

MANAGING CHANGE, BY DESIGN

Coupling design-process experts with business-content experts creates a capacity to envision and realize futures that are both desirable for stakeholders and viable for organizations.

by Peter Coughlan and Ilya Prokopoff



We read everywhere about rapid and constant change and, therefore, the increasing unpredictability of the future. And yet, we have seen little in the way of tools and methods to manage that change effectively and proactively. The tools of traditional business planning start with the assumptions that maintaining the current state is the best strategy, and that incremental growth is a satisfactory outcome. But what if we can no longer base our future business on what has happened in the past? We believe that organizations might look to tools from the field of design to help business managers both to get in touch with

their customers' (and other stakeholders') unarticulated needs and desires, and to intentionally imagine and create futures based on the one thing that seems to remain relatively stable, even in times of great change: human behaviour. When made a part of an organization's work processes and competencies, design tools enable an organization to embrace change as a normal part of managing its business.

A story to illustrate our point

A recent health care client of ours was engaged in long-range planning activities that included the introduction of a multi-story patient care tower, to be completed in seven years. Shortly after initializing plans for the building, one of the hospital's core specialty groups severed ties to the hospital in order to open up an integrated-service facility literally across the street from where this new tower was to be erected. This move, coupled with a drop in the cost of core medical technology, procedural changes that dramatically reduced the required length of stay in a hospital, and shifts in consumer demand and expectations about how care could be delivered, suddenly rendered obsolete any plans based on the hospital's past.

Looking at alternative data from what managers are typically exposed to, hospital leadership might have seen that the drivers behind this change were evolving requirements for patient care – for example, competitive pressures, technology, and human resource issues. However, the data that management had at its disposal – customer survey and employee satisfaction data – indicated general satisfaction with the services provided by the hospital; it did not reveal what problems, if any, customers had with the current services, or what they might have preferred if given a choice. No amount of examining the past could have prepared hospital leadership for this dramatic turn of events.

What could management have looked at to make a better guess about their future? And once it understood its present condition, how could the hospital have come up with an appropriate plan for getting to the future? Below, we describe three tools in the designer's toolbox that we have found effective in helping businesses manage change.

1. Contextual Observation

Effective design (whether incremental or radical) begins with a clear understanding of the problem to be solved. In order to help formulate problem statements, designers look to people's behaviour for the data they need. Specifically, designers use observational research methodologies to reveal latent needs that can form the basis of change initiatives. They do this by going out and looking at people engaged in everyday activity. Designers observe, take pictures, ask questions about the here and now. They discover what people specifically like and dislike about their work or play, what pictures they have in their heads about how a process works, how they have invented ways to work around a particular problem, and what ritualistic behaviour they engage in during a given activity. In short, they look at what is commonplace and familiar, and they reveal the ways in which it is unique, allowing them to break through existing assumptions and acceptance of things as "the way it's always been done," so that new opportunities for change can be explored.

Some common methods we use to help our clients 'see the familiar in unfamiliar ways' include:

- mock journeys, in which we simulate the experience of a customer, or someone else for whom we are designing;
- shadowing those involved in a process to note their everyday behaviours, use of tools, communication patterns, and so forth;
- expert walk-throughs to quickly understand complex processes;
- spatial observations, to absorb the atmosphere of a location, observe behavioural patterns, and look for evidence of 'everyday workarounds' or innovations that may indicate unmet needs; and
- day-in-the-life surveys, to get stakeholders to take note of their own surroundings and behaviour.

We are always surprised by how difficult it is for managers, who typically have extensive quantitative and qualitative data at their disposal, to 'see' their reality, because the data have been stripped of the emotional content that forms the basis for the most compelling change initiatives. Giving people a different way of seeing that reality helps them to articulate their unmet needs or desires. For

our health care client, getting them to shadow a day-in-the-life of a doctor, or to walk in the gown of a patient, gave them a much clearer sense of what was and wasn't working in the system. Seeing data captured from everyday reality (as opposed to data captured from a satisfaction survey) helped them to understand the vast number of opportunities to create new services or to improve existing ones, to retain customers and doctors alike.

2. Human-Centred Frameworks

System-level problems are hard to solve. In organizations of any size, people often complain that the organization has "a life of its own," or that "change is impossible," in spite of the fact that people can usually identify what is not working. The reason for this is simple: although most systems have evolved over time from something small and simple to something larger and more complex, their growth has not typically been managed in a holistic way. The design of the system is no longer contained in the head of a single individual or group – rather, it is emergent across multiple individuals or groups. Incompatibilities or even conflicts are no

We see continuous improvement and continuous innovation as completely complementary. But innovation is about stepping back and asking, 'what are the assumptions going into the system? Can we reframe the problem in a new way?'

one person's or department's responsibility. It is simply that different parts of the same system have been optimized for their own local goals, resulting in silos that are hard or impossible to stitch together seamlessly.

