



Digital Organization Design Challenges: Prototype Solutions and Integration

Chris Worley (USC), Sue Mohrman (USC), Bill Pasmore (CCL), Stu Winby (Spring Network); and the members of the STARLab Consortium

**INNOVATION
RESOURCE
CENTER** for HUMAN RESOURCES

The development of this report was funded by a grant from [IRC4HR®](#)

SPRING
NETWORK

USC Marshall
School of Business
Center for Effective Organizations

 Center for
Creative Leadership®

Digital Organization Design Challenges: Prototype Solutions and Integration^{1,2}

Chris Worley (USC); Sue Mohrman (USC); Bill Pasmore (CCL);
Stu Winby (Spring Network); and the members of the STARLab Consortium

PURPOSE

This document summarizes eight specific organization design challenges facing companies attempting a digital transformation, and describes prototype solutions and responses to seven³ of these challenges. It also presents an integrated reflection on these solutions and an induced design scenario.

THE CHALLENGE GENERATION AND SOLUTIONS PROCESS

During the second quarter of 2018, researchers from the STARLab Alliance conducted interviews with 40 mid/senior level executives at nine companies. These Fortune 500 organizations represent a broad range of industries, including manufacturing, energy, technology, financial services, fast-moving consumer goods, and healthcare, and recently initiated large-scale digital transformations. A key informant interview lasted more than one hour and often required two sessions. The interview asked for descriptions of digital/business strategies, organization design features, digital initiatives and the ways they were being managed and integrated, leadership development processes and culture, and how change and agility were pursued. We also interviewed other informants from the digital, business, and human resource organizations to fill in gaps and details. The average number of interviews per company was five people. In addition, we collected archival information, such as strategy, change, and leadership presentations, press releases, internal white papers, website information, and other documents.

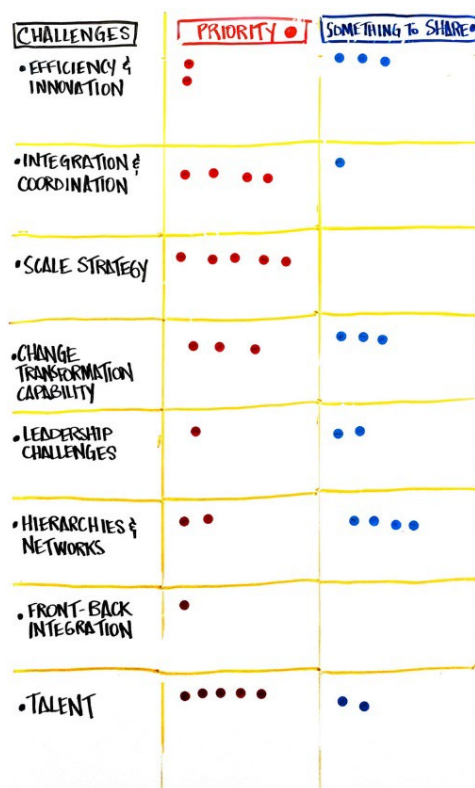
¹ We gratefully acknowledge the support and funding for this project from Innovation Resource Center for Human Resources (IRC4HR®).

² ©2019 by the STARLab Alliance, Inc., all rights reserved. No part of this paper may be copied, reproduced, or distributed without the expressed, written permission of the STARLab Alliance.

³ As described below, of the eight challenges only seven were addressed. The “Front-Back Integration” challenge was viewed as less of a priority and the issues inherent in the challenge were addressed by other challenges.

From this data, we culled eight organizational challenges related to digitalization. The challenges were not meant to be mutually exclusive, yet each one represents a specific issue or problem heard in nearly all of the company situations.

During a two-day, in-person design lab in August of 2018 (see “[Socio-Technical Action Research Design Lab Description and Process](#)” report) researchers described the challenges and gave each organizational team, typically three to five company executives, a chance to discuss the challenges in their own context. Companies then indicated which of the challenges were a priority and if they had a positive example of how they were addressing the challenge that could be shared with the other organizations.



The figure at left shows the results of the priorities and potential positive examples discussions. Of the eight challenges, **Scaling the Strategy** and **Managing Digital Talent** were the highest priority issues. Consortium members appeared to be at the stage where initial digital initiatives needed to be staffed and grown. The **Integration and Coordination** challenge was the second highest priority. Also worth noting, only one company each prioritized the **Leadership** and **Front-Back Integration** challenges.

Companies had the most to share with respect to **Hierarchies/Networks** followed by **Change Transformation Capability** and **Efficiency and Innovation**.

