Aesthesis

Design and the Art of Management
THEMED ISSUE

THE DENVER BIENNIAL OF THE AMERICAS
Bruce Mau

DESIGN THINKING
Bauer and Eagen

DANCE AND ORGANIZATIONAL LEARNING
Rowe and Smart

BUILDING DESIGN CAPABILITY
Sung and Chang

INTERACTION DESIGN AND INNOVATION
Holmlid

DESIGN METHOD AND COLLABORATION
Vaughan, Stewart, Dunbar and Yuille

DESIGN PROCESSES AND TOOLS
Robertson

STRATEGIC PLANNING, ART AND ARCHITECTURE
Rubinyi

DESIGNING INNOVATION INTO ORGANIZATIONS
Costello, Mader and Gatto

THE ARTIST ENTREPRENEUR
Fletcher

Aesthesis:
International Journal of Art and Aesthetics in Management and Organizational Life

is published by

the Aesthesis project

CONTENTS

Design and the Art of Management — *themed issue*

Ken Friedman, Laurene Vaughan and Jonathan Vickery

The editors of *Aesthesis* have been thinking of new approaches to 'the art of management' – or perhaps thinking about new ways to approach old problems. It seemed natural for us to think of design and design thinking as central to this intellectual endeavour – design is the process by which designated problem-solvers address the problems of legitimate stakeholders using innovation and creativity. But design is more than just problem solving. Design engages the sensibility, and designed artefacts take their shape in terms of feeling and form as well as function. The papers submitted for this issue on design, management, and organization covered all those areas and more.

In different shapes and guises, the articles in this issue all merge on the subject of 'design thinking', whether looking at 'tools', processes, experience or interactions. In terms of subject matter, the term 'design' in this issue emerges as a dynamic element of investigation into organizational learning, collaborative networks, product development, organizational resource management, service capability development, strategic urban planning, organizational creativity, contemporary art, and the conceptual-philosophical content of the epistemic functions of design that give us frameworks to think, create, assess, analyse and evaluate. Design always involves three great questions. How do we make things? How do we make things work? How do we make things work better?

Nobel Laureate Herbert Simon (1982: 129) defines design as the process by which we '[devise] courses of action aimed at changing existing situations into preferred ones.' Creating something new or reshaping something that exists for a purpose, meeting a need, and solving a problem, are courses of action toward a preferred situation even though we may not yet be able to articulate this preferred situation. This definition therefore covers most forms of design.

Design is not necessarily an outcome, but rather a process. The verb 'design' describes a process of thought and planning, and this verb takes precedence over all other meanings. The word 'design' had a place in the English language by the 1500s; its first written citation dates from the year 1548. Merriam-Webster (1993: 343) defines the verb design as 'to conceive and plan out in the mind; to have as a specific purpose; to devise for a specific function or end'. Related to these definitions is the act of drawing, with an emphasis on the nature of the drawing as a plan or map, as well 'to draw plans for; to create, fashion, execute or construct according to plan'.

The American architect and designer Buckminster Fuller (1981: 229-231) describes design as the difference between a 'class-one evolution' and 'class-two evolution'. Class-one evolution is natural evolution according to Darwin, the natural phenomena studied through evolutionary biology. Class-two evolution involves 'all those events that seem to be resultant upon human initiative-taking or political reforms that adjust to the change wrought by the progressive introduction of environment-altering artifacts' (Fuller 1981: 229). Design is both intrinsic and essential to human development in a fundamental sense, but also creates artefacts that change the very context of that development.

One argument for the importance of design is the increasing number of areas now subject to human initiative. The vast range of technologies that surround us mediate most of the human world and influence our daily lives. These include the artifacts of information technology, mass media, telecommunication, chemistry, pharmacology, chemical engineering, and mechanical engineering, along with the designed processes of nearly every service industry and public good now available other than public access to nature. Within the next few years, these areas will come to include the artifacts of biotechnology, nanotechnology, and the new hybrid technologies.

