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# The Design of Everyday Work

## Why does great design end at the door of the workplace?

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By Harold Hambrose, Chief Design Officer, ZENDA LLC

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Well, designers: How are we doing? How well designed are our everyday things 25 years after the publication of *The Design of Everyday Things*? Better in many ways. Profoundly unchanged (perhaps even worse!) in others.

It's impressive, for example, how much safer and more reliable our cars are than they were 25 years ago. And the environment in my home is significantly changed: Kitchen tools are safer and more effective at the jobs they support, thanks to companies like OXO. My TV-watching experience is more customized, thanks to Netflix and other on-demand services. I look on enviously at today's new parents and the well-designed equipment available to them—a far cry from the terrible handful of car seats and strollers available to my wife and me 19 years ago. Smartphones have made computing ubiquitous and contact with my family constant. We have come a long way! The design of everyday things is moving along nicely.

Well, almost.

## Everyday Work

For all of design's impact over the past 25 years, there remains an area of our everyday that is a virtual design vacuum. Every morning, most of us leave our homes (which are filled with constantly improving products) to get into cars that navigate us safely and efficiently through changing traffic conditions. Some of these cars may have even improved overnight, as their on-board computer systems download new or updated features from their manufacturer. By the time we leave our driveways we have begun our workdays—making phone call after phone call without ever taking our hands from the steering wheel. We pull up at office towers that are miraculous in their size and beauty. An ID badge is waved at a turnstile, and in one security-cleared step, we walk... into the abyss.

Yes, 25 years ago, Don Norman laid out an accessible and detailed description of human cognition and emotion in *The Design of Everyday Things*. The popularity and longevity of this book and its messages are not unwarranted. Norman's explanations allow us to understand how the experiences we have with the many things that have transformed our daily routine balance a deep appreciation of our physical, mental, emotional, and psychological selves. As we walk through the turnstile into the workplace, however, Norman's explanations and their corresponding aspirations seem to have been detained by security.

Since a job is a part of our everyday, so too are the processes, tools, and environments that comprise our workplace. And for most people, the workplace stands in stark contrast to the experience we have with the everyday things of our private lives. Through my smartphone, I can arrange for a car to pick me up and drop me at my destination without having to open my wallet.

If I discover that my credit card has expired while I am ordering that car, it's not a problem. I snap a picture of a new card, and my account is updated in seconds. However, submitting the expense of this ride for reimbursement through a corporate accounting system may take longer than the ride itself.

Been to a doctor lately? The everyday things of that work environment have devolved so thoroughly that my doctor can no longer look at me during much of my visit. We talk to each other while he stares at a laptop screen and I stare at the back of his head. I miss that old paper chart he used to toss on the counter and mark up—after we discussed how I was feeling. It was just him and me back then. Now, we have things—hardware and software. And a bad experience.

We have all called a customer service number for help with a product or service. And we have all been frustrated by the experience. But put aside all our frustration as consumers for a moment and consider the operator and his or her workplace. These individuals are often working with processes that are designed for maximum efficiency—to get you off the phone as fast as possible, and then on to another call. Operators are often looking at computer screens filled with haphazardly arranged data running across numerous software tools that may or may not allow them to do the things you need them to do. I must also mention that they are likely sitting within an acre of cubicles under call-volume tote boards, surrounded by motivational slogans and balloons and speaking to you above the din of other operators clamoring to meet their quotas. Every day the phones keep ringing, and every day the things meant to assist two people in solving a problem over the phone hobble them in their attempts.

## Consumer or worker? What's the difference?

Companies spend millions gathering consumer insights so that they can use them to inform the design of their products and services. A recent tour of the ground floor of the headquarters of one of the nation's largest banks took me through a beautifully equipped, highly visible design studio where designers hosted design thinking workshops in order to stimulate new ideas and to reimagine the company's products and services. And clearly it was working. My host described the bank's online tools as widely adopted, saving the company a fortune in support costs and delighting customers with fast and satisfying online services.

Within the design process that was described to me during my tour were techniques used to gather customer insights that clearly reflect a consideration of Norman's seven stages of action. Without quoting Norman, and perhaps without even knowing they are behaving as Norman recommends, these designers work to deliver everyday products and services that delight. Their audience is the consumer. And the focus of their every move is that person—his or her context, capabilities, and insights.