Recognizing that the eight challenges are not mutually exclusive and acknowledging that about half of the plenary group were from HR-related disciplines, there appears to be a negative correlation between priorities and positive examples. The **Scaling the Strategy** challenge was a high priority but no organization believed they had a positive example. Similarly, for the high priority **Talent** challenge, only two organizations had examples they believed addressed the issues and for the high priority **Integration and Coordination** challenge, only one organization had a good practice to share. On the other hand, the lower priority **Hierarchy and Network** challenge had four potential positive practices. One tentative conclusion from this exercise is

that the war for digital talent is real and organizations have not been able to innovate successfully in this area. Moreover, while there are many (assumedly successful) digital initiatives taking place, organizations do not have the capability to scale these initiatives. There is much value that is not being realized.

We then formed mixed-organization groups around the challenges, asking organizations to participate in high priority areas but also to participate in a group where they could serve as a positive example. Each group was tasked to appraise the challenge together, review a statement describing current research on the challenge that also identified openings for creative problem solving, and develop a prototype solution to be presented to the plenary group. What follows is a summary description of each challenge and the group’s thinking about how best to address that challenge in a digital context. The challenges and the proposed solutions are presented in the order they appear in the figure.

CHALLENGES AND SOLUTIONS

Efficiency and Innovation

The Challenge: Companies reported that balancing efficiency and innovation is hard and fraught with tensions and conflicts.

- Organizations must create new products/services/businesses for the future and, at the same time be efficient/productive/optimized in the core business, a problem commonly referred to as “ambidexterity.”
- The two types of work produce fundamentally different structures, designs and cultures, which are often contradictory in purpose and management.
- Organizations are struggling to define and connect these two organizations in a meaningful way.
- The most tension and conflict seem to occur during go-to-market and scaling phases. Adding a new line of business to an existing portfolio creates tensions in setting priorities. At the core of this tension are resources in the go to market function, sales, marketing, professional services, and partner development.

The group addressing this challenge believed that there was a strong bias on efficiency in organizations. The real issue was to find ways to increase consistent attention and resources on the full cycle of innovation. The group also struggled with how much to acknowledge that the tension between innovation and efficiency required separate and different, if coordinated, units. Such an acknowledgement could inadvertently support an “us vs. them” dynamic that may prevent managers from recognizing that innovation and efficiency can be complimentary as in the case of continuous improvement.

The group described a variety of solutions and possibilities from their experiences through the lens of **Galbraith's Star Model™**:

- **Design Criteria** - Most organizations have relatively enduring beliefs or values-in-use that have guided decisions over long periods. The group suggested that it was important to embed innovation-related values into the design of every organizational feature. If “innovation” is a cornerstone of the organization’s strategy, then it should be designed into structures, systems, and processes. Balancing innovation and efficiency begins with making the relevant design criteria - statements regarding the capabilities required for success - more public and integrated.
- **Strategy** - To encourage and support innovation, organizations could charge functions or business units to develop a 10-year strategy every three years. Such a process keeps the organization looking both short term and long term.
- **Process** - Policies that reinforce innovation can be simple. Examples include, focus 20% of your time on whatever you want to work on (but be sure it doesn’t become an extra 20% to create 120%); create a place/space where people are allowed to work full-time for a specific period (say 3-6 months) and where funding/talent would be available for successful projects; or develop “shark tank”-like processes to encourage workable initiatives. The group felt strongly that there was an important imperative of “setting information free” as a real enabler of innovation and efficiency.
- **People/Rewards** -Identify and incent experts to stay independent of management or P&L career tracks.
- **Structure** - The group noted that structure could be used to call out innovation as a priority. A business and an innovation point of contact could work together or a separate innovation group could be established as an incubator. Another point of view argued that structural choices needed to be purposeful and not just different. The example was given of a SWOT team that was available to address specific issues or problems with focused attention.
- **Metrics** - A clear “vitality index,” such as percentage of revenues from products introduced in the last five years or the number of patents, needed to be prioritized.

Integration and Coordination

The Challenge: Consortium members expressed a pressing and immediate need to address strategic and operational coordination and integration.

- The lack of system-wide integration and coordination process and the absence of integral visioning and planning systems prevented the company’s digital strategy and organizational transformation from operating as an integrated whole where the parts are flying in formation.
- Organizations need to know when units can and should be independent in their digital strategies and when they should apply the different mechanisms and requirements of cooperation, coordination, and collaboration.
- Unlike several other challenges, which are about transformation and capability building, this challenge is about the current need for coordination.

The integration and coordination and group proposed that “design principles” rather than a specific prototype solution were the key to addressing this challenge. It focused on the principles that had worked for them as well as practices that had prevented effective integration. The design principles included:

- **Clear and Transparent Objectives and Key Results (OKRs)** - Accessible metrics allow everyone to see who is responsible for what and drive clarity about accountability. Clear digitalization objectives needed to be included in these metrics if digital initiatives were to have traction.
- **Leadership Communication** - Top managers have an important responsibility to share the organization’s mission,

purpose, and strategy consistently. Given the pace of change and the likely shifts in strategy, leaders must be “humble” in the sense of being open and transparent. They must be advocates for change consistent with the long-term mission/purpose and shorter-term strategies. Such a consistent cadence of communication reduces friction among the units that are coordinating.