Fuller's metaphor of 'the critical path', which was the title of his last book (1983), articulated a scenario where our world is as much subject to disintegration as it is development or growing better. The way that the new artificial world affects the natural world has immense ramifications that parallel Fuller's idea of class-two evolution. This is what Victor Margolin (2002) called 'the politics of the artificial', where design has become so intrinsic to our environmental development that we need seriously to assess its power, and create new boundaries, ethics and agreed protocols.

Design plays a role in the evolution of an increasingly manufactured world, from ordinary objects to advanced technology. The design process takes on new meaning as designers take on increasingly important tasks. These tasks are important not because designers are more visible and prestigious, but because design has greater effects and wider scope than ever before. Despite this scope and scale, however, robust design solutions are always based on and embedded in specific problems. In Jens Bernsen's (1986) memorable phrase, the problem comes first in design. Each problem implies partially new solutions located in a specific context. The continual interaction of design problems and design solutions generates the problematics and knowledge of the field.

Design as an activity translates utilitarian, symbolic, and psychological needs into functions; it translates needs and wants into ideas; and it translates these ideas into the structural descriptions and entities to produce required functions that satisfy needs. As such, design always serves strategic goals on some level, large or small. The different forms of professional design practice require a process incorporating the strategic and managerial aspects of design as well as the hands-on developmental application of design. These move from thinking, research, and planning at one end of the process, on to manufacture, assembly, packaging, and presentation at the other.

For business firms, design is a comprehensive part of an integrated process that links selecting challenges and solving problems to developing products and marketing them successfully. For business firms, design is a comprehensive part of an integrated process that links selecting challenges and solving problems to developing products and marketing them successfully. The immaterial forms of design process have long been hidden, and now we are in the midst of a transition. Getting from one point to the next in this complex map of process, project, and product requires 'design thinking'. Design is in the business literature and designers are being brought in to organizations as they seek new ways of being, working, and producing. It is an exciting time of evolution. The literature on design thinking and the role and contribution of design to the fields of organizational and business development is expanding – and this issue of *Aesthesis* is part of this process.

REFERENCES
Bernsen, J. (1986) *Design: The Problem Comes First*, Copenhagen: Danish Design Council.
Fuller, B. (1981) *Critical Path*, New York: St. Martin's Press.
Margolin, V. (2002) *The Politics of the Artificial: Essays on Design and Design Studies*, Chicago: University of Chicago Press.
Merriam-Webster, Inc (1993) Merriam-Webster's Collegiate Dictionary (Tenth edition), Springfield, Mass.
Simon, H. (1982) *The Sciences of the Artificial* (second edition), Cambridge, Mass.: MIT Press.

Ken Friedman is Dean of Design at Swinburne University, Melbourne, Australia
KenFriedman@groupwise.swin.edu.au

Laurene Vaughan is Research Leader in the Design Research Institute, RMIT University, Melbourne, Australia.
laurene.vaughan@rmit.edu.au

Jonathan Vickery is an editor and designer of *Aesthesis*, and creator of the Masters in International Design and Communication Management at Warwick University.
J.P.Vickery@warwick.ac.uk

Designing Innovation into Organizations:
The new landscape of design management

Kelly Costello | Roger Mader | Jessie Gatto

As companies confront the challenge to think more innovatively – how they go to market, whom they serve, or what they provide to their customers – they turn to the people they have always relied upon for innovative solutions – designers. In these new circumstances, designers shift from problem solver to process trainer, from design practitioner to an active partner in embedding innovation capabilities across an organization.

This paper presents principles that designers and innovation practitioners can leverage to meet the challenge of designing innovation into the fiber, the culture, and the aptitude of the organization.

What does changing the focus of design practice mean to the methods, models and processes utilized in this new type of work? Through a series of internal interviews with team members playing various roles on projects: account leads, project managers and innovation consultants, we compiled a number of issues to consider for managing innovation, and discuss these in the context of an over-arching model for building enterprise wide innovation capability.

