sites research study. Keynote, founded in May of 1995, is known as The Internet Performance Authority® and is focused on providing online businesses with "unbiased benchmarking data, competitive analysis and operational metrics from the customer perspective" (Keynote, 2006a, About Us). The larger retail industry is selected for comparison because the Internet is used as a primary channel to sell products and services directly to consumers in a directly comparable manner to the subset retail banking industry.

No distinction is made between the secure (the web pages where personal data is exchanged and/or transactions are conducted) and non-secure elements/pages of a retail Internet banking website.

The research method employed is literature review, which emphasizes a "theoretical perspective" (Leedy & Ormrod, 2005, p. 64), and thus, allows for inclusion of a broad range of materials related to the research topic. Furthermore, use of a literature review approach draws primarily on the ideas and research published by others to establish the final outcome.

Qualified sources are analyzed using a qualitative content analysis (Leedy & Ormrod, 2005, p.142) strategy to identify types and examples of social technologies being employed

within select non-banking retail websites. The data is then organized, interpreted, classified, and synthesized as described by Leedy & Ormrod (2005, p.150-151) with the intent of producing a meaningful outcome for the identified audience.

Problem Area

Over the last three years in particular, industry analysts have assessed financial services websites as laggards behind other industries in overall innovation (Bruno-Britz, 2006c). This trend is confirmed by the Internet Standards Assessment Report which shows that Internet banking sites currently score low in the categories of innovation and use of technology (ISAR, 2006, p.43) compared to other retail websites.

Current behavior analysis indicates that bank customers "are most satisfied if they themselves are allowed to dictate where, when, and how they do their banking" (Silva, 2006, pg. 2). Walker and Johnson (2004) believe that customer perception of Internet service quality is determined by a bank's ability to demonstrate responsiveness, assurance, empathy, and reliability (p.92). Survey results and industry research that concludes that banks need to spend time and increase investments in improving connections with customers and differentiating the customer experience (Eckenrode, 2006) is getting the attention of many banks. Furthermore, industry analysts suggest "banks can learn a thing or two from many non-bank industries that are exhibiting innovation in the way that they deal with self-service options for their customers" (Silva, 2006, p.10).

Internet social technologies (Charron, Favier, & Li, 2006, p.4) have the potential to enable retail banks to enhance their Internet offerings with features that will improve customer service interactions and empower the consumer with options for increasing control

of their Internet banking experience. However, Kathleen Khirallah, a TowerGroup research director specializing in retail banking, posits that retail product innovation is impacted by technology "barriers" such as "the persistence of proprietary and heterogeneous applications, inflexible systems architecture, and a reliance on manual and poorly designed business processes" (Khirallah, 2005, pg 2). Furthermore, due to the fact that financial transactions involve the transmission of highly sensitive personal data, a major factor influencing consumer use of Internet banking websites is trust (Suh & Han, 2002). Continuing instances of Internet banking security breaches and reports of phishing scams "degrades customer trust in the bank and in online banking in general" (Fox, 2005, p.2), and thus, issues related to trust and security must be factored in to any plans for adding consumer control features.

CHAPTER II – REVIEW OF REFERENCES

This section presents the key literature references utilized in support of this study. A reference is considered to be a key literature reference if it is fundamental to the study topic areas of the retail banking industry, Internet banking, or Internet social technologies. Literature presented in this chapter is listed in alphabetical order and annotated to summarize each key source and explain its relevance to this study. All key references, with the exception of one in support of the study research method, come from research groups. Professional research material incorporates use of a rigorous research design, and thus, this material may have validity and credibility that may not be found in other sources.

Three of nine key references come from Forrester Research, an independent technology and market research company that provides advice about the impact of technology on business and consumers. Founded in 1983, Forrester focuses on the business implications of technology change and aims to guide executives, business strategists, and IT professionals in creating unified technology plans that gain business advantage. Forrester is known in the field as a "thought leader" (Hopkins, 2005, p.4).

Forrester Research

[1] Charron, C., Favier, J. & Li, C. (2006). Forrester Big Idea: Social Computing - How Networks Erode Institutional Power and What to do About it. Forrester Research, Inc. February 13, 2006.

This report discusses the results of the analysis of seven years of Forrester data aimed at discerning key consumer trends. Charron et al. conclude that easy connections

facilitated by cheap devices, modular content, and shared computing resources are having a profound impact on the global economy and social structure as individuals increasingly take advice from one another rather than from institutional sources like corporations and media outlets. This report supports the Purpose and Significance areas of this study by providing a definition of social computing as well as by providing key background regarding the convergence of key technology and social factors that have resulted in what Forrester calls a shift to an era of social computing. This source is also included as part of the data analysis set. This reference is qualified in that it is obtained from a professional, industry research firm, Forrester Research Inc. Charron is a vice president and research director at Forrester where he leads research efforts on how the Internet is changing consumer behavior in various industries. In his six years with Forrester, Charron has authored or contributed to more than 100 research articles. Favier is also a vice president and research director at Forrester. Favier manages a team of European analysts focused on the impact of the Internet and emerging interactive mediums. Li is a principal analyst at Forrester and her work is focused on examining the ways new technology will affect how companies deliver information, content, and advertising, as well as how these changes will affect the businesses that provide these services.

[2] Li, C., Charron, C., Bernoff, J., Lonian, A. (2004) Profiles: The Real Value Of Social Networks. Forrester Research, Inc. July 15, 2004.

