Designing a Digitally Enabled Prototype—The “Changing Face” of Innovation Design

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High Level Framing of the “Changing face” of Innovation Design Challenge
Digitalization both demands and provides a medium for different kinds of innovation. An innovation capability will no longer be an option in the future, and it will likely look very different. The “changing face of innovation” will be driven by new technologies that enable orchestrated approaches, often among an ecosystem of partners, to develop process and product innovation, organizational/managerial innovation, and business model/ecosystem innovation. An innovation capability needs to address incremental product and service extensions, changes in the business (i.e., how value is created and delivered) and revenue model, work system innovations to support new business models, and enable greater connectivity, learning and resource efficiency across boundaries

The Design Task
The design task is to create a design prototype of an innovation capability that continuously reconfigures strategies, business models, systems, processes, and products.

1) Start with a high-level, generic structure depicting the units of a future organization, including the identification and placement of key functions, supporting innovation and the organization’s business model.
2) How will organizations use digital technologies to generate and implement the different kinds of innovation required?
3) Describe the high-level governance and management processes (e.g., goal setting, review, decision making) requirements to drive the innovation capability?
4) What other elements of the organization’s design (e.g., leadership development, rewards/recognition) will have to change—and in what ways—to enable the effective

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operation of a digitized innovation capability while assuring the overall success of the system?

The group identified three assumptions driving an innovation capability in the future. First, innovation must be defined in an ambidextrous context, where the enterprise balances the allocation of resources between optimization of the current business model and growth through innovation of future investments. Second, a critical aspect of innovation, not properly understood but will be critical in the future, is strategic innovation - the capability to reinvent or redesign business models and strategy to drive growth and generate value for customers and the company. This type of innovation is essential for organizations to adapt to the speed of technology change. Last, a focused, funded, CEO sponsored go-to-market capability that works from start-up to fast scale. Most start-ups do not materialize, especially new lines of business, when they move to the go-to-market stage, thus requiring a different type of organizational design.

The group created a high-level, generic structure depicting the units of a future innovation organization. The graphic aligns with the three assumptions. A more detailed description of this model can be found in Galbraith’s Star Model™ narrative at the end of this paper.

The group discussed how will organizations use digital technologies to generate and implement the different kinds of innovation required in the future? Three examples were identified and represented STARLab company digital initiatives.

1. **Product Innovations**: New digital technology, like open innovation platforms, being used in new product and service design and development, thus increasing the innovation pace of products.
2. **Customer Platforms**: Interactive platforms with customers and ecosystem are creating new business model innovation, and on-going customer experience innovations. Simple and reliable processes seamlessly shape the customer journey from first contact to completed order, making traditional companies seem outdated.

3. **Value-add**: Billing, support, data analysis - digitized the entire functional value chain. The value chain is starting to undergo huge changes as the internet of things, robots, and AI revolutionize production, supply chain, and administration.

**Input: New Assumptions and Polarities**

Based on prior work by the community, a list of “go-forward assumptions” and prioritized polarities to be addressed were given as inputs and assumptions to the task.

**Go Forward Assumptions**

- Continuous learning for adaptation drives long-term value
- Organizational structure is less about hierarchy and more about the work that needs to be done
- Digitalization can drive higher impact business outcomes with lower risk
- Collective insights that can be executed will drive value
- Organizational models cannot be a one size fits all, but needs to flex across business units/teams.
- Vision and purpose are the new long term planning

**Critical Polarities**

- Responsiveness \leftrightarrow Efficiency
- Replacing Talent \leftrightarrow Augmenting Talent
- Value Creation (Change/Impact on Global Outcomes) \leftrightarrow Value Extraction (Benefits to my Organization)
- Personal Orientation \leftrightarrow Collective Orientation
- Intuitive Decision-Making \leftrightarrow Measured Decision-Making
- Not Either/Or \leftrightarrow Requires Being Adaptable/Dynamic

Incorporating digital capabilities into the way organizations operate requires changes in fundamental assumptions that fit with old ways of operating and hold these old ways in place. STARLab participants identified six critical “Go-Forward Assumptions” that will be required to inform new designs and will be required to unleash new capabilities and behaviors.

