Implementation of Inward CRM toward Organizational Effectiveness Improvement

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Abstract
Competitive advantage is achievable if an organization has a sustainable, focused, and flexible business strategy. Customer relationship management (CRM) is a strategy often employed by service organizations in an effort to attain competitive advantage in the marketplace. In fact, the foundational components required for successful customer relationship management (CRM) externally, have direct applicability to internal relationships between organizational IT departments and the business units they support. Business departments and staff are the “customers” of the IT department. The same relationships and communication processes must be built, nurtured and managed very similarly. Horizontal integration and alignment across organizations, especially between IT and the business units they support, is directly affected by the items described in the preceding sections. In summarizing and categorizing much of the extensive literature related to the business and IT integration and alignment problem, clear themes evolved. Relationships, communication and horizontal integration are critical and often causal success factors across each area. These factors form the foundation and building blocks for constructing a comprehensive and integrated assessment model, and a prescriptive framework for improving this internal relationship. This study tries to show the effectiveness of Applying Inward Customer Relationship Management Principles for Improving Business / IT Integration and Performance in banking industry. Our results suggest that Business units need to understand their interdependency so that there is a blending of technology with processing. Encouraging such interaction requires leadership by example, an understanding of the value to the customer and the organization, performance metrics aligned with cooperation as opposed to individual successes, and local management efforts to build cross-functional relationships.

Keywords: Inward CRM, Banking industry, Information Technology, Business/IT Integration
Introduction
The basis of the strategic CRM approach is to create value for customers with the premise of creating loyalty and obtaining value from customers in return (Armstrong & Kotler, 2010; Wu, 2010). CRM has been widely accepted and utilized as a strategic marketing tool to enhance an organization’s competitive position throughout various industries. Strategic CRM is widely seen as a business model that can be an important driver of quality, profitability, and competitive advantage (Day, 2003; Wu, 2010). Numerous studies (Elbanna, 2009; Musico, 2009; Wu, 2010) have examined the implementation, practical application, and effectiveness of strategic CRM in business and industry. Elbanna noted that putting a strategic CRM plan into action is a complex process, requiring alignment between the operational, analytical, developmental, and cultural elements of the plan throughout implementation (Wang & Davis, 2008; Wu, 2010).

Although statistics clearly indicate that the lack of integration and alignment between IT departments and the business units they support remains a critical problem, why is it such an important issue? Xia and King (2002) reference numerous empirical studies demonstrating the importance of aligning IT and business units to achieve organizational effectiveness. This includes many studies that show a direct relationship between the level of integration and company performance and profitability. “Not only is IT redefining the economics of information, but it is also defining the new economics of corporate growth. In 1998, corporations spent over 1 trillion dollars on IT (though it is still too often viewed as an expense rather than an investment), and most analysts see this as an increasing trend” (Mann & Gotz, 2002). IT has become a necessary commodity and significant portions of the organizational budget are allocated to supporting technology requirements. However, historical failures of expensive projects, continuous failure to meet expectations, the high cost of labor, and the rapid obsolescence of hardware and software, demand tighter scrutiny and increased pressure to justify return on investment (ROI). Determining ROI on new technology projects has always been challenging and the problem is intensified by the accelerating speed at which new technologies appear. Companies should monitor new technologies and look for opportunities to adopt or implement them. However, Michael Porter contends that “the ability to have the most scientific technological capability in a particular field does not seem to be that important. It’s more the ability to apply technology that is the source of advantage. And to apply technology, you’ve got integrate it with a lot of other things” (Gibson, 1996). While companies need to adopt architectures to ensure integration for future efforts, they must also face the challenge of integrating their portfolio of stovepipe legacy application and systems. “According to a leading survey, the typical Global 2000 Corporation has 50 applications and spends 30% of the IT budget on application interoperability today. In 1998, projects conducted by small-to-medium systems integrators showed that 65% of the budget for design and code development was devoted to integration aspects of the system, not functionality that people actually get to use” (Creamer, 2000). These figures highlight the effects of years of disjointed, stovepipe development conducted in the absence of a comprehensive and integrated IT architecture. Although the research and statistics paint a bleak picture for most companies, business and information technology integration is extremely important because it forms a foundation extending across the entire organization. “Modern business and technology are intertwined to the extent that running a modern company in all of its complexity and scale would be impossible without information technology” (Severance & Passino, 2002). In much of the information
systems literature, the relationships between business users and IT personnel is identified as central to the success of system development projects and organizational performance (Beath & Orlikowski, 1994).