This report discusses the results of Forrester research on online social networks as well as companies in that space. Li et al. conclude that three social network business models will emerge: enterprise solutions, consumer payments, and advertising. As these networks mature, Forrester predicts they will develop into three types: 1) communication networks

dominated by portals; 2) affinity networks based on relationships; and 3) interest-based networks focused on a shared passion. This report supports the Purpose and Significance areas of this study by providing a definition of social networking as well as by providing key background regarding the significance of social networks to businesses in that they are helping individuals develop personal and professional relationships more than ever before. This source is also included as part of the data analysis set. This reference is qualified in that it is obtained from a professional, industry research firm, Forrester Research Inc. Li is a principal analyst at Forrester and her work is focused on examining the ways new technology will affect how companies deliver information, content, and advertising, as well as how these changes will affect the businesses that provide these services. Charron is a vice president and research director at Forrester where he leads research efforts on how the Internet is changing consumer behavior in various industries. Bernoff is vice president with the Forrester Devices, Media & Marketing team. A profile for Lonian is not available.

[3] Ragsdale, J., McDonnell, F., and Harrington, J. (2005). Social Networking Redefines Self-Service Options. Forrester Research, Inc. August 16, 2005.

This report discusses the results of Forrester research on self-service. Ragsdale et al. conclude that increased adoption of online forums shows that consumers are eager to share their opinions and expertise of products and services not only with provider companies, but, with each other. This report supports the Purpose and Significance areas of this study by providing key background on how online forums are changing self-service. This source is also included as part of the data analysis set. This reference is qualified in that it is obtained from a professional, industry research firm. Ragsdale is a Forrester research director known for his expertise in selecting and implementing customer relationship

management applications and has authored or contributed to over 200 Forrester Research reports.

Tower Group

[4] **Eckenrode, Jim.** (2006) Building a More Responsive Banking Industry: The Bell Is Ringing But Are Banks Salivating? February 2006. The Tower Group. Ref#V46:17RCNKWP.

This report discusses the current state of the banking industry and concludes that a focus on responsiveness and making connections will be key to success in 2006 and beyond. Eckenrode observes that the banking industry is known for being slow to change and adapt to new conditions and urges banks to focus more time and invest in improving the customer experience, which provides a primary foundation for the study Purpose and Problem Area. This reference is qualified in that it is obtained from a professional, industry research firm, the Tower Group. Tower Group is focused exclusively on the global financial services industry, including business and technology topics. Eckenrode is the managing director of Banking and Payments at TowerGroup, with responsibility for all banking industry research practices and he has over 19 years of experience in consumer banking and consulting, including technology strategic planning, bank delivery channels and customer relationship management.

[5] Silva, Jerry. (2006). Customer Self-Service and Retail Banking in the US: Rising Expectations, Challenges, Opportunities. The Tower Group. February 2006. Ref#: V46:19NR

This source discusses customer attitudes about banking self-service. This report supports the Purpose and Significance areas of this study by providing key background on retail banking customer service expectations, which indicate that consumers want more control options. Silva also suggests that banks look to other industries for examples of innovation in the realm of self-service options. This reference is qualified in that it is obtained from a professional, industry research firm, the Tower Group. Silva is research director for the Delivery Channels practices at TowerGroup with 21 years of experience in the banking industry. He is a frequent speaker and chair at industry conferences and is often quoted in business and trade publications.

[6] Fox, Susannah. (2005). Data Memo: The state of online banking. Pew Internet and American Life Project. February 2005. Retrieved from: <http://www.pewinternet.org/pdfs/PIP_Online_Banking_2005.pdf>.

This source reports key data related to online banking usage based on results from a Pew Internet and American Life Project survey done in late November of 2004. This source provides a primary foundation for the study Purpose and Problem Area as it frames the increase in the use of Internet banking over the last several years. This reference is qualified in that it is obtained from a professional research and survey organization – the Pew Charitable Trusts. As noted on their website, the Pew Internet & American Life Project produces reports that explore the impact of the Internet on families, communities, work and home, daily life, education, health care, and civic and political life. The Project aims to be an

authoritative source on the evolution of the Internet through collection of data and analysis of real-world developments as they affect the virtual world. Fox is Associate Director, Editor of the Pew Internet and American Life Project, where she is considered to be an expert on the topic of banking. The project is an initiative of the Pew Research Center.

[7] Internet Standards Assessment Report: Industry Benchmarks for Successful Web Site Development Based on a Decade of WebAward Judging by The Web Marketing Association (ISAR). (2006). March, 2006. Web Marketing Association. Retrieved from: <http://www.webaward.org/isar_report.asp>.

ISAR is based on data collected from over 9,000 web site evaluations since 1997. The report evaluates average scores in more than 80 industries to create defined benchmarks in seven categories, including design, innovation, content, technology, interactivity, copywriting and ease of use. ISAR provides detailed industry by industry commentary and graphical benchmarks to see how each industry measures up. This source provides support to the Purpose and Problem Area sections of this study as it reports that Internet banking sites tend to score low in the categories of innovation and use of technology. This reference is qualified in that it is obtained from an established research and survey organization, the Web Marketing Association (WMA). The WMA was founded in 1997 with the goal of setting a high standard for Internet marketing and web development. WMA is staffed by voluteer marketing, advertising, public relations and web design professionals from around the world who share an interest in improving the quality of advertising, marketing and web site development on the Internet today and in the future.

[8] Keynote Customer Experience Rankings for Retail Web Sites: Retail Web Sites Competitive Intelligence Research Abstract (Keynote). (2005). Summer 2005. Keynote Systems. Retrieved from:

<http://www.keynote.com/downloads/cem/ce_retail070705.pdf>.

