Technology is often-lauded as a means to facilitate customer relationship management (CRM) efficiencies between companies and the customers they serve (Payne & Frow, 2005). Technology-driven CRM is aimed at enhancing the relationship a firm has with its customers and has become very popular with the executive leadership team within companies. Consequently, the relational aspects of customer interactions have become a fashionable marketing trend. Each year, companies invest billions of dollars to develop and implement CRM strategies, tools, and infrastructure. Forrester Research estimates that in 2010, over $11 billion dollars will be spent annually on CRM systems with the rate of growth expected to increase significantly due to CRM systems being a critical necessity for enterprise-wide competitive advantage (Forrester Research, 2008). With such a significant level of spending, it is clear that CRM, fueled by new technology, is perceived by business executives as vital for improving customer-company interactions.

However, while companies strive to deliver positive service that will lead to good relationships with their customers, many firms struggle to effectively design, develop, and implement effective CRM programs (Bolton, Grewal, & Levy, 2007; Boulding, Staelin, Ehret, & Johnston, 2005). A consistent finding in the CRM literature is that most CRM initiatives fail to deliver expected results with failure rates estimated between 50-75%. A synthesis of these studies reveals that issues related to people often tip the balance between CRM success and failure. It seems that management’s good intentions are often over-shadowed by the complexity and multidimensional nature of CRM – particularly as it relates to the interactions in the customer and front line employee (FLE) dyad.

One cause of CRM failure, as uncovered in our previous work (O’Reilly & Paper, 2010, in press; O’Reilly, Paper, & Marx, 2010), is the unanticipated impacts of company growth. Historically, a common means used to address the challenge of unanticipated growth is via management imposed control structures or ‘walls’ that force implementation through people and systems as a way to control and standardize the service interface and resultant customer experience(s). Even when driven by good intentions, this tactic is often employed without recognizing the insulating impact that such control mechanisms might have on customer relationships. Examples of these walls include service silos whereby customers are forced to use central service desks for product exchanges or returns; knowledge silos whereby
management elects to train only certain positions or employees to handle specific types of transactions; and decision silos whereby only select individuals are allowed to handle any type of service recovery effort on behalf of the company.

**CONTROL STRUCTURES IN PRACTICE**

Today, most retail organizations have implemented some type of ‘silo’ or central collection center or physical location used to process customer issues. These service centers are typically a separate area or service desk within a retail location where customers are ‘sent’ for all but routine transactions. For retailers who use the phone and/or Internet as the primary interaction channel, designated agents commonly handle customer issue resolution. However, the same central collection mentality is commonly implemented creating silos in the same manner as physical location implementation. Although service centers are ubiquitous, within brick-and-mortar locations, this type of service center implementation is a recent phenomenon. The emergence of this phenomenon may correspond to the development of larger retail store footprints and/or new legislation (e.g., tobacco) requiring that certain products be kept under lock and key.

It is clear that retailers implement service centers for a variety of reasons. They may desire to control where and how service recovery decisions are made and by whom. They may desire a means to speed up checkout lanes by removing any non-routine transaction. They may simply implement a service center because all of their competitors do so. Regardless of why service centers are implemented, FLEs that work in service centers are provided access to additional information, training, and subsequently given the authority to make decisions that other FLEs are not.

**CONSEQUENCES OF SERVICE CENTERS ON CRM**

In a traditional customer service center, it is likely that deep knowledge is acquired amongst the small group of FLEs that work in these areas. However, for those FLEs not privy to the same information, implications affecting morale and service can arise. For instance, in our previous work, we have observed and interviewed dozens of FLEs. In one not uncommon exchange with a FLE at a mass merchandise retailer, we questioned this employee about the process customers use to return or exchange a defective product. Sarcastically, the FLE said:

Well I can’t really return that defective product for you Mrs. Customer… I know it is only 69 cents, but I can’t walk to the shelf and get you one that works. I am going to give you a sticker and you’ve got to go to a separate line, because the company doesn’t trust me to make 69-cent decisions.

