

Article

Aligning the Corporation for Transformative Innovation: Introducing Innovation Dashboard 2.0

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ABSTRACT

Under pressure from mounting forces of change, corporations must engage in innovation more than ever. The transformative types of innovation required for organizations to thrive in the long-term are extremely difficult for established incumbents, in part because they have existing businesses to maintain. We focus on these transformative innovations that are difficult to achieve since they require exploitation of both technological and business model advancements. The Innovation Dashboard 2.0 that we describe herein offers a way for organizations, especially established corporates, to determine innovation activities, measure those activities, build innovation capacity, and align stakeholders across the organization around those activities.

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INTRODUCTION

WE LIVE IN an increasingly dynamic world. Multiple forces — climate, political, social, economic, and technological changes — operate simultaneously to create unprecedented uncertainty about the short — and long-term future. This uncertain environment can create opportunities that require organizations to respond nimbly to observations and data, and take risks to diversify their bets like never before. The popularity of corporate initiatives and executive roles with the term “innovation” in their titles shows that companies recognize the importance of leadership on this front. We have seen corporate innovation initiatives drive well-intended and high-quality efforts that result in significant improvements to existing products, expansions to existing lines of business, and increased depth of customer engagement. This is necessary work to sustain existing lines of business. However, this kind of improvement-oriented innovation is not sufficient for long-term company health, and exposes the company to disruption by others. So, companies must also place some meaningful bets on more uncertain, higher-risk, more difficult forms of innovation that have the potential to transform the business in the long run. Companies

must engage in pursuit of these transformative innovations in spite of the tremendous difficulty, if they are to continue to thrive.

Pisano, in a recent HBR article, and Boni in a recent JCB article, observe that in the pursuit of innovation, an organization can choose how much to focus their strategy on technological innovation vs. business model innovation.^{1,2} Both Boni and Pisano use these two concepts (technological and business model innovation) as axes for a four-category matrix: 1. Routine innovation is improvement-based, leveraging the existing business model and existing technology. 2. Radical innovation maintains the existing business model but “pushes” new technology into markets. 3. Disruptive innovation leverages the existing technology and creates a new business model. 4. Architectural Innovation changes both the business model and the technology.

Routine, or improvement innovation is required, as we have noted (Christensen uses the term, Sustained Innovation in his pioneering work, implying that the innovation is customer informed).^{3,4} We further argue that some form of radical, disruptive and/or architectural innovation is also required. In this paper, we use the term “transformative” to cover radical, disruptive and architectural innovations. With this term, we recognize the potentially transformative consequences of

this type of innovation, both for the company and for the markets that it serves.

Transformative innovation is inherently difficult. Innovators face massive uncertainty in gathering necessary resources, challenges in identifying supply and sales channels, regulatory constraints, difficulty with finding the right talent, and many other obstacles. These challenges are shared by innovators of all types, from startups to emerging companies to incumbents.

Large established firms face one important challenge that smaller organizations avoid: the challenge of maintaining and growing an existing business while simultaneously transforming it. There are at least two major components to this challenge. First, the established firm is designed to maintain and grow the existing business through sustained or continuous innovation. How are leaders, steeped in the sustaining perspective, to decide which bets to place in the transformational innovation arena? Second, the established firm is composed of real people, many of whom are assigned and committed to quarterly goals monitored by shareholders and regulating agencies. How are these people and their leadership teams to release and allocate resources to uncertain and risky experiments?

Our work focuses on answering these questions. In this paper, we propose an updated innovation dashboard to help identify the right innovation activities, determine how to measure those activities, and align diverse constituencies within the organization around innovation efforts. In a second paper in this volume we describe 4 models for organizing corporate innovation, and a framework for assessing organizational innovation maturity.