This research study reveals which online retailers are providing the "best" service and what they are doing to attract and keep customers. Keynote determines which are the best sites based on their success in the three key areas of customer satisfaction, brand impact, and conversion (Keynote, 2006, p.2). This source provides support to the Purpose and Problem Area sections of this study with regard to the broader retail industry and is a foundational component of the data set selected for data analysis, as the twenty retail websites presented in the Keynote report represent best-of-breed sites and are examined for examples of social technologies. This reference is qualified in that it is obtained from an established, professional, industry research and consulting firm, Keynote Systems. Keynote is known as The Internet Performance Authority® and is focused on providing online businesses with "unbiased benchmarking data, competitive analysis and operational metrics from the customer perspective" (Keynote, 2006a, About Us).

[9] Leedy, P. & Ormrod, J. (2005). Practical Research: Planning and Design (8th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

This source supports the chosen study research method of literature review and qualitative content analysis. This reference is qualified in that it is frequently cited as a foundational source for research studies employing literature review and content analysis approaches.

CHAPTER III – METHOD

Primary Research Method

The research method employed is literature review, which, with its emphasis on a "theoretical perspective" (Leedy & Ormrod, 2005, p. 64), allows for inclusion of a broad range of materials related to the research topic. Furthermore, the research design utilized incorporates qualitative content analysis, which is "fundamentally interpretive" (Leedy & Ormrod, 2005, p.150) with regard to its approach to collection and analysis of data. The chosen research method and design supports the study goal of framing a new perspective based on ideas provided by the selected sources.

Literature Collection

A preliminary and broad search within the areas of 1) retail banking industry, 2) Internet banking, 3) Internet trends, and 4) Internet social technology is conducted via several Internet search engines, listed at searchenginewatch.com, and the University of Oregon libraries website. Based on initial search findings, and establishment of the study goal, a set of key words is established and used as a foundation for identification and selection of sources directly relevant to the study topic, presented in Figure 1:

Figure 1: Initial Set of Search Terms

♣ Banking	♣ Financial services	♣ Retail + industry
♣ Banking technology	♣ Internet banking	♣ Social computing
♣ Business + banking	♣ Internet technology	♣ Social networking
♣ Consumer banking	♣ Internet trends	♣ Social software
♣ Electronic banking and e-banking	♣ Online banking	♣ Social technology and technologies
	♣ Retail banking	

Use of the above search terms initially yielded hundreds of thousands of results in total of varying degrees of relevance and quality. With regard to retail Internet and retail banking trends and information, the combination of the keywords Internet trends, Internet banking + retail, and e-banking + retail, resulted in the most pertinent sources. With regard to social technology information, social computing and social networking yielded a higher number of results than use of social technology or technologies.

Collected literature is comprised of sources, published between January 2000 and May 2006, obtained from Internet search engines, leading retail banking industry research firm websites, Internet business magazines and journals, and library databases and indexes accessed via the University of Oregon libraries website. Internet searches are primarily conducted via the Google™ and Google™ Scholar search engines. Financial services industry research firm websites used to mine for sources are: The Tower Group, Celent Communications, and Forrester Research. Access to research reports within these websites requires a subscription and most reports are fee-based. This researcher is able access sources from these websites via a corporate subscription paid for by her employer. Publicly accessible Internet business magazine and journal sources vary from industry specific sources, such as *The Online Banking Report* and *Bank Technology News*, to general news and business sources, such as *USA Today* and *CIO Insight*.

Library database and index searches are primarily conducted within Academic Source Premier, Business Source Premier, and Computer Source. Access to sources within these databases and indexes is through the University of Oregon libraries website and some sources are fee-based. Only those available without a fee are collected.

Sources are collected for use in this study if they: 1) are published within the selected timeframe, 2) contain any one or combination of the above listed key words, and

3) are authored by cited or peer-reviewed academic authors or by professional industry analysts. The timeframe limitation serves to include the emergence of Internet banking as a major internet activity and the evolution of social Internet technology. The key word limitation aims to focus the literature collection on data directly related to the study purpose. The limitation on author qualifications serves to identify sources that incorporate use of formal research design, which are considered to have validity and credibility that may not be found in other sources. Sources are discarded if they fail to meet the above stated qualifications or they are less than one page in length.

Data Collection and Analysis

A final set of references for use as the data analysis set is obtained, consisting of thirty-two sources. The set includes twenty select non-banking retail websites, obtained from a 2005 customer experience study conducted by Keynote Systems, a leading provider of customer experience research services, examined for examples of social technologies. Literature sources in the data set are listed in Figure 2 and select non-banking retail websites used for examination are listed in Figure 3.

Figure 2: Data Analysis Reference Set

1. Charron, C., Favier, J. & Li, C. (2006). Social Computing. Forrester

 Research, Inc. February 13, 2006.

2. Charron, C. & Fiorentino, R. (2006). Teens Take The Lead on Social

 Computing. Forrester Research, Inc. March 24, 2006.

3. Conhaim, W., & Page, L. (2005b). Social Networks: The Internet Continues

 to Evolve. Information Today. October 2005. Vol.22, Issue 9.

4. Graeber, C., Shevln, R., Sweeney, J. (2002). Online Service: The Next

 Generation. Forrester Research. September 2002.

5. Li, C., Charron, C., Bernoff, J., Lonian, A. (2004) Profiles: The Real Value

 Of Social Networks. Forrester Research, Inc. July 15, 2004.

6. Li, C., Charron, C., Fiorentino, R., Cohen, S. (2005). Social Computing

 Takes A Step Forward: As Blogging and RSS Grow, Marketers Can Play

 a Role. Forrester Research. December 14, 2005.

7. Peek, Robin. (2005). Web Publishing 2.0. Information Today. November

 2005. Vol. 22, Issue 10.

8. Ragsdale, J., McDonnell, F., and Harrington, J. (2005). Social Networking

 Redefines Self-Service Options. Forrester Research, Inc. August 16,

 2005.