The FLE is required to send customer issues to the service desk rather than being empowered to handle such issues himself, regardless of how simple the issue might be. Consequently, the FLE never develops experience in handling customer issues and does not acquire the kind of specialist knowledge typically concentrated in a service center. For those FLEs working in the service center, this specialist knowledge is acquired over time by dealing with various customer issues (both routine and non-routine) that occur at the service center. In time, the small group of FLEs working in the service center can become recognized as experts in their respective areas and based on this expertise, are empowered with progressively more decision-making authority since they seem to be the only FLEs in store that know how to handle certain issues. Of course, this can result in service issues for customers.

During our interactions with FLEs over the years, many have described the satisfaction...
and pride they take in knowing the answers to customer questions and being able to solve problems. Even more powerful is when FLEs perceive themselves to be the ‘go to’ employee that other FLEs seek out for answers and help. Being identified as the ‘go to’ person who is knowledgeable or even expert is a powerful ego driver and helps to explain why many service center FLEs are resistant to formal systems (e.g., CRM technology) or training that would provide fellow FLEs access to the knowledge that they have acquired over time. This creates certain tensions between systems design and implementation and the resultant service levels provided to the customer primarily due to two conditions: (1) the evolution of service specialists, and (2) programs that serve company rather than customer needs.

**EVOLUTION OF SERVICE SPECIALISTS**

Considering the previous examples and drivers of both service and knowledge silos, it is not difficult to imagine how a decision silo might result. Due to the company structure, the processes established for handling customer issues (e.g., customer service desks), or the emotional context of retail employees charged with handling customer issues, certain employees are trusted to make decisions that other employees are not based on their experience in handling similar problems. Considering ego as a powerful driver, it is clear that not all knowledge silos result from simple company processes or procedures such as the choice to provide specialist training to employees on the floor but not to cashiers. From many service desk FLEs’ perspectives, it appears they feel “entitled” to their expertise and take great pride in being able to handle problems that other FLEs cannot. These service center FLEs have constructed their knowledge and experience into expertise that is recognized by other agents; thereby making themselves the knowledge silo in the service center. Based on the high degree of pride and self-importance that FLEs derives from their role as expert, it is unlikely that they would perceive the need for others to acquire the same degree of knowledge and expertise. Therefore, company programs designed to disseminate information beyond silos may be undermined by employees who want to retain expert status among their peers as a way to keep their own self-identity intact. Such situated undermining is the direct result of the company’s own strategically designed and implemented processes for handling issues, and the resultant emotional contexts of retail employees charged with this duty who are only following company policy. This situated undermining phenomenon results in a ‘self-feeding loop’ and the natural evolution of ‘service specialists’ within retail venues. Such an approach to customer service, with a few specialized knowledge experts, is thereby reliant on FLEs relative access to information and subsequent knowledge development.

**SERVING COMPANY RATHER THAN CUSTOMER NEEDS**

The process of segregating certain transactions or customer issues to a service center with a few specialized experts to serve customers are certainly intended to help not hurt customer-company interactions. While these aspects of managerial control may have been initially orchestrated as a means to improve service, they actually create ‘silos’ that insulate non-service FLEs from important customer service knowledge that subsequently negatively impacts customer service. Over time managerial orchestration to centralized service centers fosters a silo mentality that may ‘worm its way’ into the infrastructure of the firm thus ‘insinuating’ such a mentality into procedural and process outcomes.

Such managerial orchestrations become lasting and unquestioned elements of the retail status quo and often rely on technology as a control mechanism to govern employee behavior or regulate policy implementation. Thus, technology, while the intention is to enhance process outcomes related to the customer, may
serve to further institute silo thinking into other structural and process elements in the firm and, subsequently create a negative impact on process outcomes rather than a positive one.

This reactive and inwardly focused construction of silos often serves company rather than customer needs and can result in deteriorating service levels based on the type of customer-company interaction occurring. This occurs because a ‘silo paradigm’ constrains both the flow and usefulness of information and minimizes the value potential of technology as a builder of relationships rather than an enforcement mechanism governing FLE behaviour.

Without the fluid permeation of key information across and within an organization, CRM initiatives are suboptimal at best. Likewise, approaching CRM from a purely technical rather than strategic perspective can result in ‘data-focused’ programs rather than ‘customer-centric’ service. “To stand out in a commoditized market, companies must understand what customers truly value. The only way to do that is to break down the traditional, often entrenched, silos and unite resources to focus directly on customer needs” (Gulati, 2007, p. 108). Customer needs seem to be the key driver that has relegated silos to the figurative ‘dog house’ with the realization that customer needs, expectations, and demands are dynamic and changing over time:

*[C]ompanies must synchronize the actions of business units and the goals of the enterprise as a whole more tightly than ever. This is because customers increasingly demand integrated or global solutions, which require the collaboration of multiple business units or locations.* (Ready, 2004, p. 94).