In our knowledge-based economy, information is also an asset, and leveraging this asset has strategic implications. As Peter Drucker (1998) points out, “the new basic resource, information, differs radically from all other commodities in that it does not stand under the scarcity theorem. On the contrary, it stands under the abundance theorem”. Successfully leveraging IT allows “smaller and more flexible firms, often start-ups, to compete effectively with established market leaders. Companies like Federal Express, Wal-Mart and Amazon.com have used information technology to redefine traditional standards, create competitive advantage, and become market leaders” (Mann & Gotz, 2002, p. 255). The changing economy is fueling an increased need to capture and leveraging information for maintaining efficient business processes, creating competitive advantage, and providing high levels of customer satisfaction and loyalty. The challenge is to identify those dimensions that are critical to integration, establish key metrics for assessing these dimensions, and implementing specific initiatives for improving any deficiencies. Considering the prevalence of business IT integration problems and the high stakes involved, it is not surprising to find a considerable volume of literature and research on the topic. In examining and classifying dozens of research articles on business and IT integration, several common items were identified. Interestingly, these items shared significant similarity to those that precipitated from analyzing research on another contemporary topic that has received considerable recent attention, Customer Relationship Management (CRM) project failures. The similarity is in no way counter-intuitive. In fact, the foundational components required for successful customer relationship management (CRM) externally, have direct applicability to internal relationships between organizational IT departments and the business units they support. Business departments and staff are the “customers” of the IT department. The same relationships and communication processes must be built, nurtured and managed very similarly.

Review of Related Literature

The following is a summary of key themes that emerged from an in-depth examination of the literature and research concerning business and IT integration and prerequisites for CRM success. The listed references are just some of the many papers that discuss the identified themes and additionally demonstrated that these same themes were shown to be highly correlated to external customer satisfaction and organizational performance.

Extensive research has been conducted on the economic intricacies related to the implementation of strategic CRM (Bull, 2003; Wu, 2010), value of strategic CRM as a business model (Day, 2003; Solnet, 2006), and the effectiveness of strategic CRM on customer satisfaction in service industries (Evans, Stan, & Murray, 2008; Mohsin & Lockyer, 2010). Apart from the existing research, few studies have addressed the link between strategic CRM and quality service delivery in the banking industry as a possible competitive advantage, particularly from the service provider perspective (Ford, Wilderom, and Caparella, 2008). Three components of strategic CRM that influence quality service delivery from the service provider perspective were of interest in this study, including customer centricity (Ford et al., 2008), workplace learning (Savanevičienė Stuikaitė, & Silingiene, 2008), and management controls (Mohsin & Lockyer, 2010). Understanding the perceived influence these strategic CRM components has on the service provider’s ability to deliver quality service in banks, from the perspective of the service
provider, presents management with an opportunity to increase competitive advantage by recognizing what intrinsically motivates individuals to become exemplary service providers (Grant & Berry, 2011).

Our society has evolved into what Daniel Bell (1976) refers to as a post-industrial society where services and knowledge have become the primary industry. Concurrent with this evolution has been the migration to suburban communities resulting in reduced interaction with our neighbors. This knowledge-based service economy and new loosely coupled community structure has resulted in much of our social interaction occurring in the workplace. Organizations are as much a social setting as they are a place of work or production. Combined with other internal and external factors, they develop their own “cultures” and “sub-cultures”. “Culture can be defined as (a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group, (c) as it learns to cope with its problems of external adaptation and internal integration, (d) that has worked well enough to be considered valid, and therefore (e) is taught to new members as the (f) correct way to perceive, think, and feel in relation to those problems” (Schein, 1990). An organization’s culture affects behaviors and attitudes at all levels and the results mimic those in general society, where biases can determine inclusion or exclusion and even prejudice. An organization’s cultural norms impact the treatment towards various types or groups of individuals such as administrative staff, maintenance personnel and IT staff. “The assimilation of technical people into an organization presents a special challenge in the development of a learning organization. This challenge stems from the historical separation of a special group that is seen as standing outside the everyday part of the business” (Langer 2001). IT personnel have always been seen as ‘different’ fixtures, as outsiders who are not part of the mainstream organization. Perhaps because of their technical habits or perceived differences in their values, IT personnel can become marginalized outside the core social structures of businesses (Langer, 2001). Unfortunately, many companies do not address the issue directly and a growing number have chosen to solve this problem by outsourcing their IT services, effectively creating an even wider gap between the business users and the developers. The critical significance of culture demands that managers and leaders not only understand their own company’s culture and how it affects processes and change management, but how they can impact or direct it. Culture is not a state, it is emergent and temporal and is constantly being invented and re-invented and can therefore be influenced, though it can be difficult (Avison and Myers, 1995).