Figure 2: Data Analysis Reference Set

9. Roush, Wade. (2005). Social Machines: Computing Means Connecting.

Technology Review. August 2005. Technology Review, Inc.

10. Shevlin, R., Graeber, C., Sage, A. (2004). Trends 2005: Imperatives for

Banks' Public Sites. Forrester Research. December 15, 2004.

11. Souza, R., Shevlin, R., Boynton, E. (2001). Next-Generation Financial

Sites. Forrester Research. March 2001.

12. Torrance, Fiona. (2006). Social Computing & Interactive Marketing.

iMedia Connection. March 22, 2006.

Figure 3: Select Twenty Non-banking Retail Websites

1. Amazon	11. L.L. Bean
2. Barnes and Noble	12. Lands' End
3. Best Buy	13. Nordstrom
4. Circuit City	14. Office Depot
5. Costco	15. Overstock.com
6. Dell	16. Sears
7. eBay	17. Staples
8. Eddie Bauer	18. Target
9. Gap	19. Wal-Mart
10. JC Penney	20. Yahoo! Shopping

Data analysis is guided by the qualitative content analysis strategy described by Leedy & Ormrod (2005, p.142-143) and Palmquist et al. (2005). The chosen data analysis strategy supports the methodology goal of framing a new perspective based on ideas provided by the selected sources. The data analysis process is structured in two coding phases. In Phase 1, literature is analyzed with the intent of identifying and defining social technology features and services. The initial four coding concepts (see Figure 4) are treated as an interactive set in that additional emerging concepts (i.e., social technology feature types) are considered as they are identified in the literature. Concepts are coded for existence.

Figure 4: Initial Set of Interactive Concepts for Coding

Initial Coding Concept	Definition
Social computing	A social structure in which technology empowers communities as opposed to institutions. Charron, Favier, & Li, 2006, p.2
Social technology	Umbrella term often used to refer to Internet social computing and social networking technologies. Charron, Favier, & Li, 2006, p.4
Social networking	Technology and services that create unique personal profiles, map out relationships, and leverage connections to accomplish a task. Li, Charron, Bernoff, & Lonian, 2004, p.2
Social software	Enables people to rendezvous, connect or collaborate through computer-mediated communication and to form online communities. Wikipedia, http://en.wikipedia.org/wiki/Social_software

The resulting output from Phase 1 coding is manually recorded and captured in a table (see Figure 5).

Figure 5: Phase 1 Data Recording Template

Year Published	Source	Social Technology Descriptor
####	Citation	1. Descriptor (i.e., types of social technology features)

In Phase 2, a new set of coding categories is used, constructed by merging the initial coding categories used in Phase 1 and the emergent categories. This new coding set is used as content categories by which select non-banking retail websites are examined. In Phase 2, literature is analyzed with the intent of identifying and defining types of social technology features and services. Phase 2 categories are coded for existence. The resulting output from Phase 2 is manually recorded and captured in a table (see Figure 6).

Figure 6: Phase 2 Data Recording Template

Website	Social Technology Feature Available	How ST Supports Consumer Control
Website Descriptor 1 (URL)	1. Descriptor 2. Descriptor	1. Explanation 2. Explanation

Data Presentation

Data resulting from the content analysis process are presented in two tables. Findings from Phase 1 data analysis are first summarized in a table (see Table 1: Social Technology Feature Types Defined) that presents types of Internet social technologies identified within the literature to provide a base of understanding of the various types of social technologies that exist today. Next, results from the Phase 2 examination of the select non-banking retail websites are summarized in a second table (see Figure 9), including a description of how the identified examples support increased consumer control. Finally, the data are reframed into the final outcome of the study —Table 2: Social Technology Features for Consideration by Internet Banking Channel Managers— that presents retail banking Internet channel managers with a set of social technology features that could support increased consumer control within a retail banking website. Figure 7 presents a template for this final outcome table. Column one presents each type of social technology identified during literature review. Column two presents an explanation of how the social technology feature provided the consumer with more control over the online experience. Column three presents the Keynote retail website location where the example(s) can be viewed. Finally, column four presents suggested language the Internet channel manager can use to recommend this feature for consideration as an enhancement to a retail banking website.

Figure 7: Table 2 Template – Social Technology Features or Consideration by

Internet Banking Channel Managers

Social Technology Feature	How ST Supports Consumer Control	Non-Banking Retail Website Example	Suggested Recommendation Language
Type	Explanation	Site name & URL	Text

The outcome is intended to provide retail banking Internet channel managers with a set of social technology features and services for consideration when pursuing a more active approach (Singer, 2005, p.2) to utilizing the Internet channel to attract and retain customers. The study outcome (Table 2) can be used by retail Internet channel managers as a basis for considering how their retail Internet website could incorporate social technology features to enhance the customer experience. Table 2 is designed to include language (presented in column 4) that could be used within a recommendation memo written by an Internet channel manager for their executive management as a summary of types of social technology features and services that could be implemented to increase user control of the online banking experience.

CHAPTER IV – ANALYSIS OF DATA

In Phase 1 content analysis, selected literature is analyzed with the intent of identifying and defining social technology features. The initial four coding concepts (see Figure 4) are treated as an interactive set in that additional emerging concepts (i.e., social technology feature types) are considered as they are identified in the literature. Concepts are coded for existence and presented below, in Figure 8.