DESIGN A PRODUCT
"How should we make this?"

• Design brief
• Concept Illustration
• CMF specifications
• Prototype development

DESIGN A SYSTEM
"What could we make?"

• Opportunity space definition, new concept development
• Consumer needs
• Process planning and re-engineering

DESIGN A COMPETENCE
"How to be better innovators?"

• Innovation strategy, methodology
• Organizational design
• Capability and infrastructure building

Figure 1: *Design Thinking Stretches from Products to Organizational Change* - Managing innovation requires continuity across the full spectrum of design evolution.

In business, innovation refers to the creation of new concepts, offerings, or modes of conducting business. The degree of change that innovation requires may be incremental or radical, encompassing several different spheres of a company's operations and organizational units. As Patrick Sullivan notes: 'The aim [of innovation] is an organization that can develop streams of new products or repeatedly introduce new process technology to give the firm lasting advantage in the marketplace' (Sullivan 1998: 97). For Sullivan, innovation management denotes attention to the strategic direction, core capabilities, and operations of the firm. When a company desires significant innovations, it must define change that is radical enough to truly have impact, while preserving the capabilities critical to current success. This may include innovation in management, operational systems, business models, organizational structure, and other areas of impact.

On the specific topic of management innovation, Gary Hamel describes these changes as 'anything that substantially alters the way in which the work of management is carried out' (Hamel 2007: 19). As our own experience with client engagement indicates, this is still an area of developing interest, and expertise in the marketplace. As Hamel notes, a survey of the world's leading business magazines shows how conventional business literature marginalizes innovation management. While articles relating to technical innovation garner tens of thousands of hits, references to product innovation yield thousands, and pieces on strategic innovation several hundred, articles that focus on organizational innovation and new management practices result in just a few hundred hits (Hamel 2007: 35). Clearly this is a field that business strategists and academics studying business practices have usually neglected, and one that has received increased attention only quite recently.

MAKING INNOVATION AN ENTERPRISE-WIDE COMMITMENT

The process of building innovation competence works best as an enterprise-wide commitment with cross-functional, multi-disciplinary teams. Innovation initiatives find the greatest success – and the quickest uptake of ideas - when a dedicated team (from here forward referred to as the *core innovation team*) functions as committed practitioners and champions to keep efforts alive at the enterprise level. They are ideally selected from qualified members of cross-functional, multi-disciplinary teams. Participatory workshops can be used to transfer critical skills, generate enthusiasm and build commitment to innovation as an internal capability. These events establish a shared vision and sense of ambition across the organization to set direction and maintain traction.

Customizing an Innovation Blueprint

The model on the right presents several areas of emphasis for a program focused on building innovation capabilities. Each component plays an important role, and is associated with a number of activities and outputs. It is important to customize the approach for the organization's needs, identify prioritized actions, and begin initiatives. If a company has a pre-existing process model to support current innovation efforts, it is necessary to evaluate its current state and identify which elements work well and which need improvement. This assessment should inform a tailored approach that resonates well with the values, principles, and needs of an enterprise.

The model is not a process; there is no single chronology to the components. Companies frequently place higher value on one of these elements — organizational culture, process, or the products of innovation initiatives. Understanding where this prioritization lives can aid in crafting a custom approach to innovation work that prioritizes easier uptake of building innovation capability within the company. If the company values process over either of the other elements, defining a clear innovation process may help initiate change in an area of familiarity and comfort.

The different components are interdependent and, at some point, all need be considered. The team can be great, the strategy clear, a process agreed upon and executed with an innovation initiative that yields excellent new products or services, but if the current infrastructure in a company can not support an initiative, and no partnership or organic increase of capability occurs, then implementation will fail.

