While prognosticators, futurists, and gurus have painted vivid pictures of the future of work in 2025 and beyond, few have said much about how businesses must change the way they change. Do we expect the ways we orchestrated change in the 20th century to deliver results in the 21st?

To deliver the future of work described by our Human capital trends report,¹ businesses are pursuing eight- and nine-figure digital transformation programs. Globally, according to Gartner, these will total $2 trillion in 2022. To achieve these transformation goals, organizations can’t rely on 20th-century “analog change models.” Using 1980s analog change models during digital transformations breeds cynicism among digital natives from later generations, millennials and Gen Z. This introduces unnecessary change risks: employee disengagement, lack of alignment, change fatigue, upskilling challenges, and climate/culture gaps.

Our nimblest clients are testing new solutions not yet found in dated books on change, nor MBA programs, nor even in academic research. These clients are blazing new ground, using data and new technology to support people during change in critical processes such as user engagement, learning, and adoption.

With clients, human capital experts, and scholars from around the world believe redefining the future of change management is critical so that our best thinking on “people change” supports strategic and technical change of the 21st century.

Data-driven change management using Transformation Intelligence™
Why “data-driven change management”?  

Technology is frequently the “why” of change—businesses cannot ignore AI, blockchain, cybersecurity, 5G, and quantum computing and hope to survive this decade. Technology is also the “what” of change—either modernization of an existing tech stack or new investments in emerging technology.

But can technology contribute to the “how” of change, and not just the “why” and the “what”?

Enter data-driven change management.

We know from our research that high-performing organizations are 3.5 times more likely to use data to inform change efforts and 4 times more likely to gain worker input when shaping changes. Our findings also suggest that too few organizations have grasped the concept of using data, supported by technology, to drive change.

One reason for this oversight is that the discipline of change management has not kept up. The human and technological sides of transformational change have been on opposite sides of the stadium. Technologists don’t know much about what produces long-term behavior change, so they recruit change experts to help with the psychology of change. However, fatally, psychologists know very little about technology. The change psychologist takes great pride in change processes (town halls and instructor-led training) but doesn’t think about how analytics and machine learning can support what they do with people.

At the customer interface, today’s marketing departments use digital tools to understand the customer journey and use behavioral science to shift consumer behavior. However, when it comes to employee users of business-critical systems, those possibilities have yet to be unlocked. Leading businesses are doing both: harnessing the deep human expertise of the change expert with the power of data to produce quicker, less risky, more complete change implementations. Using data helps customize communications and support—creating personalized, actionable user journeys.

The changes in change that we envision during the next decade will heal the shotgun marriage between technologists and their organizational change suitors. By using data-driven change management, we can help humans use technology to make their working lives better and to make businesses and their change journeys more human; use analytics to increase empathy; use AI to empower humans, and not just displace them; and use network analysis to build communities.

Beyond the survey: Using behavioral data, not attitudes and intentions

When considering the idea of data in change management, most people think of surveys. They are a form of data, but notoriously poor at predicting behaviors. (The academic literature on the inaccuracy of self-report data goes back decades; see “Self-report in organizational research” from 1986.)

There are two problems. The first is that reports do not always accurately reflect what people think and feel. The people who reply may not accurately reflect the views of the population—perhaps only people with grievances answer, or perhaps the aggrieved “check out” and only positive views are captured.

An even worse realization is that what people think and feel is poorly correlated with what they do. In one experiment, students were given a smartpen that tracked homework behaviors. No surprise, those behaviors had a high correlation with test results. However, when homework was tracked by surveys (self-reports), there was an inverse correlation between what students said about homework and their test results.

Imagine if our survey data told us the opposite of actual user behavior? Multimillion-dollar transformational change cannot afford such inaccuracies. In business, we care about what people do, not what they intend to do. This is acutely the case in technology: We care about how much end-users use the system, not how much they say they use the system, or how much they like the system.
The new frontier in change management is using data and behavioral science—a paradigm shift from "attitudinal" approaches to behavioral ones. Data-driven change management heals this rift using technology to provide real-time insights into user behavior, for example, tracking the behaviors of tens of thousands of users across half a dozen technology platforms. There might be patterns in the behavior, but without machine learning, they are too hard to spot.