Figure 8: Phase 1 Data Recording Results – Social Technology Feature Types from Selected Literature

Year Published	Source	Social Technology Descriptor
2006	Charron, C., Favier, J. & Li, C. (2006). Social Computing. Forrester Research, Inc. February 13, 2006.	1. Blogging 2. Instant messaging 3. Personalization 4. Podcasts 5. RSS 6. Social computing 7. Social networks 8. Tagging 9. User review portals 10. Wikis
2006	Charron, C. & Fiorentino, R. (2006). Teens Take The Lead on Social Computing. Forrester Research, Inc. March 24, 2006.	1. Weblog / blog / blogging 2. RSS 3. Social computing
2006	Torrance, Fiona. (2006). Social Computing & Interactive Marketing. iMedia Connection. March 22, 2006.	1. Blogging 2. Podcasting 3. RSS 4. Social computing 5. Social networks 6. Tagging

Figure 8: Phase 1 Data Recording Results – Social Technology Feature Types from Selected Literature

Year Published	Source	Social Technology Descriptor
		7. User-review portals 8. Wikis
2005	Conhaim, W., & Page, L. (2005b). Social Networks: The Internet Continues to Evolve. Information Today. October 2005. Vol.22, Issue 9.	1. Blogging 2. RSS 3. Social network / social networking 4. Tags
2005	Li, C., Charron, C., Fiorentino, R., Cohen, S. (2005). Social Computing Takes A Step Forward: As Blogging and RSS Grow, Marketers Can Play a Role. Forrester Research. December 14, 2005.	1. Blogs 2. Podcasting 3. RSS 4. Social computing 5. Social networking
2005	Peek, Robin. (2005). Web Publishing 2.0. Information Today. November 2005. Vol. 22, Issue 10.	1. Blogs 2. Podcasting 3. Social networking 4. Wikis
2005	Ragsdale, J., McDonnell, F., and Harrington, J. (2005). Social Networking Redefines Self-Service Options. Forrester Research, Inc. August 16, 2005.	1. Blogs 2. Forums 3. Interest-based networks 4. Social networks
2005	Roush, Wade. (2005). Social Machines: Computing Means Connecting. Technology Review. August 2005. Technology Review, Inc.	1. Blogs / blogging 2. Chat rooms 3. Instant messaging 4. Podcasts 5. RSS 6. Social networking 7. Tagging 8. Wikis
2004	Li, C., Charron, C., Bernoff, J., Lonian, A. (2004) Profiles: The Real Value Of Social Networks. Forrester Research, Inc. July 15, 2004.	1. Blog 2. Instant Messaging 3. Social network(s)
2004	Shevlin, R., Graeber, C., Sage, A. (2004).	1. Chat

Figure 8: Phase 1 Data Recording Results – Social Technology Feature Types from Selected Literature

Year Published	Source	Social Technology Descriptor
	Trends 2005: Imperatives for Banks' Public Sites. Forrester Research. December 15, 2004.	
2002	Graeber, C., Shevlin, R., Sweeney, J. (2002). Online Service: The Next Generation. Forrester Research. September 2002.	1. Chat 2. Cobrowsing 3. Collaboration 4. Instant Messaging
2001	Souza, R., Shevlin, R., Boynton, E. (2001). Next-Generation Financial Sites. Forrester Research. March 2001.	1. Chat 2. Personalization

An overview summary of the results presented in Figure 8 is presented in Table 1, which includes definitions of each feature. Note that definitions rely heavily on Wikipedia as a source, because Wikipedia represents a social technology and the most current definitions of many emerging terms in the field are provided from this wiki. Definitions are compared to those used in the literature, as a way to verify appropriate use. Table 1 reveals that eleven emergent social technology features are discussed in addition to the initial set of four. RSS, blogs, and podcasts are discussed most in the selected literature. The next most discussed features are chat, tagging, and wikis. Some features support one-to-one communication, such as chat and blogs, while others support group communication, such as forums and wikis.

Table 1 - Social Technology Feature Types Defined

#	Social Technology Descriptor	Definition	Number of Sources Located In
1	Blog	A blog (or weblog) is a website that is used in the manner of an online journal. Wikipedia, http://en.wikipedia.org/wiki/Blog	5
2	Chat	Online chat can refer to any kind of communication over the Internet, but is primarily meant to refer to direct 1 on 1 chat or chat rooms, using tools such as instant messenger applications... Wikipedia, http://en.wikipedia.org/wiki/Online_chat	4
3	Collaborative browsing (co-browsing)	Synchronizing browser access to the same sites. As one user browses the Web, the other users trail along automatically and link to and view the same pages from their browsers. Typically accomplished with a plug-in known as "co-browsing," one application of collaborative browsing is for call center agents to help customers navigate the company Web site. PCMag.com, http://www.pcmag.com/encyclopedia_term/0,2542,t=cobrowsing&i=39965,00.asp	1
4	Forums	An Internet forum is a facility on the World Wide Web for holding discussions, or the web application software used to provide the facility. A sense of virtual community often develops around forums that have regular users. Wikipedia, http://en.wikipedia.org/wiki/Internet_forum	1
5	Instant Messaging	Instant messaging is the act of instantly communicating between two or more people over a network such as the Internet. Wikipedia, http://en.wikipedia.org/wiki/Instant_messenger	3
6	Personalization	On the Web, personalization means returning a page that has been customized for the user, taking into consideration that person's habits and preferences. The personalization may be done by the user,	2