- **Balanced Reward Structure** - The organization must utilize a reward/recognition system that optimizes both enterprise and individual performance. What doesn’t work is optimizing for organization performance but not recognizing individual results.
- **Embedded Digital Lead** - This structural issue suggests that nascent digital initiatives need visibility to provide a clear mandate for their implementation. One option would be to leverage digital natives in this position as a function of the maturity of the business and the organization. Early in a life cycle, digital natives may better understand how to apply

digital technologies in a variety of different business processes although such roles should have an “expiration date.” As the change becomes routine, the role can be removed.

- **Reduce reliance on matrix structures and systems, especially when speed is an issue.** As an alternative, the group suggested being clear about the “first team,” a group responsible for a particular initiative or product/service and aligned to a customer objective. Collaboration within this cross-function or cross-unit team is essential. It should be underscored and nurtured. On the other hand, less time should be spent trying to get high levels of formal cross-functional collaboration within 2nd or 3rd level teams that are focused on specific, possibly functional issues. These teams could employ many agile principles without actually being established as an agile team. The group believed that such a solution would get to a flatter structure with clearer “rules of engagement.”

During the plenary discussion, there was a spirited discussion about whether functional teams should be abandoned altogether. Functional teams and structures imply silo'd investment processes, resources dedicated to lobbying for that investment, and an attention to functional excellence to the detriment of speed and integration. The group returned to the notion of a design principle. If designing for speed, innovation teams should not be functional and this might be appropriate at early stages of an initiative or strategy. Later, during scaling and operation, excellence might be the design principle and argue for orientations that are more functional.

Scaling

The Challenge: Most companies in the consortium were challenged to drive digital and agile initiatives from innovation to operation at scale, including (1) rolling out optimized processes to the larger organization; (2) growing a start-up business to a full standalone P&L; (3) scaling agile units; and (4) pushing a capability out to the value chain.

- Most companies did not have an organization design scale plan or capability that helped them understand where to start, how fast and how far to go.
- When digital transformations were not driven to scale, the “gravitational pull” of the legacy organization often returned operations to their former ways of working.
- When scaling agility, companies struggled to know which function should be reorganized into multifunctional agile units and which should not.

The group noted that a scaling process represented an opportunity to manage change as well as an opportunity to utilize a disciplined design process. It acknowledged that the scaling

problem was going to differ by company given culture, leadership styles, and situations. Instead, it focused on prototyping a method for identifying issues that needed to be addressed and that would allow an organization to learn about and solve the problem of scaling continuously.

The design principles for such a method were:

- Customer centricity
- Optimize for speed (in value delivery)
- Identify and remove friction points
- Capture learnings: fail fast and iterate

For the group, the central and core problem in scaling was the idea of “friction,” including conflicting funding priorities, talent and staffing issues, management attention, or decision rights. For any particular scaling effort, various kinds of friction were inevitable and this required its identification, the creation of a solution that removed or lowered the friction, learning, and proceeding again until another friction was encountered. In this sense, scaling digital initiatives isn’t that different from the scaling of other initiatives. The important distinction is that digitalization changes how people work and in scaling a digital initiative, the real possibility exists that the friction is not just a roadblock but also the obsolescence of a whole work unit or work process.

The scaling process begins with and should be guided by planning alignment or a clear understanding of how the digital strategy enables the broader business strategy. With respect to digitalization, the group recognized three common focal points: 1) the consumer, 2) process optimization, and 3) innovation. In particular, identifying the elements to scale and change should happen in the context of the organization’s strategic planning process, and the first point of friction might be the strategic planning cycle itself. Does it happen once per year or more frequently? Annual planning cycles can immediately hamstring any specific digital initiative where speed is an issue. A second point of friction could be how the organization views strategy execution. Is it like a project to be completed or rolled out according to plan or is it a series of test-and-learn experiments that allow the strategy to be adjusted in real time as data and insights become available? Participants acknowledged that even good ideas needed to be adapted to local conditions during scaling efforts.

The process also involves setting up the conditions for “control by purpose.” Senior leadership teams should be accountable and committed to scaling those initiatives that everyone agrees

are critical. As an example, to what extent are executives - as a whole - committed to and accountable for scaling digital efforts that address customer intimacy? This was seen as critical so that as friction points were discovered, there was commitment at the top to address the friction.

Following from this alignment, executive sponsors create an empowered scaling team, not necessarily the same group that drove the initial innovation or proof of concept. The scaling team is responsible for identifying and removing friction points and their focus is on the business purpose, not technology. Concretely, the group suggested that meetings begin with, “We are here for ‘X’,” where ‘X’ is about the business and the strategy. For example, “We are here to integrate or grow this line of business.” The purpose is not about “Would you like to know more about “cloud” and how it can help you?”