Despite potential challenges, one of the most direct ways culture is influenced is through the attitudes and behaviors of managers and leaders. In Reich and Benbast’s (2000) extensive analysis of the impact of the social dimension on business and IT alignment, they found strong evidence of cultural shifts that occurred as the result of a dramatic management change. In one relevant example, a financial services executive instituted a new practice that required all IT people to visit each of the 20 branch offices at least once a year. This was considered a “revolutionary” idea. The result was almost instantaneous improvement in shared domain knowledge, communication and empathy. Such practices can have a tremendous effect on breaking down cultural walls and reducing the internal social barriers. Organizational culture and attitudes evolve over time and are heavily influenced and shaped by its leaders (Goleman, 2002). Leaders are critical to the operations, direction and success of any group and there is a strong correlation between a leader’s personality and actions and the culture of that group (Wren, 1995). Although largely influenced by organizational leadership, the culture and attitudes among its employees serve as a distinct component of IntCRM that impacts the overall
climate and performance. Within the context of IntCRM, attitudes and behaviors related to customer-service are the most relevant. Much of the recent research on Customer Relationship Management provides the basic measures for such assessments. Contributing research includes the service logic model (Kingman-Brundage et al, 1995), recent work on Total Quality Management and competitive advantage (Tena et al. 2001) and the CRM capabilities portfolio (Plakoyiannaki & Tsokas, 2002).

As established, CRM is not simply a technological innovation: it is a strategy, a philosophy, and a cultural movement. The delivery of quality service within a strategic CRM framework from the perspective of the service provider is complicated, and the research literature does little to simplify it. Not enough knowledge is available about the relationship between CRM strategy, customer centricity, management controls, workplace learning and the delivery of quality service from the perspective of the individual service provider (Bolton, 2004; Ford et al, 2008). How service providers perceive the strategic direction, philosophical implications, cultural intensity, service quality expectations, and tactical controls of a CRM initiative is not clear, and there is no apparent understanding about the influence workplace learning may have on service provider’s perceptions. Workplace learning is a formidable control mechanism (Savanevičienė et al., 2008), which, if used properly, may establish a customer centric disposition within each individual. The need for an organization to understand its employees’ definition of CRM and customer centricity is crucial (Finnegan & Willcocks, 2007) and training is essential. It is essential for all employees of an organization to be informed about the core principles of a strategic CRM initiative (Zablah et al., 2004). Not enough is known about the level of knowledge and understanding service providers should have about a CRM initiative to affect the delivery of quality service. Because CRM is a strategy embedded within the entire organization, the possibility of employee rejection, a lack of planning, or poor leadership can result in failure. For this reason, all levels of a CRM strategy, from the enterprise level strategy all the way to the functional strategy, should be aligned with management controls. By striking the right balance between formal and informal controls to enhance the goals of a CRM strategy, an organization can make an enormous impact on the effectiveness of its customer relations’ goals (Wang & Davis, 2008).

Scholars and practitioners have thoroughly studied the definition of quality service throughout literature. The delivery of quality service is a complex topic, and the research literature is overwhelmingly vague. Notably, a distinguishing factor of delivering quality service is the inherent preoccupation with effective and efficient relations between all stakeholders. A customer centric marketing approach to delivering quality service, such as CRM, requires a consistent message that resonates throughout the organization on the utmost importance of customer responsiveness. Review of literature showed that there is a need for inward CRM toward improvement of business/IT alignment and organizational effectiveness. But what are key success factors and capabilities in this era? This study using a comprehensive sampling, tries to prove significant effects of some factors in banking industry to make a clear guidance for managers.