We propose a tool, the Innovation Dashboard 2.0, designed to: (1) guide leaders as they create new business models and value creation performance parameters; and, (2) guide stakeholder alignment to invest in transformative innovations. Created as a visual summary of the literature on innovation and informed by practice, the Dashboard is a practical working canvas for corporate executives and innovators. The dashboard indicates what decisions need to be made on what timeline and provides a space to confront, discuss and make those decisions. Further, it articulates plans at the top level, and aligns expectations about what will happen by when. In short, the Innovation Dashboard 2.0 is a tool to unlock needed high-difficulty, high-risk forms of innovation.

DEVELOPMENT OF THE INNOVATION DASHBOARD 2.0

Innovation Dashboard 1.0 was a synthesis of concepts taken from the Balanced Scorecard originated by Kaplan

and Norton and extended to include dimensions focused on enabling innovation and change in organizations.^{2,5} Our intent at the 1.0 stage was to leverage certain concepts from the Business Model Canvas (Osterwalder), since the business model is an important component of bringing innovations to the market.⁶ This work was first published in *J. Commercial Biotechnology*, c.f. Boni et al.² In the current paper, we improve and extend the dashboard by emulating the visual utility of the Business Model Canvas and integrating the OKR (Objectives and Key Results) model recently published by John Doerr.⁷ We also update the Dashboard to incorporate findings from our own field experience in corporate innovation, and bring the Dashboard in line with nomenclature suggested recently by the Balanced Scorecard developers. The result is a working, visual tool that is intended as a canvas by which the key members of the innovation team and their constituents address make decisions about and align the team around innovation.

We draw on our respective field experiences to further inform design of the tool. One of the authors is a former Sr. VP/GM of a large unit initiated and grown inside a large, and rapidly expanding company with a record of transformative innovation success. He is also a veteran “serial” startup founder and CEO, university commercialization leader and more recently business school professor. His experience provides grounded perspective and details on the workings of organizations that have produced transformative innovations over an extended period of time. The second author is a design thinking leader, consultant on entrepreneurship and innovation, and regularly convenes corporate innovators to share insights and best practices via the Corporate Accelerator Forum (which she founded). Her perspective working across multiple corporate innovators provides, among other observations, the insight that stakeholder alignment is a primary challenge in achieving successful corporate disruptive innovation.

We began with the Innovation Dashboard 1.0 as a foundation.² We conducted a heuristic design review with the visual, collaborative nature of the Business Model Canvas in mind, and identified key opportunities to create a usable tool. New requirements included:

- Simplicity
- Space
- Logical and usable division of elements for use by multiple parties
- Addition of practical considerations emerging from field observations.

Concurrently, we drew on established case studies regarding the alignment challenge, and created detailed

case descriptions of our own experiences with corporate innovation alignment.

Finally, we created prototypes for an updated Dashboard, and tested it with multiple corporate innovators in a workshop format. We fed the findings from this experiment back into the tool and the language describing its use. The Innovation Dashboard 2.0 is thus the result of literature review, practical wisdom and experience, and limited real-world testing.

THE ALIGNMENT CHALLENGE

Nearly all big organizations have orderly behavior as a value in their culture – this makes sense. To reach big goals, many people must operate in concert. In a way, this is the very definition of a corporation. Furthermore, regulations demand compliance. For example, in the context of finance, public companies must make forecasts and execute to reach the stated goals, e. g. financial ratios, revenues, etc. In the context of the life sciences, safety and privacy rules must be followed in all markets, especially since lives and health are at risk. These rules are designed to limit and/or manage risk, a very important principle! Nobody wants to hurt people or destroy shareholder value. Internal stakeholders, therefore, will not and probably should not provide automatic enthusiasm or material support for transformative innovation without identifying and actively managing risks.

However: the market will change as new technologies and business models emerge. These changes can't be predicted in advance, but competitors can and will pursue them. We know that change is coming, but cannot determine what exactly the change will be: That is uncertainty. Therefore, the corporation must participate actively in exploring potential changes. This means managing the associated risks in order to learn and therefore endure or even thrive when change arrives. The alternative is to be left to respond passively to unexpected changes with incalculable, potentially existential risk. There are many companies to cite who were slow to respond to these hard-to-see “over the radar” opportunities and ultimately disappeared — for example. Digital Equipment Corporation, Wang Laboratories, Blockbuster, etc. in the technology industry.