Change and Transformation

The Challenge: Change - in a variety of forms, including scaling up digital initiatives, promoting innovation, implementing re-organizations, or deploying systems conversions - was seen as overwhelming and uncoordinated.

- The number and nature of changes seemed very different from recent experience.
- From the point of view of any one change, the other changes were seen as a distraction. There was a sense that each change was a project, many important changes were managed more or less independently, and each change had a strong desire to see their own effort through to the end.
- Despite obvious interdependencies among the different changes, the organization lacked the capability to orchestrate, coordinate, and sequence these multiple, simultaneous, and

Consistent with the challenge definition, the group rejected traditional change management models and processes. It argued that organizations were going through too many changes at once for traditional linear models to work and wanted to develop a framework that could handle multiple changes on a continuous basis. Group members explored different metaphors for the kind of change system they believed would be relevant, including flocks of birds, cities, natural ecosystems, soccer teams, and Wikipedia. They noticed that these systems had distributed capabilities, believed that order = stagnation but chaos = growth, and possessed tremendous power anchored in clear intentions. Soccer teams, for

example, used clear and shared goals/intentions to coordinate each player’s real time

decision-making, and even coaches (who weren't playing) had a critical role in generating that capability. Would it be possible to create such a system in organizations?

If so, it would begin with the assertion that attracting people who care about an overwhelming and clear intention/purpose is relatively easy and greatly facilitates decision-making. The guiding principle would be "coordination over control" using a set of "simple rules." The group proposed several such rules including, "wherever you are, do the things you think are right for the purpose," "it is safe to try something," "use short planning/execution cycles," and "learn together transparently." The process would reflect the belief that change does not happen to people but by people in alignment with a story and shared purpose.

In the discussion that followed, the model received strong support and raised two dilemmas. The larger group liked the focus on behavior and control by purpose (similar to the scaling solution). The first dilemma concerned the prioritization and coordination of multiple initiatives. One participant summarized the concern, "With 25 concurrent initiatives that can all be tied back to serving customers...how do we make priorities among the changes, which is where we need to ground things?" The second dilemma concerned choice. Will organizations have to decree the use of a technology or will people - as part of a continuous change process - be allowed to choose it?

Leadership

The group focused on whether leaders needed new skills and the behaviors that would enable

The Challenge: Leadership is critical to many things in organizations: providing direction, aligning interests, setting priorities, designing the organization, deciding when to shift gears, making certain things are being done in the best way possible. In the context of digital transformation, organizations were struggling with four aspects of leadership:

- Helping today’s top leaders not only support digital transformation but understand enough about what it entails to be able to actually lead it. Such behavior would integrate and accelerate digital initiatives through cohesive organization-wide strategies while recognizing where local autonomy in the application of digital tools is still appropriate.
- The belief is that leaders need to learn new competencies to lead in a digital world but neither the competencies themselves nor the ways of developing them are clear enough at this point. It’s relatively straightforward to teach digital literacy but leading a digital organization is something different and beyond that.
- Recognizing that leadership is becoming more shared, formal AND informal, internal AND external. Existing formal structures and hierarchical leadership are likely impeding the development of badly needed new leadership models and organizations are wondering what it would take to overcome the inertia of the status quo.
- An increasingly important aspect of digital leadership is making the strategic choice between continuity and transformation (related to challenge 1 but at a more macro-scale: “do we stay the organization we are or become something different?”). Leaders need the tools and development to make these critical strategic decisions.

them to build a digital strategy. It concluded that existing competencies, such as collaboration, creativity, innovation, and customer focus, were still relevant. But it also talked about focus, building up digital literacy, and coaching.

The group proposed four digital leadership competencies:

- Accelerating responses to change and transformation
- Scaling with speed
- Finding and setting time to reflect and learn
- Developing digital literacy

Two of these competencies were addressed: finding ways to increase reflection time and finding ways to experiment with response time. The group wanted to develop methods for building new leadership skills at the same time as they were leading, to apply what we know or develop what we need to know in a digital environment.

First, compared to identifying new behaviors in a digital context, finding ways to reflect on and practice the new behaviors in a safe environment is not easy. The

group believed the key issue was to create space for leaders to think about digitalization and its effect on the future. There were typical (e.g., field visits, consultant presentations) and novel approaches (e.g., coaching processes specific to a digital focus, bringing digital natives to the leadership “table,” allowing digital natives to facilitate leadership events). The group talked about options for leaders to practice in a safe environment where they wouldn’t feel exposed or vulnerable.