It is suggested that to adequately serve customers, the people, processes, and technologies of an organization must be organized and integrated within and across the customer-facing structures of a firm. “One of the key elements of any CRM plan is integration, the unification of all your company’s data sources to create a single, holistic view of each customer. While technology is most often used to make this happen, integration is just as dependent on behavior” (Lager, 2005, p. 49). In this context, technology can help to solve issues related to driving information within and across an organization and it is our view, that a ‘sweet spot’ exists whereby technology’s usefulness can be maximized in CRM endeavors to mollify the impact of service center silos.

**TECHNOLOGY’S CRM “SWEET SPOT”**

Intuitively it is easy to grasp that not all customer-company interactions are alike. For instance, customer expectations for service are different when they are seeking toothpaste in a grocery store versus their expectations for service and guidance from a financial planner. While there are many perspectives from which to view the various types of interactions, one useful perspective is first to consider the degree of knowledge needed by an FLE and second, the nature of the interaction (e.g., routine or non-routine). We posit that strategically considered technology is vital for interactions that require any type of specialized knowledge whether it is routine or non-routine. We suggest that a ‘sweet spot’ exists for technology to yield immediate and value-laden results when applied against interactions requiring specialized knowledge. This sweet spot is depicted in Figure 1.

**Routine Interactions Requiring Specialized Knowledge**

Considering interactions requiring specialized knowledge, those that are routine in nature may benefit from an element of technology-enabled automation. Consider the case of a medical office. Every day, invoices are generated and claims to insurance companies are submitted. While the submission of insurance claims for services provided is a routine occurrence
throughout each day, some degree of specialized knowledge of the various insurance companies and their respective plans and service limits is needed. In many offices, this duty is performed by a few select FLEs, which often results in ‘lumpy service’ for clients who happen to receive service on a day when the ‘billing specialist’ is not available.

However, it is easy to imagine how this specialized knowledge could be embedded through technology-enabled tools that allow many FLEs within the office to perform this task, thus minimizing the chance of service failures or constraints. By embedding this knowledge into automated tools, this process is opened to others within the business, thereby expanding the capacity of the firm. In this situation, it appears that, “Technology can make a major contribution to achieving an outstanding customer experience” (Payne & Frow, 2004, p. 533). Technology-enabled and process-based solutions will likely yield efficiency gains for the medical office and service improvement for the clients.

Chen and Popovich (2003) argue that technology “…assists with the re-design of a business process by facilitating changes to work practices and establishing innovative methods to link a company with customers, suppliers and internal stakeholders” (p. 677). Accordingly, the strategic implications for interactions that require some degree of specialized knowledge rely on the ability of a company to automate the processes as a means to better link all stakeholders. This idea supports the work of Berry (1995) in which he argues that information technology “enhances the practical value of relationship marketing by efficient performance of key tasks” such as “personalizing service encounters” and “minimizing the probability of service errors and breakdowns” (p. 238). Consequently, through the technology-enabled automation of interactions requiring specialized knowledge, CRM systems design is more likely to capture the necessary knowledge for effective relationship development. Meaning, in a scenario with no automation, only a few FLEs will be subject matter experts in submitting claims. Because this function is reliant on the (tacit) knowledge of these FLEs, it is unlikely that all components of the invoicing will be captured in a formal manner. Therefore, the details will not be available for other employees to utilize in their interactions with this same patient. Lack of such automation could

![Figure 1. Technology’s Sweet Spot](image-url)
result in gaps of information between FLEs, thus constraining the value creation between company and customer.

**Non-Routine Interactions Requiring Specialized Knowledge**

Likewise, non-routine interactions requiring specialized skills and knowledge can also benefit from a technology ‘sweet spot’. For instance, salon hairstylists serve differing customers whereby each client presents a different set of expectations and needs. In these instances, a company-centric focus that relies on technology-enhanced protocols is warranted because maintenance of a relationship between a customer and company are highly dependent on the actions of retail employees (Gummesson, 1987).