In the future of change management, surveys will be used with behavioral data to become better predictors of what humans do—not just what they think they should do.

Introducing Transformational Intelligence™

We are about to introduce a change model, but let’s be clear: There’s a difference between this and the thousands of other “n-step models.” Such models are typically presented as Michelangelo’s David would be—any alteration, however small, would alter its timeless perfection. Because technology implementations that touch 100,000 workers and millions of customers are a relatively new thing, we think that even new models must be treated as provisional and updated constantly, not like David, but rather like the Wright Brothers’ early aircraft. With this in mind, a primary feature of our model is that we present our framework as a prototype, not as a prescriptive, linear journey for clients to follow; nor as a finished, be-all-end-all change recipe book, but rather as a scaffolding to organize and drive innovation in the change space.

A second feature of our model is that it focuses on information flows. Data-driven change management focuses on the end-to-end information flows that are critical to design making at each stage.

At the start, we combine the vision of the business leaders with the capability for change of the organization to determine strategy. As development proceeds, more sophisticated AI-derived market analytics and people analytics will deliver increasingly predictive insights, whose information drives decisions at crucial nodes during the change process.

In later stages, information from inside the organization helps the change team intervene correctly and efficiently. After "go-live," process changes, reactions to process changes, and the impact of process changes generate terabytes of data.

Here are the four stages, some client breakthroughs, and how we are driving the notion of data-driven change management into the future.
Stage I—IntelligentSensing

The first stage of “Sensing” uses AmbitionScan™ to ask a fundamental question of the change leaders: What is your aspiration (ambition) for the program? Leaders need line of sight and alignment on whether they are “modernizing” or “updating” or “transforming.” This helps the leadership team accurately scope the areas of focus for the people and process changes that are essential, while also showing any lack of alignment on the ambition that could torpedo the eventual success of the program.

Sensing then uses ChangeScan™ to measure “propensity”—the practical, real-world, tendency of people in the business to embrace change. Propensity includes data on culture and climate, upskilling, and how change has fared previously. Propensity, meaning the aptitude to change that the client has within a particular department, function or office, for example, gives a strong indication of the types of change management techniques and how much effort will need to be expended on these for each focus area in order to achieve the desired outcomes.

IntelligentSensing in action

Our life sciences client embarked on a multiyear regulatory transformation. The client was unsure of the amount of change management they faced in the business, at the functional and business unit levels. ChangeScan™ identified which areas would be more adept at embracing the change and helped prioritize spending and actions to maximize value. The scans helped to showcase misalignment within the program team on the ambition for the project. AmbitionScan™ showed that most team members thought of it as a modernization effort, while the team leaders aspired to a full digital transformation including how they use data in the future. With this information, Deloitte was able to resolve the alignment issues and provide targeted change management support across the multiyear transformation.

Stage II—IntelligentBlueprint

When budgeting a new technology investment, there used to be a “finger in the air” approach to scoping the change management side of the program based on prior projects. However, no two businesses react the same way to transformational change (nor even two areas within the same business). In a resource-constrained world, clients must make tough choices about how to allocate change resources.

Untargeted communications disengage employees; the more they receive communications that seem irrelevant to them, the less likely they are to open, click, or engage. Change leaders today compete for share of mind. Over perhaps a dozen platforms, people may receive a thousand messages a day via SMS, phone, email, social media, Skype, Teams, Slack, and workhorse apps such as Salesforce, SAP, and Workday. Digital marketing experts use data and analytics, but change communications are a decade or more behind.

Now, leaders at high-performing organizations are becoming better at using data and analytics to develop insights that scope and guide their change approach, including understanding impacts, determining potential areas of resistance, monitoring adoption, and tracking the realization of transformation objectives. During the Blueprint phase, Deloitte’s intelligent blueprinting engine takes the areas of focus from ambition and unpacks the specific activities needed while adjusting the level of detail required for each activity based on the audience change propensity. By understanding how audiences across the organization have historically responded to change, Blueprint identifies which areas will need a more detailed change impact analysis to assess current risks. This allows clients to be more precise on the level of change effort that the environment requires—to make rightsized investments. At one extreme, technology upgrades...
Data-driven change management using Transformation Intelligence™

in a business with high propensity (from ChangeScan™) will require less change spend than full-scaled transformation in an organization with low propensity. Sometimes, for example, high-octane, instructor-led training will be required, while sometimes “micro learnings” will achieve their ends at lower cost. Sometimes communications can be general and periodic, sometimes they must be specific and perhaps daily.