Designers create frameworks so that they can simplify and unify design opportunities in order to conceive of possible futures and make sure that all the parts and pieces that compose these futures are coordinated with one another. Frameworks are powerful because they can be used to generate a coordinated set of ideas or opportunities, and later, to evaluate the

degree to which a current set of offerings satisfies user needs and reflects an organization's intentional view of the future.

Frameworks reintroduce a holistic viewpoint to an organization and allow it to refocus on its reason for being: to provide value to customers, employees, and other stakeholders. For our health care client, we developed a framework that consisted of a 'patient journey' that helped them to understand that the patient views their experience as a contiguous process, unaware of how the organization is structured to deliver care. For example, patients do not understand why, each time they move to a new location in the hospital, they are asked the same set of questions. From a hospital perspective, redundancy of information collection ensures accuracy and safety (and reflects the reality of non-integrated IT systems). However, from a patient's perspective, it creates an experience laden with frustration and lack of trust.

3. Rapid Prototyping

Rapid prototyping helps people to experience a possible future in tangible ways. These include rough physical prototypes of prod-

ucts or environments, or enactments of processes and service experiences, as well as the internal infrastructure and business plans that will be required to deliver them. It allows a very low-risk way of quickly exploring multiple directions before committing resources to the best one. Prototyping is commonly used in design development to explore details of how a product, service, or experience will be manifest. It externalizes the project team's thinking, allowing for quicker convergence and more useful feedback from stakeholders. This feedback is based in the reality of an experience, rather

than in an interpretation of a description of that same experience.

When organizations go about developing their strategies, they typically define both the problem statement and a proposed solution at the same time, as a means for getting approval and resources to move forward. Rapid prototyping gives an organization license to explore hunches or directions that may in turn give more clarity to the problem statement. It also helps them continue to be mindful of the possibilities of creating systemic solutions.

Faced with the challenge of improving the hospital's dining experience, our health care client used rapid prototyping to quickly

explore ideas that allowed patients and family members to eat whenever they wanted to. One of the ideas that came out of this exploration was a concept for a mobile 'minibar' that could be ordered and stocked appropriately. In the process of testing this idea, the team discovered and resolved issues around ordering, fulfilling, and maintaining the minibar. They discovered that this particular solution affected multiple parts of the system, from patient room design to admissions processes to food service design. A simple prototype allowed the hospital to surface these issues and solve them all at the same time, resulting in a more unified experience for patients.

Integrating design and business thinking

Increasingly, our client organizations come to us expressing a wish to be "more innovative." We interpret this as a request to be better able to face change. While design continues to be seen as a specialized expertise, we have found that the tools of design are learnable and applicable to challenges that business managers face every day. When we couple design process experts (with no vested interest in perpetuating the current way of doing things) with business content experts (who are looking for ways to think differently about their area of expertise), we create a capacity to envision and realize futures

Project: Patient-Care Delivery Model

Client: SSM Health Care's DePaul Health Center, Bridgeton, Missouri

SSM Health Care approached IDEO with a vision to develop a new patient care model at the **DePaul Health Center** that will ultimately provide the foundation for improved services. Realizing that hospital services influence the well-being and care of people, DePaul aspired to provide innovation for a comfortable patient experience. To achieve this, IDEO explored the hospital's space usage, technology, services, and staffing and then developed design concepts for a new patient care delivery system.

The IDEO team worked onsite at DePaul's facility to fully research the opportunities for innovation. By brainstorming, observing, interviewing, and actually living as a DePaul patient, they visually 'mapped' the patient-journey process, documented DePaul's procedures from patient check-in to recuperation. Visualizing the journey helped IDEO identify current challenges, such as moments of confusion, and helped the Center recognize that these 'moments' were actually 'translation points' where new designs could have significant impact.

IDEO provided DePaul with a framework to create its new patient care delivery model and developed concepts to support the new model. In addition, the designers

worked closely with a cross-functional team from DePaul to prototype and begin testing some of the design solutions. By learning the basic steps of process innovation and receiving a rough implementation plan, DePaul can now further refine and actualize the design concepts.

Amongst the changes proposed by IDEO: valet parking; frequent flyer cards that detail regular returnees' needs and preferences; self-registration; a patient hotline for instant connection to staff who can act as a system translator; pod-like staff

work spaces that keep caregivers closer to patients; a 'family healing area'; and vending machines in waiting areas that dispense bandages, over the counter analgesics and other temporary discomfort relievers. By employing multiple, small-scale innovations, DePaul can deliver improved patient-care delivery services. "We saw that the patient travels a journey," says **Robert Porter**, then-CEO of DePaul, "in which clinical states and events happen to them, often without their understanding or realization of the relationships between events."