Second, in getting leaders to practice quicker responses to digital shifts, the group wrestled with how to grab a leader’s attention in the context of an already jammed packed agenda. Their proposal was to bring the customer in the room, to hear about what the customer wants, and then to build responses from there. Similarly, to get leaders to experiment or practice on new behaviors, their suggestion was to identify a priority issue for the team to address (not delegate) over a six-week (not six-month) period. For example, the leadership team could create a “Shadow Board” of digital natives to discuss digital literacy or the implications of digitalization.

Hierarchies and Networks

The Challenge: “We are a silo’d organization” might be the most common response in the company interviews. There was widespread concern that hierarchical structures were a key contributor to the lack of coordination and collaboration, an inability to diffuse or integrate successful digital initiatives, or the slow pace of implementation and deployment.

- Organizations understand and leaders have become comfortable with working in hierarchies and bureaucracies, but the new digitalized way of working demands a different structure and design.
- The definitions of control, coordination, direction setting, resource allocation, trust, and strategizing in a network have to be redefined and fleshed out.
- Managers who are most comfortable in the hierarchy reduce risk in their eyes by relying on reliable control processes rather than untested agile and network processes.

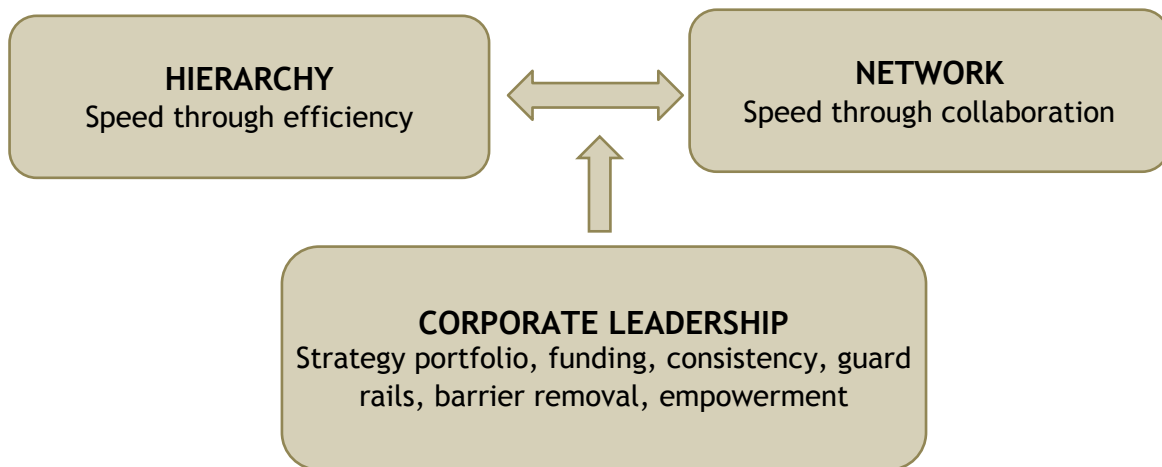
The group drafted a prototype organization where a network-like structure with hubs of expertise operated in parallel with a traditional hierarchical structure. The model shifted in terms of how much connection or overlap there was between the two structures depending on such contingencies as the speed at which the industry works, its stability vs. volatility, or the relative amount of required innovation vs. execution.

Assuming the organization is a more or less traditional, publicly traded, and regulated company, and acknowledging the inherent benefits of hierarchical coordination, the role of the Center or HQ shifts from control and direction to providing guardrails, removing barriers, defining consistency, and ensuring empowerment. Corporate officers, through a digitally enabled and highly transparent/participative strategic planning process, determine or clarify the direction/purpose and a portfolio of initiatives to keep the company running and moving forward. This would require a funding model, a strong portfolio and resource management capability, and a database of the resources available, the resources needed, who is working on what, and so on. The center will be challenged to find a delicate balance between knowing who's doing what and how much time are they spending on that (which risks the reaction, "leave me alone, you are getting in my stuff") and trying to empower coordinated action that makes it all work. Digital technologies become a connective tissue that integrates inventories of expertise, resources, and talent with project/initiative requirements, including information about the customer, markets, and objectives.

The key idea was that no matter how much initiative management capability the organization had, how strongly product-based innovation was pursued, or how many rapid problem-solving teams there are, there would generally be a need to hand off innovations to a traditional structure that achieves speed through efficiency, execution, and scaling. This latter kind of work will be longer lasting and change less frequently.

The inputs to this more traditional organization come from the network part of the model that achieves speed through collaboration. Truly new initiatives, capabilities, or products required by the strategic plan are given to the network.

The network consists of hubs (resources, talent, and expertise), projects/initiatives defined by the strategic plan, and an orchestration team that pulls resources from the hubs to create project teams around the initiatives. The hubs will scale up or down and be created or eliminated based on the capabilities needed to execute on the strategy. Hub members have a flexible, entrepreneurial mindset, and careers and development are a mix of growing in expertise as well as the possibility of "moving up" in the organization. Hub leads oversee this talent and its development, and such an approach aligns well with the notion of the gig economy.