Twenty-five years after that first edition of *The Design of Everyday Things*, design has become essential to business—a title within the organization, an activity performed by people across the organization, and a recognized driver of innovation, invention, and success. For the most part, though, our focus has been on the external—the consumer's experience with the business enterprise's products and services. The bank's employees who are working in that design studio, and all the banking professionals moving through those design thinking workshops, recognize the value of design and its effect on the people who will purchase the

bank's products and experience the bank's services. Having focused so intently on the fullest expression of the customer as they create products and services, the bank's workers leave the design studio on the first floor and ride elevators back to their respective departments—to engage in processes and use tools that are devoid of the principles promoted by Norman and extolled during their design-thinking training. As workers, they have been conditioned to accept a dichotomy that sees considerable investment in design as it relates to the human consumer, but does not recognize the value of design's application to the company's own human workforce.

There is a certain irony in this. Although the corporate workforce represents a segment of the consumer population before it passes through the corporate turnstile, that population becomes something else once it's inside the office. Product manufacturers and service providers have spent fortunes studying corporate employees in their role as consumers—but the corporate employer spends little time or effort to understand the captive humans within its walls. Does being a company employee make a person less worthy, or his or her insights less valuable? Or is there a belief that because workers are a captive population, collecting a paycheck from the company and subject to corporate rules and regulations, there is less use or need for them to be understood as people?

## The everyday bottom line

When considering the consumption of products and services, design's value is obvious. When products and services are designed based upon a careful consideration of their intended audience's context, needs, expectations, desires, and goals, that audience is likely to find the product or service attractive, valuable, and worth using or consuming again and again. Norman spends hundreds of pages explaining this in detail. Commercially, that product or service company can expect to see demand rise and to watch the top line of the income statement grow—as long as the product or service continues to connect with its consumer. Correct application of design will help to ensure that this happens.

When design's human-centered understanding results in things (products or services) that a company manages to make appealing or necessary to consumers, it is easy to tie the commercial value of the design of everyday things to the success of a product manufacturer or service provider. At the other end of the income statement, though, is the bottom line. Between this figure and the top line is the expense of delivering the product or service. This is where design has yet to be applied and to realize its predictable positive effect.

Corporations have limited the impact of design to the things they deliver to consumers. This is understandable, because we are all consumers and we can quickly and easily relate to design's impact on the things we buy and the services we experience. The better the experience with a product or service, the more likely we are to consume more of them. Design's value does not stop there, however. Below the top line are the cost of operations and the expense of delivering that product or service to market. Inside those cost lines are opportunities for design to deliver comparable value to the internal operations of the company and the delivery of goods and services. Design holds great potential for the bottom line when we see the internal processes and tools of the enterprise as everyday things—just as likely to benefit from the power of human-centered design as any consumer product.

## Everyday things: Business processes

For decades, process-flow diagrams and methods like Six Sigma have been the means by which corporations analyze and document the execution of work. There is security in knowing that each step in a process has been carefully considered for accuracy and that surrounding systems and environments account for work being performed as planned. Confidence can be drawn from the ability to see work through the documented process and the belief that through methods like Six Sigma, a model of the most efficient, repeatable methods has been defined.

Pin that documented process up on the wall of a corporate department and compare it to how work is actually transpiring, and confidence shrinks away. For all the planning and analysis represented by business process definitions and their related systems, there is a chasm between that which was planned and that which is actually happening. The reasons for this are plain to see, and equally plain are the risks they represent to the company.

Mind you, business processes are not designed without the involvement of human participants. In fact, it is common for a workforce to become fatigued by the amount of surveying and polling they endure when processes are being defined. But having experts in a business domain or Six Sigma black belts ask workers what they do, and then dissect and reconfigure those processes into differently ordered or fewer steps, does not produce the kind of success Norman illustrates in the human-centered design process. Observation is how we gain insight.