The biopharma industry provides a contrasting story, one in which large pharmaceutical companies, not wanting to passively accept disruption, found ways to experiment with opportunities originating from biotechnology breakthroughs by others. They accomplished this experimentation via partnerships with these emerging companies by slow engagement, increasing over time as comfort and risk reduction occurred. As a result, rather than disappearing in the face of new technology,

large pharma companies have used the partnering and M&A processes to drive consolidation of the industry. In effect these practices have led to a “marriage” between the pharma industry and the VC-backed biotech companies. By pacing their engagement with the new biotechnologies, the pharma companies were able to align internally and survive the change. Currently the biopharma ecosystem includes both acquired biotech groups (such as Genentech and Foundation Medicine, acquired by Roche), and freestanding partners, such as Amgen, Biogen Idec, Gilead, Celgene, and other now mature biotechnology companies.

Necessary efforts to reduce risk are inherently in tension with necessary efforts to explore risk actively. Stakeholders who lead these contrasting efforts must find a way to align with each other while managing the risk, not avoiding it.

WHAT DOES IT LOOK LIKE WHEN AN ORGANIZATION ISN'T ALIGNED?

Global IT company Citrix has seen mixed success as an innovator. Consider these examples of moments in Citrix history when lack of alignment may have hobbled innovation.

Financial goals asserted without connection to mission/vision: Citrix sets ambitious financial goals for itself. At various times these financial goals were presented to internal and external audiences as primary goals – as salient or even more salient than any customer-oriented mission.⁸ Financial goals are certainly critical to any company and serve to create powerful alignment between the board shareholders and company executives. Certain employees also benefit explicitly from this kind of financial commitment: If the company grows its revenue, its stock price is likely to rise, affecting the lifetime wealth of employees with stock awards. However: Many employees benefit only slightly or not at all from increased corporate revenue.

Secondary benefits, such as listing a growing company on one's professional profile, may not be enough to motivate performance. Even for stock-compensated employees, a financial target may not feel particularly central on any given workday, depending on the role. Worse, most employees have no conscious agency with regard to revenue – sales people have a direct effect, but most other job titles have essentially no ability to increase revenue directly, and limited ability to reduce costs. Perhaps most importantly: Work and professional advancement is a primary source of meaning for workers. Employee ownership, as discussed below, is an important component of “meaning and motivation”, c. f. Boni, Weingart, and Todorova.⁹ The goal of increasing

corporate revenue may not generate as much meaning as goals that affect lives (some innovators choose the life science industry for that reason). In attempting to align primarily around financial goals, Citrix may have excluded most employees from direct positive reinforcement, limited most employees' impact and agency, and also limited its ability to engage employee's sense of meaning in their work.

Tactical innovation goals articulated without connection to strategy: Citrix took on a major challenge in 2009: Focus on the customer through adoption of design thinking, including service design.¹⁰ Customer focus was indeed a very important objective – as it would be for any company working in a crowded field: If there are many ways to solve a problem, or get a job done, the customer experience can differentiate positively to win sales and ongoing loyalty, and prevent or mitigate negative sales outcomes. (c. f. Boatwright and Cagan, and also Hahnemann for more extensive discussion on this topic, especially the emotional components of decision making).^{11,12}

New roles were created and consultants hired to train all employees in the design thinking toolkit. Measures for these training goals were established and tracked, along with design recognition goals. For example, if the company was successful in addressing customer experience, it should get good customer/user feedback, increased adoption, and potentially win design awards. Return on investment was also tracked (noting that ROI is difficult to ascribe to any particular source).