Talent

The Challenge: A high priority for many organizations was the challenge to recruit and retain digital talent on the one hand and diffuse digital knowledge on the other.

- How do organizations bridge the divide between those who understand the system through technology lenses and those who have deep knowledge about the requirements for successful value stream performance in the organization’s business domain?
- The challenges with talent included (a) having agile/cross-functional teams even as the skills to make them work were unevenly distributed, (b) lacking the skills to collaborate effectively, (c) lacking the leadership skills to bring agile/cross-functional teams into the organization, and (d) missing the development processes necessary to spread digital competencies across the organization.

The group’s discussion pointed to a simple message about how organizations - and particularly HR and talent management units - should be thinking. That thinking could be summarized by the phrase: *“Get your digital story straight.”* Like organizations that must listen to the customer and work back to an organization that responds to customer demands, talent organizations need to recognize that the secret to attracting and retaining digitally oriented talent is to meet the expectations of the new people coming in. The group identified several practical

examples that should be “no-brainers” or table stakes in the recruitment, development, and retention of digital talent. For example, every organization should have an app for onboarding new employees that helps them through their early days in the organization; every executive should be able to demonstrate the competence to run an agile team; and every organization

should have a consistent digital story in communications from the board, top management, and the business.

OBSERVATIONS AND INTEGRATION

The participants in the STARLab prototyped organizational responses to seven critical challenges from digitalization. In sum:

- *The efficiency/innovation group recommended rewards for subject matter experts that would allow them to remain independent of the management structure, setting information free, and structural innovations that were purposeful, not just different*
- *The coordination/integration group advocated for transparent OKRs, leader stewardship of purpose/strategy, balanced rewards for individuals and the enterprise, and decreased reliance on matrix structures in favor of strongly coordinated “first” teams*
- *The scaling team saw friction as the primary problem to be addressed through top management team commitment, control by purpose, and a business over digital focus*
- *The change group also recommended control by purpose and the larger group wanted prioritized and coordinated initiatives*
- *The leadership solution pointed to the importance of quick responses to changing environments*
- *The hierarchy and network prototype identified a “both/and” solution and the use of flexible resource hubs*

Organizations are systems, and it is not surprising that the various challenges being experienced and addressed by these companies point to related organizational solutions. Among the themes common across the outputs are the importance of purpose, transparency, a variety of tensions that require coordination and integration, and the need for new ways of changing, leading, and working. In addition, and in contrast to calls for abandoning hierarchy, nearly every group’s proposal tacitly or explicitly acknowledged that hierarchy played a useful but incomplete role. The need for innovations in organization design as a viable and important solution to the challenges the companies are experiencing was clear.

How might these initial responses to the challenges of digitalization - and in particular the common themes - be integrated into a description of an effective, digitally transformed organization? The following discussion represents one possible scenario - not a prediction but a synthesis of the ideas generated by consortium members and the research team. Figure 2 summarizes this scenario.

First, the pervasiveness of digitalization - the extent to which AI, robotics, or the Internet of Things is going to touch everything - reminds us that digital strategies are subordinate to and enable business strategies. However, it is equally important that leaders regard the digital strategy as part of the business model and not an independent initiative.

Digitalization is disrupting strategies and business models but technology is not a substitute for them. What digitalization is doing is replacing many of the assumptions of traditional business models that have become “taken for granted” and not examined in a long while. This is why we feel so anxious in charting a course ahead. These shared assumptions have facilitated conversations and strategy development. For example, many business models have implicitly assumed that innovation and change develop in more or less linear fashion. In today’s world, innovation and change along multiple dimensions is more complex and simultaneous. Traditionally, organizations have assumed that boundaries between units in the organization or between the organization and its ecosystem members were relatively fixed. In today’s world, technology is blurring or obliterating all boundaries. Finally, managers assumed that performance derived mostly from stability, scale, and efficiency. In today’s world, innovation and efficiency, stability and change are driving performance. Organizations must learn to craft strategies and business models under these new assumptions.

At the same time, digitalization pressures organizations and their leaders to be clearer about - and perhaps even elevate the importance of - purpose. The more organizations become technology organizations, the more important values, mission, direction, and identity become. To get the flexibility and efficiency required to be successful, the business strategy may need to take a back seat to purpose and identity. In the digitized organization, strategies and business models will have an “expire by” date, not an assumption of permanence. Strategy is a wasting asset, while purpose, *raison d’être*, and who we are will be the long-term guard rails/governance system that coordinates and facilitates quick responses and decentralized action.