Strategy
Vision, goals and directives guide innovation practice

Culture
Innovation leadership and aligned teams

Processes
Agile and adaptive processes

Initiatives
A small number of bold, differentiated innovation initiatives

Infrastructure
Support for building capabilities, initiatives and implementation

Figure 2: *Driving Organic Growth through Effective Innovation – Breaking innovation capability building into several critical areas outlines a successful approach for instilling innovation in an organization (King 2009).*

Strategy
Vision, goals and directives guide innovation practice

DIRECTIONAL ALIGNMENT AND AMBITION SCOPING
- Ambition level setting
- Vision development
- Communication strategy
- Competitive landscapes
- Value definitions
- Opportunity space framing
- Agenda selection
- Partner identification

*strategy*considerations

Though most large companies may have a relatively sophisticated business strategy in place, it may not address how to deal with innovation. Crafting a vision specific to the goals of building innovation capability provides direction in creating an optimal organizational structure, setting an agenda to guide concept and platform development, and identifying relevant initiatives to meet the goals of the agenda.

Early strategy work defines opportunity spaces that are ripest for the company to pursue as part of the overall agenda. As the core innovation team defines these spaces, they craft a strategy and agenda precise enough to provide guidelines for decision-making, broad enough to incorporate opportunities that are truly new to the company, and ambitious enough to inspire the

group while providing proof that a commitment to innovation can make a difference.

approach

Set Expectations, Ambition Level:
When setting the tone for collaborative exchange, strive to appropriately set expectations for the ambiguous and uncertain nature of the process for re-building an organization's innovation capabilities. Early in the process, the innovation team should share an initial set of principles, outlining high-level requirements for a robust innovation culture: collaborative teamwork, multi-disciplinary team members, contextualized, equity-based decision processes, and business concepts developed through deep customer knowledge. In many ways, the successful implantation of an innovation unit depends upon the ability of the core innovation team to build, internalize and disseminate this core set of principles.
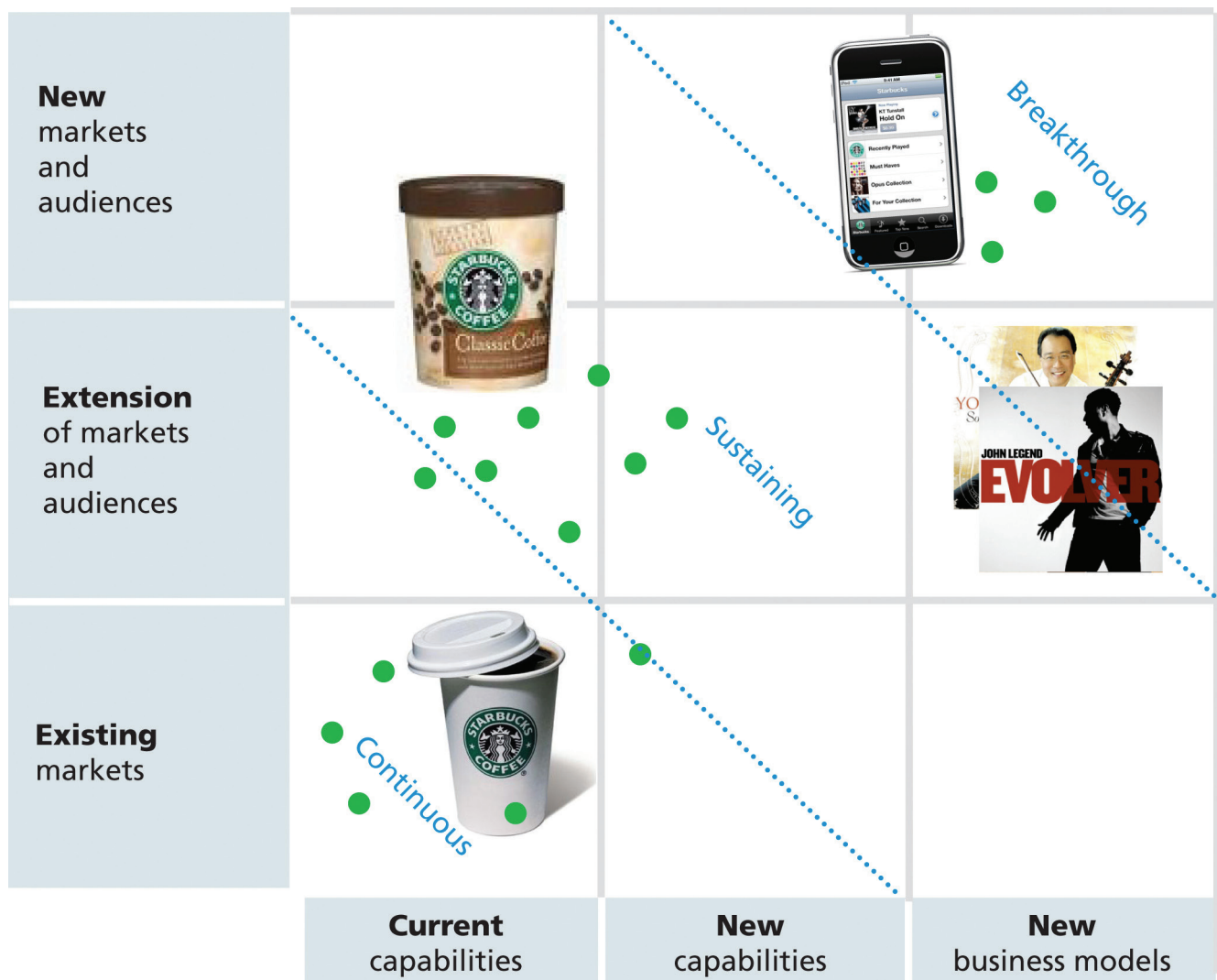

