Expert Advice Customer Experience

An Automation Manifesto

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Automation Manifesto – Verisei

"Computers are transforming the office of the future into the factory of the past." – Barbara Garson

The technology inside a factory stays inside the factory, but the design of technology for customer facing roles bleeds into the customer experience. As this work is systematized, automated and optimized, most customer service has become terrible – frustrating for customers and customer service reps alike. Customer services once were characterized by flexible human dialog and empathy; today, that empathy has been replaced with maddening interactive voice response systems, long hold times, and stilted, systems-driven dialog. Inside the call center, the reps deal with scripted systems and angry customers. Why has the ofce of the future become so much like the factory of the past?

The fundamental driver is the use made of technology, which embodies early 20th century assumptions about the nature of people and work. We are developing systems for interaction with people as if we were building assembly lines. The Holy Grail for these systems is efficiency, which is pursued through an ever-expanding rationalization of work. As new technologies (IVR systems, speech recognition, AI) make it possible to automate more tasks, work is broken down into sub-tasks, each of which is standardized and optimized using the latest technology. The zeal for standardization results in force-fitting of some non-routine work into a routine system, resulting in "fallout" (work that has to be specially handled).

There is an alternative, but it is rarely exercised. It is based on the post-World War II Scandinavian tradition of Socio-Technical Systems (STS). The basic ideas are that work and the technology to support it should be designed together and that those doing the work should participate in its design. When I have been involved with systems developed using these principles, they have resulted in work that is not only more effective for customers, but also more efficient. But the philosophy runs against the grain of most systems development.

My eyes were first opened to this alternative in 1990, during the deployment of an early AI system across 42 centers in what was then NYNEX (now part of Verizon). The system was better than human experts at its task, but it did not ft in well with the work of some centers, and people in those centers were furious with us. We hired an anthropologist – one of the very first corporate anthropologists – who sought to understand what was happening in cultural terms. We began to spend more time understanding the context of the work we were automating before we sought to automate it.

I have used the basic principles of socio-technical systems in my work developing intelligent systems over the past three decades at Fortune 500 companies, including Verizon, ARCO Oil and Gas Company, Pitney Bowes and Goodyear. My initial perplexity at the organizational response to systems led to a lifelong study of users, customers and work, including stints as an Advisory Board member at the Institute for Research on Learning, a Visiting Scientist at MIT and an Honorary Professor at Aston University.

I have refined the basic ideas into seven core principles that constitute what I call an Automation Manifesto. This is a cry for the design of work and systems that engage the intelligence and commitment of people at work – and that result in greatly improved customer experiences when that work is in customer support.

1. **Develop systems to support people (not the other way around)**: Effective work needs to be defined first; system should be developed to support it. This means really understanding the non-routine cases that might arise and the information that can help workers manage them. It means that systems often cannot be deterministic: they must enable people to deal with ambiguity. Often systems are designed the other way around: the requirements of the systems

define the work of the people. Customers struggle to describe their problem in the framework that the system provides, leading to frustrated customers and employees

2. **Define whole jobs, with coherent deliverables**: Customers want to solve their problems quickly and directly. They do not want to be the link that works with different parts of an organization to piece together a solution. They do not even want to be transferred from one part of the organization to the other. The fragmentation of jobs to their simplest sub-tasks does not serve customers, develop employees or lead to productive work, especially when something new or unexpected happens.

3. **Automate thoughtfully (not promiscuously).** Too often, when a company sees the opportunity to take work out of an existing work process through automation of some small portion of a job, it jumps in and does so. The result can be short-term savings but a jarring fragmentation of the work. To customers, this may be as simple as dead air on a telephone call and as mundane as repeated requests for basic information (name, telephone numbers, address). Or it can be as serious as an issue that remains unresolved for long periods of time as its resolution falls between the cracks of the fragmented work.

4. **Think carefully about the allocation of functionality between the person and the system**: Even the most efficiency-minded firm should not automate everything that can be

automated. People handle many things better than machines do. Companies tend to err on the side of maximizing flow through and "non-touch" transactions. The logic is that automation reduces costs and keeps error-prone humans out of the loop. Inappropriate automation saves time on every transaction but often adds costs in call-backs, re-work, lengthened calls, escalations and lost customers.

5. **Be very careful about shifting work to customers (self-service) unless they want it:** Corporations have made huge efforts to push people to the web. It is often difficult even to locate a customer service number on a bill or on a web site. Customers spend too much time navigating the web and interactive voice response systems trying to talk to a human being capable of solving a problem. Companies have certainly been spared work in some cases, but their customers are frustrated and angry.

6. **Trust your employees! You cannot create good work without trust**. It is inevitable that employees will have to deal with situations not anticipated in their training or by the systems they use. Employees must be empowered to solve customer problems in these cases (and systems must be designed to help them do this).

7. **Extend this trust to your customers:** Customers are generally not out to cheat people. They react negatively when reasonable trust is not extended to them. The front-line employees with whom they speak know this, and generally empathize with it. Unfortunately, their hands are often tied. This creates a rift between the company and its employees, leaves customer problems unsolved, and costs money in re-cycling of problems, escalations, and dissatisfied customers.

CEOs do not design systems, but they can influence the principles of their design. If they go beyond the raw economics and use these principles to ask questions of those who are charged with automating work, they can inspire not only better systems and improved customer service, but also more productive workplaces.