All organizations have to create the right balance of some key polarities/tensions (such as between short and long term performance focuses) in order to perform effectively. STARLab participants identified six polarities that are strong tensions that have to be addressed to design to incorporate of digital capabilities into their business models and organizational logics.
Digitalization and Innovation Design Principles Generated by the Group

**Strategy:** The “changing face of innovation” shows up in several ways. First, we will likely see a more balanced strategic view of management focus and corporate funding between current products and service P&Ls and new digitally enhanced channels of innovation, e.g., product innovation, customer platforms and value chain value add digital innovations. The vision and mission of the organization will clearly define this “ambidextrous” balance of optimization and innovation, as will the organization design. Strategies will define not only funding allocation of annual innovation projects linked to the businesses, but also incubator funding for early discovery innovation.

Strategies will show more emphasis on business model design innovations, especially driving customer platform models which link customers and ecosystem members.

**Work Processes:** There will be an increase of work processes designed for innovation compared to standard work processes designed for optimization, thus an increase in the use of agile methodologies and teams. Agile methods will be adopted beyond software development and utilized in other functional areas like hardware product design, marketing, and strategy development. Strategic innovation work processes which explore foresight insight sense-making will be a standard practice.

Digital based work processes eliciting customer feedback and data will be adopted not only in new platform business models but as a standard practice in every customer relationship.

Also, work processes will be transparent to not only internal members of the work unit but will include members of the ecosystem.

**Structure:** The group considered several structural choices ranging from the structure of the executive team, to how the company incubator is designed, to a lateral council cross-business and functional structure to transfer and implement innovations to the businesses, to agile cross-functional teams.

The executive team structure would have innovation-based roles and responsibilities like chief innovation officer, chief digital officer, and new business “go-to-market” executive. The executive team would adopt as a standard practice strategic innovation work processes and methods of decision making (design lab - stress test - decide). The three horizons model would be used as a way of strategizing and managing innovation.
An incubator structure would have its own “venture-type board” that would allocate funds to an approved innovation portfolio. Different types of structures would handle different types of innovations. Type one and two product extension innovations and sub-system innovations would be initially be defined *(business case and development roadmap)* in the incubator but soon transferred to a laterals council to manage implementation in the business. Innovation lateral councils would exit to implement Type one product extension innovations across the organization’s P&Ls and functions. These councils consist of line managers and functions and members of the incubator.

A separate start-up structure emerging from the incubator would have its own executive sponsor and go-to-market mandate. Separate from the parent structure this innovation would be expected to create a new line of business. The structure would expand as its scales.

**Management Processes and Rewards:** The innovation incubator manages its portfolio through milestones. Funding is based on meeting milestones. Projects are delayed funding until risks are lowered, and uncertainty is reduced, insuring confidence that the market will reward the innovation investment. Pivots occur frequently requiring tight decision loops and funding.

Rewards are based on meeting milestones. Specific milestones create bonus rewards and/or non-financial rewards like team celebrations and vacation time.

**People:** Early stage start-up behavioral characteristics like a tolerance for ambiguity, user focus, divergent thinking, and learning/curiosity/self-motivation were seen as core values for the innovation organization and a focus of talent development. The ability to connect the dots, see possibility, and solve problems was seen as highly relevant to early stage innovation projects.
Vision
- Clear articulated vision and mission for innovation

Strategy
- Sensing capability guided by frictionless fast feedback
- Discipline of possibility
- Unlock individual empowerment
- Collective wisdom

Capabilities/Work Processes
- Common, simple problem solutions approach (e.g., agile teams)
- Robust flow of stakeholder feedback
- Information transparency and navigation

Core and Lateral Structure
- Executive team is ambidextrous
- Incubator structure – own separate board structure
- Lateral councils
- Agile teams
- Flexible dynamic teams – cross functional
- Notice problems (our customers; other customers, blue ocean
- Spin-out team, prototype
- Acquire support via kick-starter resources

People
- Hire develop / self authorship
- World leaders in art of possibility
- Level 5 leaders

Rewards
- Bonus and celebration upon meeting key milestones
- Celebrate and share learning
- Pay sufficiency
- Intrinsic rewards – purpose, mastery, autonomy

Management Processes
- Horizons process
- Venture model for funding allocations
- Optimize for tight decision making
- Remove barriers from lateral processes
- Advice processes
- Kick start – resource allocation process

Star Model™ adapted from J. Galbraith
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.

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