Figure 3. The core innovation team defines and positions their ambition intent at the company level, and in the context of increasing their innovation portfolio

Defining levels of innovation ambition and aligning the team around what these mean and the characteristics of breakthrough innovation sets the team on a common path for the development of an innovation portfolio. How grand is the scale of the company's ambition – a measure of both its willingness to reshape its focus and its commitment of talent and resources to the innovation process?

cultureconsiderations

Culture plays a critical role in building innovation capability, with the following factors contributing to the relationship of innovation to culture:

> The ability of people to contribute to and support an innovation competence
> A social ecosystem that supports and sustains innovation, particularly the acceptance of new ideas
> The leadership, personnel, and organizational structures that can generate, develop, and implement new ideas
> The values people have and their expectations around what behavior is rewarded in the organization

Though culture can be the single most important facilitator or inhibitor of innovation, it is also the most difficult element to impact directly. Only by focusing on other elements of the model – strategy, processes, initiatives, and infrastructure – can an organization transform its culture.

Several Key diagnostics inform the understanding of a company's culture. Internal interviews (within the company) help assess the overall innovation condition and identify orthodoxies – the unwritten rules people hold true but don't always acknowledge. These conversations also identify capabilities and potential barriers to the adoption of new ideas.

When the main focus of interviews is garnering support and input for a single innovation initiative, only executive leaders within the organization are interviewed. But when the intent of an engagement is improving company-wide innovation capability, it is important to conduct interviews that are intentionally cross-functional and multi-dimensional. A 360 degree approach to selecting interview participants – where people at different levels within the organization are included – is one of the most effective ways to ensure a clear understanding of the dynamics currently impacting successful innovations and thus to develop an approach to address company needs at an enterprise level.

approach

Characterize the Organization: Identify Attributes Impacting Innovation Effectiveness:
Embedding a program for innovation effectiveness within an organization requires us to understand the current situation of that organization through a diagnostic study exploring the structure and culture of the organization and the team dynamics of those dedicated to innovation at an enterprise or initiative level. This approach maximizes the efficacy of interventions while avoiding the pitfalls that may result from an incomplete understanding of the dynamics of the organization.