Table 1 - Social Technology Feature Types Defined

#	Social Technology Descriptor	Definition	Number of Sources Located In
		the Web site or both and may be aimed at the general public or company employees. The Free Dictionary, Computing dictionary http://computing-dictionary.thefreedictionary.com/Web+personalization	
7	Podcasts	Podcasting is the method of distributing multimedia files, such as audio programs or music videos, over the Internet for playback on mobile devices and personal computers. Wikipedia, http://en.wikipedia.org/wiki/Podcasting	5
8	RSS	Really-Simple-Syndication: An XML standard that lets users collect and read content feeds. Charron, Favier, & Li, 2006, p.4	6
9	Tagging	A tag is a keyword which acts like a subject or category. A keyword is used to organize webpages and objects on the Internet. Each user "tags" a webpage or image using his/her own unique tage. An image or webpage may have multiple tags that identify it. Webpages and images with identical tags are then linked together and users may use the tag to search for similar webpages and images. Wikipedia, http://en.wikipedia.org/wiki/Tags	4
10	User-review portals	Web portals that allow users to search for peer reviews on a product or service. Charron, Favier, & Li, 2006, p.4	2
11	Wiki	A collaborative web site that comprises the perpetual collective work of many authors. Similar to a blog in structure and logic, a wiki allows anyone to edit, delete or modify content that has been placed on the web site using a browser interface, including the work of previous authors. ISP Glossary, http://isp.webopedia.com/TERM/W/wiki.html	4

In Phase 2, a new set of coding categories is used, constructed by merging the initial coding categories used in Phase 1 and the emergent categories. This new coding set is used as content categories by which select non-banking retail websites are examined. In Phase 2, select retail websites are analyzed with the intent of identifying and defining types of social technology features and services. Phase 2 categories are coded for existence. The resulting output from Phase 2 is manually recorded and captured in a table (see Figure 9).

Figure 9: Phase 2 Data Recording Results – Examples of Social Technology Features from Select Retail Websites

Website	Social Technology Feature Available	How ST Supports Consumer Control
Amazon	Blog Personalization Podcasts Wiki	"Your Plog" – A personal blog that displays posts relevant to user purchase history or user defined parameters. "Your Store" – Provides personalized product recommendations based on purchase history and/or input from the user regarding items owned and/or rated. "Amazon Podcasts" – Provide the option to subscribe to podcasts of interest to the user; selected podcasts are downloaded to the user's computer automatically as they are published. User can then control what device is used to listen/watch (e.g. MP3 player, computer). "ProductWiki" – A web site that allows purchasing customers to share information with other customers about items offered at Amazon.com.
Barnes and Noble	Collaboration Personalization	"Online Reading Groups" – Allows customers to interact with others regarding books of interest to them. "My Account" - Allows registered users to save personal information

Figure 9: Phase 2 Data Recording Results – Examples of Social Technology Features from Select Retail Websites

Website	Social Technology Feature Available	How ST Supports Consumer Control
		for repeat use and track order status.
Best Buy	Personalization Podcasts	"My Account" – Allows registered users to save personal information for repeat use and track order status. For example, a user can create a "Wish List" of items they would like to purchase in the future. "Podcasts & Streams" – Allows users to download MP3s or stream audio files. "With our digital services, you get the entertainment you want, the way you want it. Download digital music, or rent movies and games, without the hassle. No lines, no trips to the store — you can do it all from your computer."
Circuit City	None	N/A
Costco	None	N/A
Dell	Chat Forum Personalization	"Chat with Customer Care" – Provides user with real-time chat access to customer support staff. "Community Forum" – Allows Dell customer-to-customer sharing and learning. "My Account" – Allows registered users to save personal information for repeat use.
eBay	Chat Forum Personalization	"Chat Rooms" - Provides user with real-time chat access to interact with other users. "Feedback Forum" – Allows users to post feedback about the site and their experiences. Personal account tools - Allows registered users to save personal information for repeat use.
Eddie Bauer	Personalization	"Your Account" - Allows registered users to save personal information for repeat use.

Figure 9: Phase 2 Data Recording Results – Examples of Social Technology Features from Select Retail Websites

Website	Social Technology Feature Available	How ST Supports Consumer Control
Gap	Personalization	"Your Account" - Allows registered users to save personal information for repeat use.
JC Penney	Personalization	"My jcp.com Account" - Allows registered users to save personal information for repeat use.
L.L. Bean	Chat Personalization	"Live Help" - Provides user with real-time chat access to customer support staff. "My Account" - Allows registered users to save personal information for repeat use.
Lands' End	Chat Personalization	"Lands' End LIVE" - Provides user with real-time chat access to customer support staff. My Account - Allows registered users to save personal information for repeat use. My Virtual Model™ - Feature that allows users to create a model to virtual try clothes before buying.
Nordstrom	Chat Personalization	"Live Help" – Provides user with real-time chat access to customer support staff. "Your Account" - Allows registered users to save personal information for repeat use.
Office Depot	Personalization	"Your Account" - Allows registered users to save personal information for repeat use.
Overstock.com	Personalization	"My Account" - Allows registered users to save personal information for repeat use.
Sears	Personalization	"Customize My Experience" / "My Profile" - Allows registered users to save personal information for repeat use.
Staples	Personalization	"My Account" - Allows registered users to save personal information

Figure 9: Phase 2 Data Recording Results – Examples of Social Technology
Features from Select Retail Websites

Website	Social Technology Feature Available	How ST Supports Consumer Control
		for repeat use.
Target	Personalization	"My Account" - Allows registered users to save personal information for repeat use.
Wal-Mart	Personalization	"Your Account" - Allows registered users to save personal information for repeat use.
Yahoo! Shopping	Personalization	"Your Account" - Allows registered users to save personal information for repeat use.

An overview summary of the results presented in Figure 9 reveals that the selected
retail websites offer at least one social technology feature identified within the literature to
provide consumers with options for control of the online experience, including seven
different social technology features including blogs, chat, collaboration, forums,
personalization, podcasting, and wikis. Personalization is identified within 18 of the sites,
and is by far the most prevalent feature. Chat is second most prevalent, with five sites
containing this feature. Podcasts are third most prevalent, with two sites offering this
feature.