During Blueprint, analytics primarily measure readiness in preparation for go-live. This may be a combination of self-reported readiness data (through readiness surveys and interviews) or, much better, behavioral data (such as open rates for emails, attendance at engagement events, and training completion) to understand where pockets of resistance require additional change support. We not only need to identify who is affected but how they are affected and to use our best data on self-reported readiness to anticipate needs.

No plan survives first contact with the enemy, say military leaders. Change planning has always been central to change management: anticipating stakeholder needs. But, by using data we can both create more targeted plans and (critically) monitor how well our change plans are meeting community needs.

IntelligentBlueprint in action

Our Technology, Media, and Telecom client was in their third phase of a finance transformation, implementing a new finance system to replace their 25-year-old legacy system. Using Deloitte’s Transformation Intelligence tools created a customized change management strategy and work plan that fit the client’s unique situation and needs. After the client completed the complimentary AmbitionScan™ and ChangeScan™, we were able to present the client with data-driven results in the form of ChangeBlueprint™. The results served as a key input in creating a highly tailored and customized change management strategy that outlined critical path activities and a detailed work plan. The data highlighted the need for the client to dedicate time to creating a robust change impact approach and focus on Role to Position Mapping as part of their change strategy.

As we innovate on IntelligentBlueprint, we’ll focus on answering the following questions: How can we use behavioral data to determine what interventions are required? How can we develop predictive models on which interventions will work with different groups, geographies, cultures, and climates?

Stage III–IntelligentActivation

The complex interdependencies in a transformational change that might affect tens of thousands or more people and hundreds of processes have typically been managed in spreadsheets and pivot tables. Keeping such analyses current and useful might require a dozen people to continually update and refresh the spreadsheets with real organizational user data and to predict and assess change impacts. It can be a nightmare—and could cost millions of dollars in consulting fees.

IntelligentBlueprint™ identifies the change activities and the level of detail required; the next step is to gather the information needed to carry out the recommended activities at the required depth.

Enter ChangeScout™, proprietary software that combines cutting-edge technology, access to experts, and Deloitte’s unique change methodology to transform the way change is delivered. ChangeScout™ delivers a better change experience for your stakeholders and organization. With more than 140 deployments in the United States and globally, ChangeScout™ is the unchallenged market leader in providing real-time behavioral data during change implementations.

Communities are created in ChangeScout™ to represent the audience groups, which allows the system to capture and track data directly related to designing, planning, and executing the activities identified in the blueprint.

ChangeScout™ begins to gather data and produce insights during Blueprint. It produces analyses that highlight impacts and progress across business units, geographies, and functions. Change leaders can adjust engagement channels based on behavioral effectiveness data, such as town hall attendance or altered behavioral patterns following training.
This allows the change team to target change interventions based on actual behavioral and process data. Change Scout™ also predicts what future-state changes will affect each of the different stakeholder groups and what they will have to do differently to deliver project results. Analyzing these forces allows teams to prioritize where, and on what specific business effects, change management approaches should focus.

While change operations are being managed, vast amounts of user and process data illustrate which change team activities are effective and efficient. Change Scout™ builds a dashboard to visualize impacts and identify how they have been mitigated or “activated,” and change managers monitor the workload of change agents in a PMO dashboard.

The consistent, accurate, “single point of truth,” monitoring of impact allows senior leaders to make real-time adjustments in change strategy and allows change specialists to adapt, for example, the upskilling strategies for different communities.

IntelligentActivation in action

A multinational pharmaceutical company aimed to harmonize and integrate business processes powered by best-in-class technology. By leveraging ChangeScout™, the organization was able to seamlessly manage change across 39 countries.

The global change team used the power of ChangeScout™ to maintain a single source of truth for thousands of change impacts and associated mitigation activities, ultimately engaging more than 35,000 end users.