An *Innovation Condition Assessment*, undertaken at the start of the project, can ascertain specific needs of the organization by asking some key questions:
> What is the history of the organization's practices? Perceptions of success and failure?
> Where are the current innovation strengths? Weaknesses?
> How specific is the core innovation team's intent?
> Are major stakeholders aligned around this intent?
Some of the drivers of innovation readiness include risk tolerance, the current innovation capability, core innovation team dynamics, and the interplay of decision-making and leadership models.

We collaborated with leaders of a medical product manufacturer to design the structure of a new innovation group. The team understood that a cultural and philosophical shift was needed to successfully position this innovation group within the rest of the company (Tyson). The team addressed organizational design issues such as:
> Who will set and who will own the innovation strategy for the company?
> What is the current leadership model; what would be most effective for innovation?
> What is the organizational structure? What changes are required?
> What are the organizing principles and priorities for the new group?
> How much is enough? How should a massive, diversified company balance focus with the opportunity to do new and different things?

	FINANCE		PROCESS		OFFERING			DELIVERY		
	Business model	Networking	Enabling process	Core process	Product performance	Product system	Service	Channel	Brand	Customer experience
Cellular Service										
Provider A	⬭	●					●	⬭●	●	● ⬭
Provider B				●						
Provider C			◒	◒						
Provider D				○						
Convergent & Ubiquitous Services										
Provider E		●		●	●	●			●	
Provider F	⬭●	●		●	●	●		⬭●	●	● ⬭
Provider G			◒	◒						
Provider H	◒	◒	◒	◒						
Provider I			◒	◒						◒

Figure 4: *Innovation condition assessment* - Mapping current offerings across the 10 Types of Innovation [TM] illustrates capabilities and areas of potential opportunity.

The account leader described the inherent challenge of achieving both focus and diversification of effort, particularly in attaching people throughout the organization to different innovation agendas in the following:

"It was a capacity issue. We had to be able to do enough to have impact and there was no way to do that with only one [innovation] agenda. But, it was hard to do more than one agenda with only four people. We had to create a leveraged model, where we attached people throughout the organizations to these agendas. This model demonstrated how we could leverage different parts of R&D or others within the company. [The ability to do that] also becomes a key metric. This agenda has leveraged x number of people from outside the core innovation group. This becomes an evaluation metric, an Effective Value Creation (EVC) metric" (Tyson).

Some people within an organization are eager for the changes that accompany restructuring and embedding an innovation group, while others are wary and risk-averse. Assessing openness to risk can be a key determining factor in understanding the ability to challenge and evolve current innovation practices at an organization. In examining how open a company is to change, evaluators must consider both the *hard* and *soft* qualities of the organization: the hard qualities include the overall infrastructure, the management and reporting practices in place, and the distribution of funds within the organization; the soft qualities include the overarching culture of the organization, the types of decision-making processes, the emphasis placed on innovation, and the receptiveness to new ideas.

Centralized vision and planning

THE BENEVOLENT DICTATOR
Capacity to innovate is present throughout the organization and led by one individual, one vision.

THE GREENHOUSE
Capacity to innovate lives in a dedicated group responsible for planning and executing innovation for the whole organization.

Decentralized capacity ←——————→ Centralized capacity

THE FREE MARKET
Capacity to innovate is present throughout the organization, led by all, with many, competing visions.