Reichheld (1994) argues that these types of interactions often build bonds between the customer and FLE rather than the company. Consequently, company-centric focus is important to ensure that the relationship forms between the company/brand/location and customer, rather than with a specific individual service specialist such as a hairstylist. While value is created for the customer through their access to a specialist, the value to the company comes from controlling the relational aspects of future interactions and follow-up. Therefore, the strategic implications for non-routine interactions requiring specialized knowledge rely on the ability of a company to control the linkage (e.g., technology-enhanced protocols) between customer and company and the resultant relationship development.

For instance, controlling the data (e.g., customer information) that results from interactions is a key aspect of CRM systems design. Based on the specialized knowledge required and the non-routine nature of the interaction, these types of interactions may present both the highest degree of risk and benefit for customers and companies with regard to customer-company interactions that occur over time through CRM systems. This may be due to higher expectations on the part of the customer due to the nature of the interaction, and a higher degree of connection that may result between individual service specialists and the customer.

Previous research supports this notion and Beatty, Mayer, Coleman, Reynolds, and Lee (1996) suggest that bonds tend to form between the employee and customer rather than the customer and firm. Without effective CRM systems in place to capture, analyze, and fluidly disseminate customer information across and within the firm, the greater the risk is that the relationship will not transcend a one-to-one connection between service specialist and customer; as a result creating risk of customer defection when the employee changes jobs within the company or worse yet, seeks employment elsewhere. A company-centric focus should work to guard against threats to the most valuable asset of CRM systems: customer data. Aptly deployed technology can help organizations breakdown silo thinking, improve interactions between customers and FLEs, and control data protocols that can add long-term value for all stakeholders involved as illustrated in Figure 2.

**CONCLUSION**

From a company perspective, employees perceive the need to develop, extend, and leverage the relationship with customers as their primary mission. In line with previous research, “relationship marketing is typically more effective when relationships are critical to customers such as for service versus product offerings…” (Palmatier, Dant, Grewal, & Evans, 2006, p. 150). If we consider the customer-company interaction that occurs through service silos, the customer will typically interact with the silo specialist to resolve issues due to the need for specialized knowledge. By forcing the customer to a service or knowledge silo, the organization may ultimately be facilitating a relationship between the service specialist and customer rather than between the company and customer.
Likewise, although relationship marketing and CRM are often used interchangeably in the literature, Ryals and Payne (2001) suggest that relationship marketing centers on the relationships between multiple stakeholders, while the concept of CRM focuses primarily on the customer. CRM relies on value-added knowledge fluidly permeating the firm to allow all stakeholders to develop appropriate relationships with customers. To achieve fluid permeation of knowledge, CRM innovation requires energy, focus, training, and investment in new tools and software to aid in the development of value-added CRM systems. The efficacy of such systems is their ability to achieve alignment of the people, processes, and technologies of a company with its strategic intent to maintain and enhance customer relationships and create value. “Traditionally, CRM has been about breaking down silos by integrating sales, service, and marketing. This can build a silo of its own” (Lager, 2005, p. 50) if the CRM becomes separate itself. Accordingly, when silos exist, they inherently constrain the flow, access, and availability of information across the organization, thereby rendering CRM ineffective.

Understanding the various interaction types and how each interaction type may be affected by silos or service specialists is crucial for designing customer experiences that will sustain over time. The importance of diagnosing customer-company interaction types correctly and subsequently developing strategies to support these interactions is critical for CRM system design and success within the company. “CRM software could evolve to CEM (customer experience management) software in recognition of the central role of customer experiences” (Lusch, Vargo, & O’Brien, 2007, p. 11).

To improve the interaction with key stakeholders such as shareholders, customers, vendors, and employees assumes that companies can correctly diagnose the tasks requiring specialized versus general knowledge and can subsequently maximize technology’s sweet spot for these interactions. “Without a unified view of the customer, marketing, sales, and service/support departments will all be working in the dark, chasing goals that don’t fulfill the organization’s broader ones” (Lager, 2005, p. 52). Silos and service specialists implemented in suboptimal conditions must be torn down
to allow the rebuilding of customer-focused organizations. Aptly deployed technology is a key for achieving this goal.

REFERENCES