CHAPTER V - CONCLUSIONS

This study is intended to provide retail banking Internet channel managers with an understanding of how Internet social technologies could be used within a retail banking website to improve consumer control of the online experience, particularly with regard to feature offerings. Internet banking is one of the fastest growing Internet activities (Fox, 2005), yet bank websites are not considered to be leaders in terms of innovation nor use of technology (ISAR, 2006). Leading financial industry analysts urge banks to look to other industries for ways to increase consumer control of the online experience (Silva, 2006). Because financial transactions involve the transmission of highly sensitive personal data, a major factor influencing consumer use of Internet banking websites is trust (Suh & Han, 2002), and thus, issues related to trust and security must be factored in to any plans for adding consumer control features.

First, literature is examined to identify information that defines social technology feature types. Then, twenty non-banking retail websites, identified by a 2005 customer experience study conducted by a Keynote Systems, are examined for examples of social technology features being offered by non-bank retail websites to increase consumer control. Figure 9 reveals that the select retail websites offer at least one social technology feature identified within the literature to provide consumers with options for control of the online experience, including seven different social technology features including blogs, chat, collaboration, forums, personalization, podcasting, and wikis. Personalization is identified within 18 of the twenty selected sites, and is by far the most prevalent feature. Chat is the second most prevalent, with five sites containing this feature. Podcasts are the third most prevalent, with two sites offering this feature.

The outcome of this study (see Table 2) consists of a set of seven specific Internet social technology features that could enhance consumer control within a retail Internet banking website. The purpose of Table 2 is to provide retail banking Internet channel managers with a summarized set of social technology features for consideration when pursuing a more active approach (Singer, 2005, p.2) to utilizing the Internet channel to attract and retain customers.

Table 2 – Social Technology Features for Consideration by Internet Banking Channel Managers			
Social Technology Type	How ST Supports Consumer Control	Non-Banking Retail Website Example	Suggested Recommendation Language
Blog	Blogs allow consumers to read posts they are interested in or to post questions or comments themselves.	Amazon	Blogs could be used to display posts relevant to a customer's purchase history or user defined parameter.
Chat	Chat allows consumers to communicate real-time with others when they have questions or desire interaction.	Dell eBay L.L. Bean Lands' End Nordstrom	Chat could be used to provide customers with real-time access to customer service when they need or want help.
Collaboration	Collaboration lets consumers co-browse with someone for help in finding something on a website or conducting a transaction.	Barnes and Noble	Collaborative co-browsing could allow customers to get virtual hands-on help form customer service.
Forum	Forums let consumers discuss and share	Dell	Forums could allow customers to share

Table 2 – Social Technology Features for Consideration by Internet Banking Channel Managers			
Social Technology Type	How ST Supports Consumer Control	Non-Banking Retail Website Example	Suggested Recommendation Language
	experiences with others.		experiences with others.
Personalization	Personalization allows consumers to store and communicate store personal information with a retail organization when conducting transactions via their website.	Amazon Barnes and Noble Best Buy Dell eBay Eddie Bauer Gap JC Penney L.L. Bean Lands' End Nordstrom Office Depot Overstock.com Sears Staples Target Wall-Mart Yahoo! Shopping	Personalization could allow customers to store and communicate preferences for repeat use.
Podcasts	Podcasts let consumers download and playback multimedia files, such as audio programs or informational videos, via mobile devices or personal computers.	Amazon Best Buy	Podcasts could allow customers to download and playback informational audio or video files on the device of their choice.
Wikis	Wikis let anyone edit, delete or modify content that has been placed on the website using a browser interface.	Amazon	A Wiki web site could allow customers to share information with other customers about items offered via our Internet channel.

Based on the examples identified within non-bank retail website, channel managers should take note of the ways in which each of the social technology feature types listed above could be effectively utilized within a retail Internet banking website to provide increased consumer control of the online experience. Personalization features, such as an individual "my account" feature, could allow users to denote and save key preferences and information for use during future visits. Blogs, forums and wikis could be employed to allow customers to share their experiences with bank products and services with others in a virtual group setting. Chat and collaboration features could allow real-time access to customer service representatives in situations where one-to-one assistance is desired or preferred. Finally, podcasting could enable consumers to learn about products and services of interest in a manner that is most convenient for them.

APPENDIX A - DEFINITION OF TERMS

Term	Definition
Banking industry	Companies that provide banking services such as checking and savings; deposits; loans; leases; mortgages, and credit cards; ATM networks; securities brokerage; investment banking; insurance; and mutual funds and pension funds. Hoover's Online, http://www.hoovers.com/banking/--HICID__1028--/free-ind-factsheet.xhtml Establishments primarily engaged in accepting time deposits, making loans (mortgage, real estate, commercial, industrial, and consumer), and investing in high-grade securities. Savings and loan associations, savings banks, and commercial banks are included in this industry. Also called: Banking and Finance Industry, Wholesale Banking Industry, Banking, Internet Banking Industry, Commercial Banking Industry, Online Banking Industry, Financial Services and Banking Industry, Electronic Banking Industry, Investment Banking, and Retail Banking Industry Bitpipe, http://www.bitpipe.com/tlist/Banking-Industry.html
Blog	A blog (or weblog) is a website that is used in the manner of an online journal. Like other media, blogs often focus on a particular subject, such as food, politics, or local news. Some blogs function as online diaries. A typical blog combines text, images, and links to other blogs, web pages, and other media related to its topic. Wikipedia, http://en.wikipedia.org/wiki/Blog
Channel manager	See Internet channel manager
Chat	Online chat can refer to any kind of communication over the Internet, but is primarily meant to refer to direct 1 on 1 chat or chat rooms, using tools such as instant messenger applications… Wikipedia, http://en.wikipedia.org/wiki/Online_chat
Co-browsing	See collaboration
Collaboration	Synchronizing browser access to the same sites. As one user browses the Web, the other users trail along automatically and link to and view the same pages from their browsers. Typically accomplished with a plug-in known as "co-browsing," one application of collaborative browsing is for call center agents to help customers