Research Methodology & Findings
Based on literature we found 4 key factors about inward CRM that influence business/IT integration namely: Technology capabilities, Customer-centric culture, Effective leadership, Horizontal collaboration.
Research can be classified as quantitative and qualitative in nature. Quantitative research is the focus of the current study. According to Ary, et al. (2002), quantitative research explains phenomenon by using objective measurement and statistical analysis of numeric data. Quantitative research can be classified as either experimental or non-experimental. Experimental research involves the manipulation of one variable on another variable. Non-experimental research looks for relationships among variables, but does not manipulate them. Three types of non-experimental research include: a) causal-comparative research; b) correlational research; and c) survey research (pp. 24-25). The methodology chosen for the present study is survey research. Survey research provides a broad picture of the subject being studied and provides an easy way to generalize to a population (Salkind, 2000). Many advantages and disadvantages have been cited in regards to survey research. Miller (2004) cites the following advantages: a) the ability to collect a wide scope of information from a large population; b) it deals with a real situation in the sense that a researcher collects data in the actual situation; and c) it provides a first step in developing hypotheses or in identifying more specific problems for research. The disadvantages suggest that survey research can be: a) more extensive than intensive in the sense that it does not dig down to discover deeper issues below the surface; b) demanding of time and money; and c) lacking in external validity (p. 61). The current study will employ a cross-sectional method. Salkind (2000) highlights some of the advantages and disadvantages for using this type of approach. The advantages for using cross-sectional survey research include: a) it is relatively inexpensive; b) the study can be conducted in a short-time span; c) there is a low-rate of subjects who drop out the study; and d) it requires no long-term administration or cooperation between staff and participants. The disadvantages are related to the following: a) it limits the comparability of groups; b) it does not reveal the continuity of development on a person-by-person case; c) it examines people of the same chronological age who may be of different maturational ages; and d) it does not reveal the direction of changes that may take place in a group (p. 202). For purposes of the current study, the advantages far outweigh the disadvantages for using cross-sectional survey research. The setting of this study, in order to examine 4 hypotheses in banking industry, is a survey based case study of Eghtesade Novin Bank in a 2 months period of data gathering. Based on the literature review, seven-point Likert scales were identified or modified to measure each of the constructs. Quantitative interval-scaled data were obtained for both dependent and independent variables. Within the context of the current study, independent variables are those variables which are not influenced by any other variable. In contrast, a dependent variable is defined as one that is influenced by another variable in the model. The data collected was analyzed using SEM (Structural equation modeling). The SEM techniques were applied for discussion concerning a) the measurement model’s GOF (Goodness of Fit) and construct validity, b) converting the measurement model to a structural model, and c) assessing the structural model’s GOF and the significance, direction, and size of the structural parameters. Structural equation models require a fairly large sample size for effective analysis (Tabachnick & Fidell, 1996). General structural equation models (SEM) are comprised of two interrelated components, a measurement model and a structural model. The measurement model specifies relationships between observed variables (manifest variables) and latent variables (Medsker, Williams, & Holahan, 1994), while the structural model explains the relationships among latent variables. Anderson and Gerbing (1988) advocated a two-step approach starting with the measurement model. The measurement model builds on a priori theoretical foundation to describe or explain the relationship between the underlying latent factors and the empirical
measures. Confirmatory factor analysis (CFA) is used to evaluate the measurement model with respect to the degree to which the data are consistent with the proposed model. Thus, testing whether the observed variables represent the latent variables well and the overall fit of the measurement model needs to be done prior to testing the proposed structural model (Anderson & Gerbing, 1988). It is very common to consider the re-specification of a baseline measurement model when the initial model fails to fit the data adequately. Re-specification of the model, however, is controversial in that a re-specified model with an improved fit to the data may not be the best-fitting model in the sense that it capitalizes on chance co-variation in the sample data and thus, compromises the generalizability of the model (MacCallum, Roznowski, & Necowitz, 1992). To avoid this problem, a robust approach to model generation is a cross-validation method, which cross-validates the model results with two independent sample sets. That is, having two sub-samples randomly split, where one sub-sample (calibration sample) is used to assess the model and the other sub-sample (validation sample) is employed to determine the predictive effectiveness of that model. Following figures show SEM models for 4 dimensions: Technology capabilities, Customer-centric culture, Effective leadership, Horizontal collaboration.

**Figure 1: Technology capabilities Standard Model**

![Figure 1: Technology capabilities Standard Model](image-url)
**Figure 2: Customer-centric culture Standard Model**

Chi-Square=26.98, df=14, P-value=0.01937, RMSEA=0.097

**Figure 3: Effective leadership Standard Model**

Chi-Square=38.82, df=24, P-value=0.02849, RMSEA=0.079
The likelihood that the model capitalized on chance is reduced considerably with cross-validation. A number of fit statistics are applied to assess the goodness-of-fit of the model. Measures of fit include the goodness-of-fit index (GFI), the adjusted goodness-of-fit (AGFI), the comparative fit index (CFI), the normed fit index (NFI), the Tucker-Lewis coefficient (TLI) which is also called the Bentler-Bonett non-normed fit index (NNFI), and the root mean square of approximation (RMSEA). Values over 0.9 on the four indexes GFI, AGFI, TLI, and NFI indicate reasonable fit (Jöreskog & Sörbom, 1996). The CFI is the least affected by sample size and values of CFI over 0.9 indicate a reasonable fit and values over 0.95 represent a good fit (Holmes-Smith, 2001).