THE SHARED SERVICE
Capacity to innovate lives in a dedicated group responsible for working with existing business units as a shared service for innovaiton.
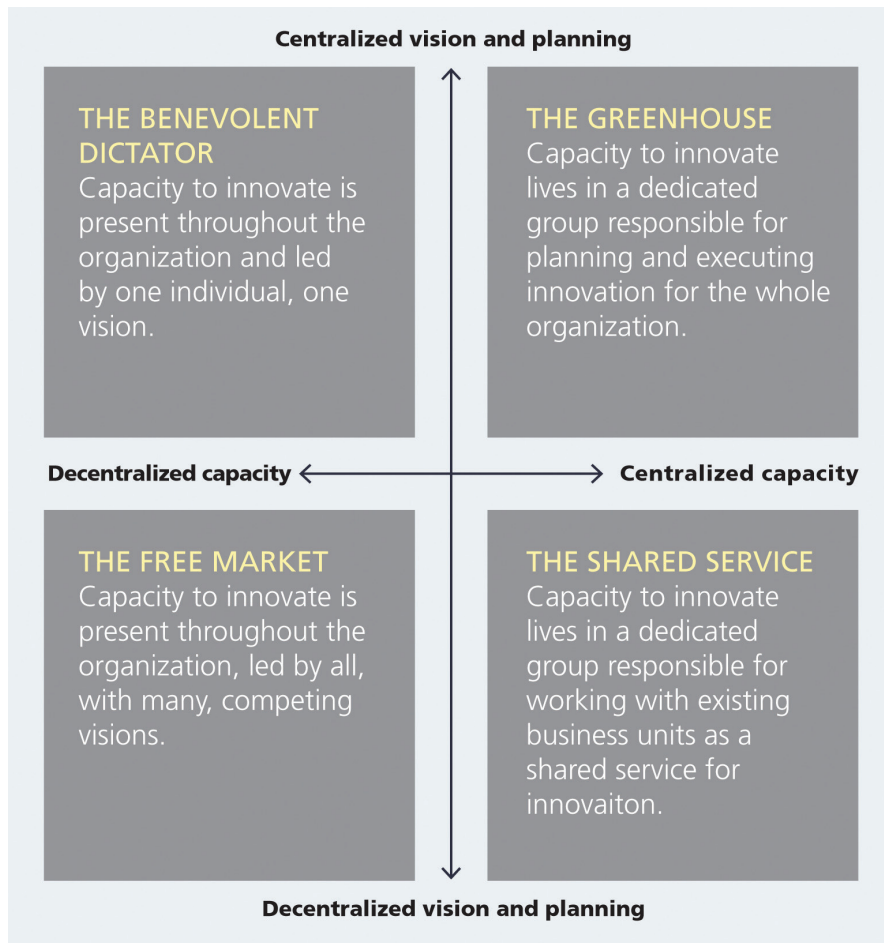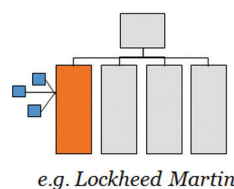
Decentralized vision and planning

Figure 5 (above): *Innovation Archetypes* – Models for fostering innovation help companies plot a path to the innovation ecosystem they want to achieve (Locsin).

Figure 6 (below): *Innovation Archetypes* – Breaking down the archetypes with examples and tradeoffs guides the selection of a relevant organizational model.

LEVERAGE ARCHETYPES AND PROTOTYPES TO CHANGE AN ORGANIZATION

In the process of building innovation capability at companies, we leverage archetypes as a way of discussing the current stance toward innovation, how new ideas and concepts currently come to fruition, and other models that exist for cultivating innovation. This framework helps to simplify an otherwise very complex innovation ecosystem, and functions as a tool for discussing different models and paths to changing the current culture.

Because a critical part of becoming more innovative as an organization includes rethinking organizational structure and envisioning new ways of interacting, organizational prototyping is a key component of imagining and testing alternative solutions.

In his book *Serious Play*, Michael Schrage discusses the importance of building visual models: 'Redefining and reshaping the prototyping culture may prove to be the most important and provocative management challenge that innovative organizations now face. Organizations that want to understand their own prototyping cultures need to have the courage to confront what their prototypes say about their strengths and weaknesses' (Schrage 65).

Greenhouse

e.g. Lockheed Martin

Where Innovation Happens	Pros / Cons
The discipline and activity of innovation is contained within the Greenhouse. It develops new concepts and incubates them, preserving the right to decide where, when, and if to transplant them to the existing business units.	+ : Free of restrictions from broader business. Able to move quickly against breakthrough concepts – : Breakdowns are common at handoff points. Needs to be coordinated and strategically aligned with broader org

process**considerations**

Work processes specifically address the activities that support innovation at the organization, business and new concept development level. The core innovation team is tasked to develop and apply processes that guide ongoing work.