What was missing? Any discussion or explanation of the steps that could connect the customer-focus tactic to the key strategic goal. Customer experience improvements have a theoretical impact on financial goals through improved purchases and loyalty, but did designers understand how to create financial impact as such? Did sales or marketing staff understand how to take advantage of customer experience improvements? At Citrix, customer focus was presented largely as a moral imperative and a tactical toolkit, rather than a measurable outcome with direct effects on strategy. We have included a sidebar on the Citrix experience for the interested reader in Vol. 24 of *J. Commercial Biotechnology*, c. f. Boni et al.² Today (April 2019) Citrix' strategy directly includes a customer-focused mission: "at Citrix, our mission is to power a world where people, organizations, and things are securely connected and accessible." There is a clear logic chain between customer-focused tactics and customer-oriented strategy.

WHAT DOES IT LOOK LIKE WHEN AN ORGANIZATION IS ALIGNED?

SAIC (Science Applications International Corporation) enjoyed a decade or so of high, consistent growth after inception (~30% per year profitably), reaching the \$1B annual revenue level in approximately a decade. It eventually reached over \$8 billion prior to its IPO, and then split into two public companies (SAIC and Leidos); c. f. Beyster and Economy.¹³ The company started with a focus on solving problems related to national security for the government, and generated revenue and profitability through service contracts. SAIC then added new government customers related to national intelligence, space, energy, environment, and healthcare. Ultimately, the company transitioned to filling technology-related needs of commercial organizations both nationally and internationally. These new business developments were made through exploitation of technological innovation and business model innovation in response to new customer need, and entailed significant changes inside the company. In short, SAIC engaged successfully in transformative innovation (both new technology and new business models). Stakeholder alignment played a major role in SAIC's innovation success. CEO J. Robert Beyster (JRB) established strong mechanisms for creating and maintaining this alignment. We describe two examples below (and our paper on Innovation Models in this issue touches on additional elements of SAIC's approach).

Cultural alignment – Incentives: SAIC was employee owned, and that was part of the culture. Similar to other large companies, this ownership was represented in terms of stock grants, options, and an employee stock ownership plan (ESOP). In contrast to other large companies, SAIC stock was accessible only to SAIC employees and close affiliates, with zero dilution from investors or anonymous shareholders of any kind. The SAIC approach meant that any given employee, regardless of level, had access to ownership of a meaningful, potentially life-changing amount of stock in the company. For most employees at other companies, stock plays a relatively small role in income, as compared to salary. For all employees at SAIC, stock was a meaningful component of compensation, and therefore the success of colleagues in other parts of the business was perceived as additive, rather than competitive.

Since the company was privately owned, the stock price was set quarterly (by the Board) for trades within existing and incoming employees. The process was regulated by the SEC. All employees were provided access to stock through stock options granted upon hiring, earned as incentives based on achieving their performance

objectives, and, through the ESOP as a fringe benefit. At the leadership level, this meant that employees who focused principally on maintaining the original business had significant, literal stock in the success of the ongoing business they maintained, but they also benefitted as the new lines of business created value. Employees focused on innovation and growth thru new lines of business earned significant, literal stock through the new businesses that they created, but they also benefitted from performance in the “traditional” lines of business. Since everyone owned the same stock, as prices rose, all benefitted regardless of their particular role in the company – “a rising tide lifts all boats”. The stock served to align incentives in the most direct way. When a difficult resource decision had to be made that would benefit innovation or business maintenance differently, employee ownership served to help each leader and employee to take both the short – and the long-term under serious consideration. Basically, stock ownership (employee ownership) was the glue that tied everyone together to grow the organization as a profitable entity responding to new challenges, while simultaneously growing and diversifying the base business. Contrast this with typical Silicon Valley companies – while employees in high-tech companies might own some shares of stock, their ownership is extremely diluted relative to investors’ ownership (with the notable exception of company founders).

Process alignment – Guiding coalition: SAIC management was characterized by collaboration between the Board of Directors, external advisors, and top managers of SAICs autonomous business units – this was the “guiding coalition” that led change (see more below), c. g. Kotter who has created an 8-step model for leading change.¹⁴ Under the direction of the CEO, these leaders comprised a Management Council that met quarterly at the numerous company business unit sites around the country to understand what was happening on the ground, and tangle with thorny challenges facing each unit and the business as a whole. Alignment across the organization was reinforced with consistent practice and in-person engagement, which was important since SAIC was organized from inception to be close to its customers who were located throughout the United States.