The most important indicator of goodness in standard models is RMSEA. This indicator represents the discrepancy per degree of freedom, which is measured in terms of the population, not only in the sample used for estimation. RMSEA is relatively robust to sample size and values between .00 and .05 indicate a close fit, values between .05 and .08 indicate reasonable fit, and RMSEA greater than 0.1 reflects a poor fit. All of our RMSEA was less than 0.1 that prove the fitness of models.

A panel of Experts were informed on the study and provided directions in order to critique the proposed instrument for improvement. The experts were asked to categorize and rate the entire instrument and each item within the questionnaire for content, clarity, wording, format, and thoroughness, ease of use, focus, and appropriateness. The panel of experts allowed for the examination of face and content validity to ensure the items developed obtain the proper results. This procedure identified if any questions needed updating due to new developments in the field of service quality and safety quality. Moreover, a confirmatory factor analyses (CFA) was carried out to assess the validity of the questionnaire. In other words, this analysis assessed the fit
between the data and the specified CFA Measurement Model. The second set of analyses tested the structural model.

Discussion & Conclusion
There are volumes of articles and books devoted to improving leadership capabilities in organizations. It would be naive to suggest a simple formula that would be applicable to the infinite spectrum of organizational situations that exist. However, recent research regarding leadership styles and emotional intelligence provides some key areas to consider when attempting to improve leadership effectiveness, especially within the context of internal relationship management. With regards to style, Jim Collins, author of Good to Great (Collins, 2001) offers some observations regarding what he calls Level 5 leadership. Collins and his team conducted extensive research into companies that stood out as the best in their industries over decades. Among other characteristics, his research team discovered an amazing similarity among the company leaders. The leaders that Collins observed during his research certainly possessed what Dan Goleman calls emotional intelligence (Goleman, 2002). Goleman analyzed leadership from a psychological perspective to uncover the neurological foundation for various types of human interactions. He emphasizes the benefits of establishing resonant communication behaviors for improving relationships. He proposes a classification system for leadership styles and behaviors and suggests that in a corporate setting, most leaders will use all of these styles as situations demand, but in general, some of the should be used more sparingly than others. In some ways, an assessment of technology capabilities may appear somewhat recursive when applying the IntCRM model to the problem of business and IT integration. However, technology can be both a facilitator and a product of effective IT integration. As a facilitator, technology capabilities should improve information processing and flows within an organization, including their capabilities for collecting, organizing, sharing, and most importantly, mining the data. However, as the model suggests and this research supports, these capabilities should not be developed unilaterally by IT. Such behavior is an example of what Kingman-Brundage, et al. (1995) refers to as the ‘technical logic’ functioning autonomously. Such an approach presents special problems in today’s environment where outsourcing has become increasingly popular. Many companies see outsourcing as a way to “off-load” internal problems. However, this increases the complexity required to maintain connected processes, such as efficiently collecting and maintaining data. An atmosphere that not only accepts, but encourages and rewards horizontal collaboration is also created by organizational leadership and culture. Not only does executive leadership play an important role, management at all levels can inhibit or encourage collaborative behavior by their own actions, comments and language. It is easy to assess the organizational propensity for creating internal barriers by simply observing internal relationships in action. The last dimension, customer-centric attitudes and behavior, is also largely impacted by leadership, but often, it is local leadership, not executive leadership that is more critical. Great customer service can be achieved at any level of the organization. When it occurs, there is always a local manager and/or staff member(s) that have made excellence in customer service a top priority. This was certainly the case in our research analysis between the Control Group and Test groups. The Test group measured their own success on how satisfied the business units were while the Control group measured their success on how fast they were writing code or database throughput metrics. Improving or changing local attitudes can be accomplished on two fronts. The first, using the same change agent strategy discussed in the employee satisfaction section, leaders and managers in key positions can be trained or replaced.
The second focus is on the staff. The newly trained leaders, along with other corporate training resources, must develop this customer service ethic while rewarding and encouraging excellence in performance. There are two important items that must be in place for this to be successful. First, employees must have the authority to solve customer problems. This concept of empowerment has been around for decades, but rarely applied internally. Too often, when a decision is required to solve an internal problem, staff members feel that the department manager is the only with that authority. If there is a clear vision along with well understood processes and procedures, a significant amount of decision making authority, especially related to problem solving, can be delegated to the lowest levels. A critical adjunct in establishing an empowered staff is tolerance for mistakes. This same principle that applies to supportive, effective leadership and encouraging horizontal collaboration, applies equally to developing a customer-centric staff and culture.
References