APPENDIX A - DEFINITION OF TERMS

Term	Definition
	navigate the company Web site. PCMag.com, http://www.pcmag.com/encyclopedia_term/0,2542,t=cobrowsing&i=39965,00.asp
Consumer control	Providing consumers with self-service features that enable them "to dictate where, when, and how" they conduct their online transactions. Silva, 2006, p. 2
Content analysis	A content analysis is a detailed and systematic examination of the contents of a particular body of material for the purpose of identifying patterns, themes, or biases. Leedy & Ormrod, 2005, p.64 Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter). Krippendorff, 2004, p.18
Distribution channel	The method through which a product is sold including retailers, catalogers, internet commerce websites, etc. Verio.com – eCommerce Glossary, http://www.verio.com/support/documents/view_article.cfm?doc_id=1745
Financial services industry	Companies that provide products and services to facilitate the flow of money, such as credit and related services; investment-related services; oversight services, including accounting, regulatory agencies, and data oversight; stock exchange; and associated marketing services. Hoover's Online, http://www.hoovers.com/company-information/--HICID__1298--/free-ind-factsheet.xhtml
Forum	An Internet forum is a facility on the World Wide Web for holding discussions, or the web application software used to provide the facility. A sense of virtual community often develops around forums that have regular users. Wikipedia, http://en.wikipedia.org/wiki/Internet_forum
Instant messaging	Instant messaging is the act of instantly communicating between two or more people over a network such as the Internet. Wikipedia, http://en.wikipedia.org/wiki/Instant_messenger

APPENDIX A - DEFINITION OF TERMS

Term	Definition
Internet banking	Internet banking, sometimes called online banking, is an outgrowth of PC banking. Internet banking uses the Internet as the delivery channel by which to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages, and purchasing financial instruments and certificates of deposit. An Internet banking customer accesses his or her accounts from a browser— software that runs Internet banking programs resident on the bank's World Wide Web server, not on the user's PC. NetBanker defines a " true Internet bank" as one that provides account balances and some transactional capabilities to retail customers over the World Wide Web. Internet banks are also known as virtual, cyber, net, interactive, or web banks. BankersOnline.com, http://www.bankersonline.com/technology/gurus_tech081803d.html
Internet channel manager	See also Distribution channel. Retail bank managers who are responsible for management of their institution's Internet website.
Personalization	On the Web, personalization means returning a page that has been customized for the user, taking into consideration that person's habits and preferences. The personalization may be done by the user, the Web site or both and may be aimed at the general public or company employees. The Free Dictionary, Computing dictionary http://computing-dictionary.thefreedictionary.com/Web+personalization
Podcasting	Podcasting is the method of distributing multimedia files, such as audio programs or music videos, over the Internet for playback on mobile devices and personal computers. Wikipedia, http://en.wikipedia.org/wiki/Podcasting
Retail industry	Companies that sell consumer goods such as apparel, footwear, food, home furnishings, building supplies, books and videos, toys, housewares, pools and spas, and other items. Hoover's Online, http://www.hoovers.com/retail/--HICID__1518--/free-ind-factsheet.xhtml
RSS	Really-Simple-Syndication: An XML standard that lets users collect and read content feeds.

APPENDIX A - DEFINITION OF TERMS

Term	Definition
	Charron, Favier, & Li, 2006, p.4
Social computing	The term social computing refers to a social structure in which technology empowers individuals or communities as opposed to institutions. Charron, Favier, & Li, 2006, p.2 Social computing refers to the use of social software, and thus represents a growing trend of ICT usage concerned with tools that support social interaction and communication. Social computing is rather based on existing social conventions or related to specific social contexts than characterized by its technological attributes. Examples of social computing is the use of e-mail for maintaining social relationships, instant messaging for daily microcoordination at one's workplace, or weblogs as a community building tool. Wikipedia, http://en.wikipedia.org/wiki/Social_computing
Social networking	The term social networking is defined as technology and services that create unique personal profiles, map out relationships, and leverage connections to accomplish a task. Li, Charron, Bernoff, & Lonian, 2004, p.2 A social network is a map of the relationships between individuals, indicating the ways in which they are connected through various social familiarities ranging from casual acquaintance to close familial bonds. The term was first coined in 1954 by J. A. Barnes (in: Class and Committees in a Norwegian Island Parish, "Human Relations"). Wikipedia, http://en.wikipedia.org/wiki/Social_networking
Social software	Enables people to rendezvous, connect or collaborate through computer-mediated communication and to form online communities. Wikipedia, http://en.wikipedia.org/wiki/Social_software
Social technology feature	When technology and social factors converge and result in website features that support social computing or social networking. Charron, Favier, Li, 2006, p.4

APPENDIX A - DEFINITION OF TERMS

Term	Definition
Tags	A tag is a keyword which acts like a subject or category. A keyword is used to organize webpages and objects on the Internet. Each user "tags" a webpage or image using his/her own unique tage. An image or webpage may have multiple tags that identify it. Webpages and images with identical tags are then linked together and users may use the tag to search for similar webpages and images. Wikipedia, http://en.wikipedia.org/wiki/Tags
Wiki	A collaborative web site that comprises the perpetual collective work of many authors. Similar to a blog in structure and logic, a wiki allows anyone to edit, delete or modify content that has been placed on the web site using a browser interface, including the work of previous authors. ISP Glossary, http://isp.webopedia.com/TERM/W/wiki.html

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