This appears to be the emerging and primary role of top management/leaders - to develop, embed, and monitor purpose, to rapidly adjust elements of the business model, and to empower decisions and execution in the organization. Bringing more stakeholders with diverse views and capabilities into the strategizing process is essential to meaningful adaptation in a digital world. With more robust and shared strategies, the implications for organization redesign become clearer and urgent.

Second, digitalization will continue to wreak havoc on ways of working. The participants in the STARLab consortium agreed that organizations are spending too much time focused on the efficiencies technology can produce and not nearly enough time thinking about how to connect people to digitalized processes in service of productivity and meaning. While new digital technologies will continue to replace human workers in routine jobs, companies that find new and exciting work that only humans can do will continue to capture attention as they lead others by example.

In this context, the war for digital talent is a temporary, albeit acute, problem. In the future, digital talent will become more widely available, reducing the barriers imposed by digital talent shortages we experience today. Instead, talent acquisition will revolve around finding individuals who have a combination of strengths in cutting-edge technology, innovative thinking, entrepreneurial drive, collaborative orientation, a growth mindset, self-and-other leadership capabilities, customer and business fluency, and openness to feedback and new ideas. Organizations should begin to envision work and structures populated by digitally savvy people and the much more difficult task of innovating new metrics, structures, and reward systems required for success.

Third, far from obsoleting hierarchy, digitalization clearly points to its value-added role as well as its limitations. Hierarchy and power emerge as a function of contribution and reputation, not authority or access to information. Control by purpose does not relieve the top management team from governance and decision-making responsibility but it does re-direct leadership activities toward stewardship and coordination. Leadership will play an important role in insuring that the enterprise remains ambidextrous, connected, collaborative, focused on shared purpose and priorities, changing as required, and making smart decisions about acquiring, developing, applying, and retaining talent.

As a result, networks - a relatively new form of structure - will rise to partly replace and partly augment hierarchy. Network structures are not just uber-powered matrix organizations or amped-up lateral coordination processes. They are a new form of organization with their own properties and capabilities. In fact, hierarchies and networks, organization change and organization design, efficiency and innovation will be co-mingled to empower a wide variety of choices/decisions made by the workforce (in line with purpose). A transparent portfolio management capability is the central management process. It prioritizes current/future work activities and initiatives (that are primarily defined by teams), resources (people, budget,

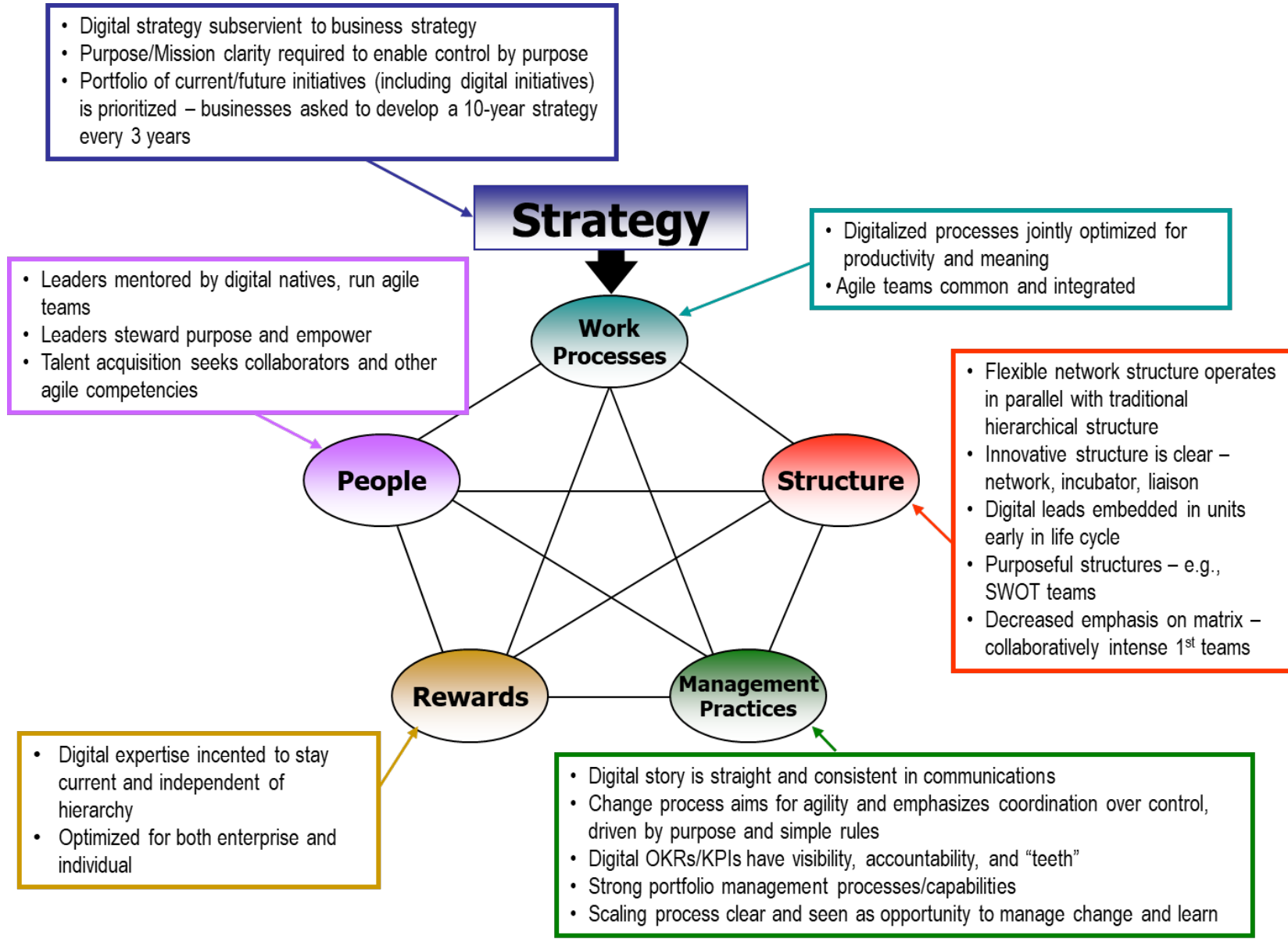
speed, time), capability development, and relationships (who should be coordinating with who, why, and how).