Organizational capacity alignment – change management: At SAIC, innovation could originate in any one business unit. Opportunities were identified as part of an aggressive business development culture and focus on existing and new customer needs. Therefore, as the company grew it was often necessary to move businesses from one business unit to another to better align the new business with the customers and with the skill sets of the individual groups. Opportunities could also be identified at the corporate/CEO level. The result of this entrepreneurial approach often led to the addition of a new Group, intended to consolidate businesses serving

similar markets and customers. The topic of “reorganization” was discussed at each annual planning cycle with the CEO. More significant alignments occurred every several years, and were led by the CEO with Board Level engagement. The common bond and incentive of stock ownership and liquidity served as a motivator to build the value of the corporation vs. any one unit. Managers who succeeded were incentivized with the leadership of larger units. Those who did not were accommodated in units more consistent with their skill sets. Active management of expectations was common practice.

Frequent reorganization is common in other companies as well, however, most other companies do not base this reorganization process on experimenting with new customer needs. Also in many cases, cultural barriers and lack of incentives is a serious barrier for reorganization. To succeed in transformative innovation, companies can identify in advance how they will encourage and accommodate experimentation, what will happen when a project succeeds or fails, measure their activities, and create a shared understanding across a guiding coalition.

ALIGNMENT THROUGH THE INNOVATION DASHBOARD 2.0:

Dashboard 2.0 is a visual canvas that guides corporate innovators to:

- Shape the decisions needed to identify and act upon worthy transformative innovation attempts
- Provide a space to confront, discuss and commit to those decisions
- Articulate strategic and tactical plans for disruptive innovation
- Align expectations across internal stakeholders including a guiding coalition
- Accumulate and act on lessons learned (technology, leadership, culture, etc.) and embed them into the infrastructure of the organization going forward.

Our updated **Innovation Dashboard 2.0** was crafted to serve large companies engaging in transformative innovation. That said, we believe it can be used as a canvas/dashboard by any organization to align vision and engagement around the innovation agenda. This planning tool is suitable for large mature organizations, as well as for smaller units such as accelerators or independent operating units. It may even be useful to the growth stages of early stage companies.

The tool is designed to guide creation and execution of appropriate OKRs (the Objectives – or goals, and Key Results indicators) – goals and metrics for that unit which will change over time as the organization(s) evolve. We discuss OKRs, now a well-established Silicon Valley methodology, below.

The key elements of the dashboard are Vision and Mission; Strategy (Customer and Financial); and Tactics (Organizational Capacity, Culture, Process and Resources).

Any transformative innovation strategy must be driven by an overarching Vision and Mission – the Vision is the organization’s intended destination or aspiration (its desired future position), and the Mission is the near-term path to reach that destination thru its current business objectives, tactics and approach. The entire organization shares a single Vision. Each group may have a distinct, related Mission to move the Vision forward, as was illustrated above for SAIC. The Vision at SAIC overall was to find and deliver solutions to problems of national significance that could be solved by the principles of science and engineering. Under that vision, the original business focused a defense mission, while later arms of the business took on missions in energy, environment, space and others.

With the mission and vision, the dashboard guides both Strategy (meaning long-term plan and objectives to achieve the vision); and Tactics (meaning the actions required to achieve the short-term goals (largely as delineated in the Key Results). Measurement is embedded in the Dashboard via the Key Results, which are quantitative (but can include qualitative aspects as well).

BACKGROUND

The Dashboard is built on the foundations and framework of the Balanced Scorecard, originated by Robert Kaplan and David Norton²⁶, where key factors to be measured and monitored include: Customer, Financial, Culture/Processes, and Organizational Capacity (formerly termed Learning/Growth). With an eye to pragmatic use, we distinguish Culture and Processes as separate categories. While we concur with Kaplan and Norton that these concepts are highly interdependent, we have observed that the pragmatic work of implementing new culture is quite different from the work of implementing new processes. Building on Kaplan and Norton’s original categories, we include an additional tactical element: Resources.⁵ The best planning in the world is of no use if the organization withholds the time and money that are required for disruptive or transformative innovation. The good news is that investment of time and money should be relatively low in the early stages.