Observing work as it transpires; understanding not only what is happening but why it is happening; gaining insight into the characteristics of the people performing the work and the culture of the work environment—this is where insights are found. A highly pressured, highly regulated workplace may have to respect prescribed processes as dictated by regulators. Regulations, though, are only part of that process's definition. The workforce must also be considered. Do people understand the regulation? Is there a tradition of regulatory oversight, or will this be new to them? Are the workers' professional motivations and goals in synch or in conflict with the regulatory process? Define the process according to regulation without regard for the human worker, and compliance is at risk. Because a business process is a man-made construct intended to affect the behavior of the workforce, human beings must be integral to its definition. If they are not, human beings will do their own defining. This is illustrated every day when we compare industry's standard operating procedures with what the workers are actually doing.

## Everyday things: Business systems

There is little chance that a human resources manager will come to like an HR system as much as she likes her favorite smartphone app. The call center operator will likely never feel the same exhilaration using the systems at work that he does using his Xbox at home. After all, work is work and appropriateness is a consideration in the creation of any well-designed tool. An employer may want the workforce to be as excited about their job tasks as they are about their high scores on Grand Theft Auto, but is this a realizable or even a worthwhile goal? The software tools of the workplace don't need to entertain. They do need to fit beautifully into the hand of the worker in order to most effectively support her tasks.

Any well-designed tool demonstrates an accurate appreciation of the task for which it is intended and the human being who will perform that task. Of course, the tool will also

need to be fabricated from appropriate materials and fit within an appropriate commercial model that makes cost of ownership commensurate with the value the product delivers. As everyday things go, few business systems can be described as well-designed.

The software tools of the business enterprise are technological wonders. The shape of these tools comes from two sources: respect for the task at hand and a fascination with technology. This is the crudest way to define a tool and is typical of the early days of any new device. For example, until real consideration for human beings drove their design, early automobiles were death traps. They could accomplish the task of traveling from point A to point B through the use of the latest combustion engine technology. Safety and comfort, though—not so much. But these are not early days for business systems; they have been with the worker for decades. We have just come to accept that work is work, and that the systems of our everyday work experience will be, well, work. And industry has fooled itself into believing that with enough training and the right systems, its human workforce will conform to the planned behaviors of an imagined future state.

When I ask my doctor about the medical record system he is using, he tells me that it's OK, that he's gotten used to it. It took some time, but now, he says, he's doing pretty well with it. "It stinks!" is what I want to shout at the back of his head. Ask any workforce about the design of their everyday things, and they may tell you that they are okay. Or they may not. After all, work is work and expectations of the tools are low.

## The opportunity

Don Norman told us 25 years ago about the value of design. Judging by things like the ubiquity of computing and our everyday experiences with constantly improving products, he and other design voices have been heard. Norman, though, like most who admire design or appreciate its value, can artificially limit design's potential impact. The notion of the things it can transform extends well beyond the things a consumer can buy. Consumerism and mass consumption can too quickly have us believing that design's primary value is in the creation of products and services that must be made appealing to a consumer. This is the obvious first step in understanding the opportunity that design affords us. Turn Norman's thoughts on design inward toward the way business operates and the tools that support work, and design's impact on everyday things expands broadly.

At the center of design is empathy—an appreciation for another human being's condition that allows us to shape an experience or an object to effectively draw that person in, to elicit a particular response, or to encourage a desired behavior. The downward stare of the developed world's populations as they lose themselves in smartphones and tablets is testament to the power of design in everyday things. Perhaps it is simply timing. We are in the early days of design's prominent position within the business mainstream. For the most part, design's value is limited to the consumer and denied to the employee. This isn't about pool tables and beanbag chairs in the workplace. It's about how work is designed. It's time for industry to take Norman's ideas and look internally at our workplace in order to deliver to the human workforce the same kind of transformation that design has provided the consumer.

## About the Author

*Harold Hambrose, ZENDA's Chief Design Officer, began his career in user interface design more than 30 years ago while studying design at Carnegie Mellon University. Through his company Electronic Ink he touched business processes and systems in the largest global organizations and the smallest start-ups. Until its sale to LiquidHub – Cap Gemini in 2016, Electronic Ink remained unique in its focus on the design of business systems and the effectiveness of the human workforce. Hambrose speaks widely on the value of design to business operations. He is the Author of Wrench in the System (Wiley, 2009).*

ZENDA, LLC

[info@zendaconsulting.com](mailto:info@zendaconsulting.com)

(01)267.307.8300

[www.zendaconsulting.com](http://www.zendaconsulting.com)