Place of Practice

Places of practice, like the radiology suite below, are dedicated to facilitating the staff's most efficient and best work for the patient. While primarily serving system goals, there are numerous simple opportunities for important translation to occur which can greatly impact the patient experience.

Patient Journey Punch Card
Carried with the patient and updated by staff allows for a simple graphic way for the patient to know where they've been and what is coming next.

Patient Garment with Information Badges
Additive badges allows the staff to get a brief history of the patient visually.

Modal Diversion
Patient has automatic control over simple things in their environment, everything from important information to personal soundtrack accompanies the patient on their journey.

Information Transfer Doorway
A place for a simple log of patient interactions, patient photos and useful tools facilitate the doorway as a translation zone. Eventually information transfer can happen wirelessly.

Patient Hotline
Patient Hotline allows for instant connection to staff who can act as a systems translator. All mediated staff interactions happen through the phone because it is a familiar interface.

Patient Manuals
Customized patient manuals which track the patient journey based on their specific illness can allow for the possibility of in depth information at any point.

Staff Cross-Training
Anyone coming in contact with the patient has the minimum knowledge necessary to answer simple questions and help in basic matters.

that are both desirable for people and viable for organizations.

The challenge remains for business schools to find ways of integrating design thinking into their curricula, and for

design schools to expand the purview of design to include not only products, services, and experiences, but the organizational means by which they are created and supported. **R**

From *Managing as Designing* (eds. Richard Boland Jr. and Fred Collopy). Reprinted with the permission of Stanford University Press. Peter Coughlin and Ilya Prokopoff are co-leaders of IDEO's design group, based in Palo Alto, California.

Project: Improved Patient-Provider Service Client: Mayo Clinic

The **Mayo Clinic** has developed a worldwide reputation for practicing cooperative, patient-focused medical care for people with some of the most severe forms of illness. At Mayo's three primary outpatient facilities in the U.S., physicians and health-care practitioners combine their skills and experience in team fashion to help solve people's medical problems in a way that puts the patient first. To enhance service provision, Mayo invited IDEO to help turn an internal medicine wing into a laboratory for improving the patient-provider experience. The new venture is known throughout Mayo as the SPARC Innovation Program, which stands for See, Plan, Act, Refine, and Communicate.

IDEO began by observing how patients interacted in waiting areas and exam rooms, and how they worked with doctors, nurses, and staff to navigate the health care process. They provided the Mayo team with a basic template for creating service delivery innovation — a systematic process that includes how to brainstorm new ideas for using the space, rapidly prototype novel service delivery designs, and use customer observation and direct feedback to refine solutions.

Supporting patient-physician communications is one way in which Mayo and IDEO worked together to put the process into action. The team devised a simple and flexible design for the internal medicine corridor that allows for more informative, comfortable, and guided interactions among staff and patients. Physically, the team turned the wing into a four-zone 'moving journey' through which patients proceed.

The first stop is the Service Home Base, an inviting locale that provides visitors with resources for planning their trip

through Mayo. This area can be used in various ways, and Mayo plans to develop it into a highly visible information hub that displays literature about the clinic. Sectioned waiting spaces can be used as a tool to explore new designs in better accommodating individuals who want privacy, or families who need to spread out.

The Visitor-Facing Hub is the second destination, allowing patients to choose the type of service they need — be it drop-in and pick-up, check-in, or in-depth information. The flexible set-up enables the eventual use of clear graphics that will give visitors easy and quick access to precisely the information they require — without long waits or hassles. A frosted glass wall allows translucent views into behind-the-scenes areas, enhancing the sense of friendliness and accessibility and making innovation processes and practices as visible as possible to Mayo customers.

In the Preparation Service Area, providers take patients' vital statistics and offer educational consultation in advance of

their meeting with the physician. Half-rooms provide flexible modules that can be easily outfitted for a variety of purposes. Architectural features such as special lighting and translucent barriers enhance the sense of service and intimacy.

Finally, patients enter Innovation Central, where exam rooms feature outside walls that are used as storytelling boards to convey patient information and movable interior panels that can modulate between privacy and open space. Furniture and space are configured for collaboration and can accommodate large-group communication.

The wing will remain a section of the clinic where staff and physicians can continually develop new processes for improving service delivery. Over the long term, Mayo anticipates that the SPARC program will generate innovations to enhance patient satisfaction, make more efficient use of physician time, and add a new dimension to the Mayo Clinic mission of putting the needs of the patient first.