We distinguish two strategic arenas: Customer and Financial; from the tactical arenas: Organizational Capacity, Culture, Processes and Resources. Financial goals are by definition strategic for large organizations. Taking a cue from design thinking, Lean Startup, and the Business Model Canvas, we take the position that Customer also needs to be treated as a strategic arena. In this view, customer focus drives corporate longevity strongly enough that customer goals must be treated as equally strategic, if not more strategic, than financial goals. The remaining arenas represent tactics to serve strategy.

We recognize that a particularly difficult challenge any organization faces when challenged with change is to “get everyone on the bus, in the right seat, or off the bus” according to Jim Collins in “Good to Great”.¹⁵ Accordingly, the Dashboard serves to align the goals and objectives of specific teams or units with those of the overall corporation – and then to identify who specifically is responsible for action(s). To that end, we add the use of the methodology of *Objectives and Key Results* (OKRs).

OKR’s were embedded into the Intel culture by the legendary co-founder Andy Grove. John Doerr, the well-known and storied Silicon Valley VC at Kleiner, Perkins, Caulfield and Byers (KPCB), brought the OKR concept to Google and to many other organizations in his investment portfolio. Many other companies have used the OKR concept and extensions proposed by Boni in a recent J. Commercial Biotechnology article — leading innovators including Intuit and Google itself in addition to Chrome and YouTube.¹⁵ Doerr stresses that it is important to use the OKR’s quarterly and annually by all in the organization to align goals and collaboration, to build trust in the organization, and to measure performance. Everyone’s OKR’s are tracked and visible to all in the organization including the board of directors! What better way to align goals or objectives, and measure achievement than with quantifiable results and powerful illustrating stories?

The Dashboard was inspired by and is fully complementary to the Business Model Canvas (BMC).²⁸ In effect we consider that the Dashboard is a corporate version of the BMC, but focused on the organizational components specifically. The BMC is carefully calibrated to the needs of a startup, which by Steve Blank’s definition is “a temporary organization searching for a repeatable and scalable business model”.¹⁶ An ongoing corporation is no longer temporary – it has culture, processes and teams designed to stabilize and scale the organization and defend its efforts to a wide range of stakeholders and customers. This culture and process-set tend to reduce the organization’s ability to take on transformative innovation. Furthermore, an established firm has evolved multiple competing opportunities with resource needs – it can no

longer afford to be laser-focused on experimenting with a single project. The corporation therefore needs a different type of canvas. In the spirit of the business model canvas (BMC), the Dashboard lays out all of the elements that must move forward in an integrated fashion in order to foster disruptive innovation. Also in the spirit of the BMC, the Dashboard covers customer-facing, company-facing, financial and partnership elements.

In our view, the Dashboard should be used hand-in-hand with the BMC and other customer-focused innovation methods such as design thinking and Lean Startup. The Dashboard handles the organizational alignment needed to make disruptive innovation stand as an ongoing effort in a corporation. Simultaneously, toolkits like the BMC, design thinking and Lean Startup support the day-to-day thinking and practice required by the actual teams working directly to identify new technologies and business models.

Disruptive innovation entails that the work (or “jobs to be done”) of some employees (and managers/leaders) will change — either ending, shifting significantly within the organization, or moving into a spinoff company (a NewCo).^{3,4} With the right communication and leadership practices in place, this massive change can be weathered or even embraced, c.f. the SAIC story. In short, leaders in the organization, and all constituents involved (internal and external) must agree on:

1. The necessity and urgency of transformative innovation
2. Full endorsement and support by all constituents so that innovation is “protected”
3. Shared principles, goals and processes to foster transformation.
4. Use and understanding of OKR’s to chart the evolution of innovations (sustained and transformative) through their respective pathways to the market.