Stage IV–IntelligentSustain

In the first decade of this century, the paradigm in consulting used to be “stand the system up” and move on to the next project. This left clients with the critical work of benefits realization using training and tools left behind by consultants. This was a dysfunctional paradigm as CIOs began to realize that the hard part, after build and test, began at go-live. Even later they realized that benefits realization continued well past go-live into the first years of the technology life cycle.

We know now that patterns of technology adoption following go-live result in substantially suboptimal digital adoption scores. The first innovation in this respect was “hypercare” during the first 90 days. During this time, a critical mass of “early adopter” users were built, and group norms started to shift around technology use—creating a virtuous circle of improved adoption (i.e., more users, shift in group norms, improving adoption by later adopters).

This is better, but still insufficient. Clients today recognize that there is hidden gold in helping users go from 50% or 60% adoption to higher scores—that is, they can realize commercial value without new additions to the technology stack, by optimizing the value they get from existing technologies. The focus on unlocking value from existing technology is what makes IntelligentSustain particularly powerful: CIOs now have a way to release value from a (say) $10 million technology investment that is only 60% used.

As with earlier steps, data is the key. In our Digital Adoption Center (DAC) enabled by digital adoption platforms, such as WalkMe, stakeholders receive “intelligent help” throughout the adoption cycle, from near-expert to novice. Process analytics continue to monitor efficiencies for optimization; continual seamless onboarding supports staff hires and transitions.

Users learn with best-practice, just-in-time information and feedback. Those have long been the holy grail of training, but until recently it has been impossible to provide support for new behaviors, instant feedback on errors, and to monitor adoption trends. While no client wants never-ending, high-cost consulting support for technology implementation, the DAC offers automated, continual support for internal change functions and capability building so that long after the project consultants leave, there is ongoing support for leaders and their people.

As we innovate on IntelligentActivation, we’ll focus on answering the following questions: How can we integrate change AI, data, and analytics to more holistically plan for change?
In 2019, Deloitte began seeking innovative technologies that would improve the internal employee user experience across enterprise applications and increase the operational effectiveness of the workforce by reducing onboarding time and increasing self-service for end users. Deloitte formed a Digital Adoption Center of Incubation (COI), powered by WalkMe, to build and deploy adoption solutions across its internal employee digital ecosystem. Deloitte uses WalkMe internally as an in-app guidance tool and enabler of learning in the flow of work. Since WalkMe is present on several internal auditing technologies, Deloitte end users know to look for WalkMe support when they want to learn how to use a new application or feature. This has liberated time spent on the app support and learning and development teams responsible for training end users, and has enabled teams to better analyze the effectiveness of their training content. This analysis provides the team with indicators on where to pivot to improve the impact, and helps informs an improved strategy for deploying content on future WalkMe releases. The result is a cycle of improvement and automation that streamlines the user experience and ultimately sustains performance of the change. Realizing the value it brings our own employees, Deloitte Consulting formed a strategic alliance with WalkMe in 2021 to deliver digital adoption solutions to its clients.

Conclusion: Moore’s law for humans?

According to Moore, we famously increase the computing power of a chip every two years. Humans, however, do not keep up. This leads to a paradox: As technology becomes a greater part of our working lives, the human part—learning, growth, climate, culture, and change—becomes ever more important.

The joint revolutions in the future of change management, using data coupled with behavioral science and digital adoption technologies, paint a much brighter future than the traditional methods of the past. Technology, it is often feared, will dehumanize work. However, our vision is to use technology to make working lives better, to help leaders connect with their people, to help change agents empathize with struggling groups, and to target how we support people according to their needs and not according to our guesses.

That future of change management is the one that inspires us and drives value for our clients.
End Notes


Contacts

Nathan Sloan
Principal
Deloitte Consulting LLP
nsloan@deloitte.com

Lee Merovitz
Managing Director
Deloitte Consulting LLP
lmerovitz@deloitte.com

Chris Norman
Senior Manager
Deloitte Consulting LLP
chnorman@deloitte.com

Paul Gibbons
Author, The Science of Organizational Change
paul@paulgibbons.net

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