

## Chapter 3

# Five Small Secrets to Systems Success

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*A pervasive theme today regarding the performance of new systems is “many systems are technical successes, but organizational failures.” Systems that are well designed often fail to meet user expectations at implementation. This chapter details and analyzes the implementation of a major operations support system at a large U.S. firm that fits this theme. Measurements (of success) from a quasi-experiment are used to accurately measure user performance and user expectations pre- and post-system implementation. These measurements offer solid proof that the system achieved key user defined objectives. ... And yet, the system is widely viewed as a failure. This chapter highlights the “organizational chaos” that “technically successful” systems often cause in user organizations when the Systems Delivery process (how systems are delivered to users) is ineffectual. In effect, systems are dropped off at the users' doorsteps. A prescriptive model using five key guidelines is proposed for effective management of the Systems Delivery process. These five relatively small secrets can save corporations millions in investment dollars, reduce negative impacts to customer service, and enhance employee morale and systems acceptance.*

## **CALL CENTERS UNITED (CCU) INTRODUCTION**

During the early 1980s, five mid-size call center companies combined to form a large call center conglomerate called CCU (Call Centers United). The combined company served more than 10 million customers and employed over 60,000 employees. With the formation of CCU, the company found itself with a hodgepodge of systems—various mainframe vendors, five different system architectures, multiple telecommunications software products, 37 different types of workstations, 600 million lines of application code to maintain, and escalating systems costs. Service Representatives were required to understand and use 250,000 service order codes in order to respond to customer requests for products and services.

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## COMMON SYSTEMS STRATEGY

In 1985, a key corporate strategy was initiated to combine all of CCU's systems into a "common" CCU approach. One of the most challenging "commonization" efforts was converting the massive billing and ordering systems from the five original companies to one common system. After eight years of requirements gathering and validation, joint application development sessions with user groups, system design, coding and testing, and pre-installation testing—the deployment of a common Billing and Ordering System (BOS) began in 1993 in a phased company by company approach.

Before merging, each company used a distinct billing and ordering system to process customer bill inquiries and orders. From 1993 to November 1995, CCU implemented BOS to replace all of these systems.

The expected benefits of BOS were many. CCU combined its ordering and billing systems staffs, reduced system maintenance costs, and allowed new services to be provided faster throughout the five company area. System changes now required modifications to one system instead of five or ten. The consolidation of systems and staffs was certainly significant to the Systems department. However, to the Sales and Services organizations within CCU (the user departments), the critical measure of success for BOS was a reduction in the average call handling time required to satisfy customer phone inquiries and orders.

CCU receives 45 million service calls a year. Before BOS, the average time to handle a call was 7.3 minutes. To handle these calls CCU employed a work force of 5,000 Service Representatives (Service Reps). BOS enhancements to the bill inquiry and service order processes would allow Service Reps to handle customer calls more quickly, which would lead to a reduction in the number of Service Reps. Anticipated savings due to average call handling time was actualized in early 1995, as the Service Rep work force was reduced to take maximum advantage of expected time savings from BOS.

Unfortunately, average call handling time did not decrease with the implementation of BOS, but increased. Despite tremendous investment in human and financial resources and eight years of development and planning, the implementation of BOS was a very painful experience for CCU. Contrary to plan, average call handling time increased as Service Reps struggled to use/learn the new system. As call lengths increased, hold time for customers waiting to talk to a Service Rep grew proportionately. The system was deemed defective, poorly designed and difficult to use. The company president, referring to BOS, concluded "our systems have failed us."

*WHAT HAPPENED?* Why did average call handling time increase instead of decrease? Why did the consolidation of ten disparate systems into one common system degrade CCU's service instead of improve it? Was the system defective? Was BOS poorly designed? Why did users have such a difficult time using the system? With eight years of planning, why did the system fail to meet expectations/user measurements of success?

## BOS IMPACT ON CUSTOMER SERVICE

The implementation of BOS caused CCU's Service Reps and customers great pain. Service Reps had a very difficult time learning the system. They complained *bitterly* about the complexity and difficulty of using the system. BOS seemed plagued with defects. The following complaints about BOS were collected via a survey of Service Reps at one of CCU's offices one week after converting

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