These agreements must become an ever-present solution for the frictions and tensions that inevitably arise in any organization. Conflict management and education refer to and build on this foundation. A little creative tension is to be expected and is a good thing! Too much tension can be destructive; too little may indicate lack of engagement with the change. We view the Innovation Dashboard as an important tool for articulating transformational goals (objectives) and measurable outcomes (key results) – OKRs – that explicitly and consistently guide the processes and practices required to achieve those objectives and key results. Along with the OKRs, we also suggest use of the Business Model Canvas which is also a valuable team-based framework to tie together the

business model elements. Framed in the context of the Dashboard, these methodologies establish a firm basis for developing understanding, trust and alignment across company leadership and all of its constituents, including shareholders and outside partners. In this context, the **Innovation Dashboard 2.0 provides the framework** to accomplish four tasks:

1. Discipline innovation behavior to address transformation – identifying unsolved human problems thereby **creating new value** for stakeholders including customers, shareholders, partners, and employees as constituents of the organization.
2. **Evolve and grow a culture of innovation** that supports transformative innovation (we are tacitly assuming that the organization already know how to execute sustained innovation).
3. Shape organizational behavior to enable the implementation of **business model elements** specific to and required for successful delivery and capture of value for transformative innovation.
4. Provide a convenient and powerful framework to **align leadership team, employees, and shareholders** with strategic and tactical innovation goals around a common set of goal and objectives.

The elements of the Dashboard are shown as a canvas in Figure 1. Our intent is for each appropriate team to develop and be responsible for relevant OKRs. Any given company will create its own **specific OKRs and time scale** for achievement suited to the opportunity landscape and the organization’s evolution along the development pathway.

SUMMARY AND CONCLUSIONS

The Dashboard is intended as an active design canvas to be used throughout organizations setting themselves up for success in transformative innovation. In principle, like the OKR practice, the dashboard methodology is suited for use by the entire organization regardless of size, as well as by individual units within the organization. In fact, Doerr suggested that the OKR methodology can be piloted in individual business units. As entrepreneurs, we advocate building the methodology into the culture of the organization from its inception and evolving it thru the growth and maturation stages. The design canvas, Innovation Dashboard 2.0, is intended to guide disciplined disruptive innovation work. Making the dashboard concept ready for practical use by corporate strategists and innovators will require

Vision: Mission:								
Strategy	Customer				Financial			
	Objectives		Key Results		Objectives		Key Results	
	Stories				Stories			
Tactics	Organizational Capacity		Culture		Processes		Resources	
	Os	KRs	Os	KRs	Os	KRs	Os	KRs
	Stories		Stories		Stories		Stories	

Figure 1: Corporate innovation dashboard 2.0

Vision: <i>Corporate aspiration</i> Mission: <i>Team responsibility supporting the vision (path to the destination)</i>								
Strategy	Customer <i>E.g. new customers, markets, value</i>				Financial <i>Revenue</i>			
	Objectives		Key Results		Objectives		Key Results	
	<i>What we will do</i>		<i>How we'll know it's done</i>					
	Stories <i>What is happening? What does it mean?</i>				Stories			
Tactics	Organizational Capacity <i>Knowledge, Skills</i>		Culture <i>Incentives, behaviors</i>		Processes <i>E.g., funds fasttrack</i>		Resources <i>Designated, assigned, protected</i>	
	Os	KRs	Os	KRs	Os	KRs	Os	KRs
	Stories		Stories		Stories		Stories	

Figure 2: Corporate innovation dashboard 2.0, with notes

adaption and testing. The next step for refinement and improvement is to gather case studies of real-world use of the Dashboard, including both rich qualitative description and quantitative results of specific decisions. We anticipate using this framework in our consulting and educational work, and welcome feedback from the experiences of our audience.