Fourth, digitalization demands a radical change in the rewards/recognition process. Innovations in work efficiency, creativity in new product development, stewardship of purpose, basic service delivery, scaling new business models, or developing new capabilities all contribute to performance and have no relationship to level in the hierarchy. Contributions to the success of the enterprise will be equally valued and requires a flexibility and customization in rewards that does not exist in today's performance management systems. As the coordination and integration solution noted, there will need to be a considered balance between the recognition of individual and organizational metrics.

Finally, digitalization confronts organizations with a thorny change problem. On the one hand, there is a clear sense of frustration about how to conduct a digital transformation. Existing models of change cannot handle the multi-faceted complexity of the current transformational environment. On the other hand, there is an uncomfortable realization that when the digital transformation is "over," another important transformation is looming. As a digitized organization, evolving the business model and scaling innovations across the enterprise will become the "new normal." An organization with a digital core will always be changing. An agile organization is guided by a strong sense of purpose that allows constant adaptation to the environment through the incorporation of inputs from a diverse group of internal and external stakeholders, applications of the latest technologies, and network-based structural arrangements that reduce friction associated with continuous change. Importantly, many of the design proposals included here support such a capability.

The clear message from the companies in this consortium is this: Today's organizations are applying digital technology to various parts of their operating model which, in turn, impacts its value proposition and business model but typically does not drive disruption until these digital initiatives become more pervasive and gain critical mass. The organization then faces a critical inflection point for which it is unprepared. From a competitive perspective, leaders will find themselves in a reactive position wanting to lead an organization that is not change ready. To become change ready will not be about purchasing and installing new technology, it will require organizational design changes.

Figure 2.



Star Model™ adapted from: J. Galbraith

STARLab Alliance, Inc.

2297 Oberlin Street
Palo Alto, CA - 94396

1.443.845.3903

<https://starlab-alliance.com>

The **STARLab Alliance** is a non-profit learning consortium focused on creating next generation organization design and leadership models

The **Digital Organization Design STARLab** is a year-long learning experience that allows participants and subject matter experts to collectively explore and prototype practical and innovative responses to digitalization. STARLab Participants include 3-6 senior leaders from 10 companies, well-into the digital transition of their business models, who will partner with leadership and organization experts. The STARLab accelerates learning and creates organization design solutions that optimize the application of advanced technologies and human capital approaches to achieve agility and sustainable effectiveness.

STARLab Alliance Sponsoring Partners & Leadership

<p>The Center for Effective Organizations Marshall School of Business University of Southern California</p>	<p>Sue Mohrman, Senior Research Scientist smohrman@marshall.usc.edu</p> <p>Chris Worley, Senior Research Scientist cworley@marshall.usc.edu</p>
<p>The Center for Creative Leadership</p>	<p>Bill Pasmore, Senior Vice President CCL and Professor Teacher's College Columbia University pasmoreb@CCL.org</p>
<p>SPRING Network – A Silicon Valley Design Firm</p>	<p>Stu Winby, CEO SPRING Network stu.winby@spring-network.biz</p>



Our partner, IRC4HR®, has provided funding to help make the STARLab Alliance program and research possible. Innovation Resource Center for Human Resources (IRC4HR®) is a 501(c)(3) private research foundation that seeks to make organizations more competitive, productive, and effective through improved people management practices and to serve the mutually beneficial interests of organizations, workers, and society.

<https://irc4hr.org/>