We have argued that large companies have an imperative to undertake innovation in the transformative space,

to hedge against the probability of smaller entities disrupting technologies, industries and business models. Further, we have argued that large companies face a special challenge, relative to smaller entities: Large companies must engage in transformative innovation while simultaneously maintaining existing lines of business. Our aim is to provide a framework that recognizes the distinct missions of different units in the organization, makes strategic and tactical decisions visible for discussion, and guides ongoing

Vision: <i>Airbnb creates new commerce and social change</i> Mission: <i>Leverage natural experiments from the Airbnb community to create new customer offerings</i>								
Strategy	Customer				Financial			
	Objectives		Key Results		Objectives		Key Results	
	<i>Yr 1: Identify hosts creating new experiences, build MVPs</i>		<i># host ideas reviewed, experiences identified, MVPs prototyped/released</i>		<i>Suspend in year 1. Year 2: Review for opportunities and non-financial positive impacts</i>		<i>Dollars and other impact opportunities identified.</i>	
	Stories <i>Examples</i>				Stories <i>Stories about hosts creating extra revenue for themselves & communities</i>			
Tactics	Organizational Capacity		Culture		Processes		Resources	
	Qs.	KRs	Qs.	KRs	Qs.	KRs	Qs.	KRs
	<i>Hire design thinking leader, train team</i>	<i>Completion</i>	<i>Set expectation: AirBnB staff hosts seek experiments</i>	<i>Completion</i>	<i>Build process for release time to participate</i>	<i>Completion</i>	<i>2 designated FTE guaranteed for 5 years</i>	<i>Completion</i>
	Stories <i>How leader got involved, how people changed through training</i>		Stories <i>Discovery stories</i>		Stories <i>Stories about staff involvement</i>		Stories <i>What is made possible given protected resources?</i>	

Figure 3: Speculative AirBnB example

measurement of required activities. The Dashboard is in current use with large companies. We plan to update the Dashboard with findings from this fieldwork.

REFERENCES

- Pisano, Gary, "You Need an Innovation Strategy", Harvard Business Review, R1506, June, 2015.
- Boni, Arthur A. (2018). "The Business of Commercialization and Innovation", *J. Commercial Biotechnology*, Vol. 24 No. 1.
- Christensen, Clayton M. (1997). "The Innovator's Dilemma: when new technologies cause great firms to fail". Boston, Mass.: Harvard Business School Press.
- Christensen, Clayton M. and Michael E. Raynor. "What's Coming Next" The innovator's solution: creating and sustaining successful growth. Boston, Mass.: Harvard Business School Press.
- Kaplan and Norton. (1996). "The balanced scorecard: translating strategy into action". Boston, Mass.: Harvard Business School Press, Also see "Linking the Balanced Scorecard to Strategy, *California Management Review*, Vol. 39, 50-70.
- Osterwalder, Alexander, and Yves Pigneur, "Business Model Generation", Wiley (2010).
- Doerr, John, "Measure What Matters", Portfolio/Penguin (2018).
- Madden, Brian, <https://www.brian.madden.com/opinion/Can-Citrix-become-a-Thought-leader-again> (2006).
- Boni, Arthur A., Laurie, M. Weingart, and Gergana Todorova (2014), Chapter 7, "Building, Managing, and Motivating Great Teams", in *Biotechnology Entrepreneurship* (ed. Shimasaki, 2014, Elsevier).
- <http://www.managementexchange.com/story/reweaving-corporate-dna-building-culture-design-thinking-citrix> (2009).
- Boatwright, Peter and Jonathan Cagan (2010), "Built to Love, Creating Products that Captivate Customers", Berrett-Kohler Publishers, Inc.
- Hahneman, Daniel. (2011). "Thinking Fast and Slow", Farrar, Straus, and Giroux/Macmillan.
- Robert Beyster and Peter Economy (2014). "*The SAIC Solution: Built by Employee Owners*", 2nd Edition, La Jolla, CA, The Foundation for Enterprise Development.
- John P. Kotter. (2009), "Leading Change", Harvard Business School Press. Collins, Good to Great.
- Collins, Jim, "Good to Great", Harper Collins Publishers (2001).
- Steve Blank. (2013). "Why the Lean Startup Changes Everything", *Harvard Business Review*.