In thinking about the role and importance of work processes, it is important to diagnose the nature of the organization with which you are working. For companies that are very process-focused, then prioritizing the role of various processes will be critical to successful adoption of a new innovation approach.

approach

Support collaborative processes with protocols:
Once the effort is made to understand an organization, focus can shift to visualizing a custom innovation process. Knowledge of the company will prove insufficient unless we're able to translate cultural understanding into a viable strategy and approach. We place a collaborative approach at the center of the program, designing the program to emphasize cooperation between relevant parties and focus on learning for the core innovation team.

We have found success in externalizing processes, being explicit about team roles and the desired outcomes of the work. People need clear definitions of what is expected of them, especially in circumstances where they are engaged in activities outside their own expertise.

A more disciplined model for facilitating collaborative sessions provides the tools, information and processes for developing more robust innovations. These protocols also ground people quickly in a shared discourse and approach, creating greater comfort than dealing with what may be unfamiliar territory for some clients.

Processes
Agile and adaptive processes

PLANNING AND PROCESS SUPPORT

- Innovation processes: approach and method selection, review, and implementation
- Business processes: review, assess, and redesign implementation

Figure 7: *Innovation Construction Worksheet* – Protocols facilitate discussions and the generation of new business concepts.

Initiatives

A small number of bold, differentiated innovation initiatives

OPPORTUNITY DEVELOPMENT AND INNOVATION STRATEGY

- Projects integrating:
- Customer research
- Contextual research
- Internal interviews
- Concept development
- Implementation planning

*initiative*considerations

The term initiative refers to a project focused on innovating in a particular industry, product category, or business unit — potentially in an undefined opportunity space. To familiarize participants with a new approach and create early success associated with building innovation capability at the company, the core innovation team frequently incorporates an initiative into capabilities-building engagements.

Running an initiative simultaneously provides the team with hands on learning while illuminating the need for further customization of the innovation approach for the organization. While learning-by-doing may present logistic challenges and the dramatic feeling of 'building the bus while it's rolling down the highway', it also provides unique opportunities that stretch and engage the team.

approach

Lay Down an Innovation Foundation through Active Learning:

The core enabling processes of innovation stressed in the initiative include the overall structure and approach to the program, relevant methodologies, staff roles, management models, and metrics for success. During the process of identifying and prioritizing key initiatives and exploring new business opportunities, some key questions arise.

> Should the concept project and the organization project occur concurrently, or should one precede the other?

> Did the skills learned in the pilot project transfer to the core innovation team? How was the team/innovation department impacted? How can we measure this?

> What is the best way to facilitate communication and share best practices across project teams?

Pilot projects have the ability to move innovation from an abstraction to something relevant and valuable to the organization. At their best, these projects generate momentum, inciting the organization to think in terms of its own innovation discipline. By building on strategic conversations and collaborative workshops, the core innovation team develops the confidence and experience with the process of developing innovative business concepts.

*infrastructure*considerations

Infrastructure incorporates a number of operational functions that support on-going innovation efforts. It is last in the line-up of components because organizations should make decisions about what they need to build or purchase after completing several innovation initiatives and produce a working model prioritizing needs across the organization. Typically things like knowledge management systems, overall IT strategy, project management, and other mission-critical systems already exist within the company; the organization can then refine or leverage these systems as needed. After the core innovation team has completed enough projects to feel comfortable in defining the necessary modifications to their infrastructure, they are in the best position to make meaningful changes to the existing infrastructure.

approach

Achieving Results Through a Custom Innovation Methodology:

As we embed innovation capability in organizations, we have the opportunity to collaboratively build a methodology suited to their culture, needs, and strategy. The resultant deliverable, a custom set of methods and tools, thus may include any of the following:

> Detailed guides for training core teams as the innovation program is rolled out, encompassing proven strategies and trouble-shooting techniques based on past experiences.

> A suite of diagnostic and pedagogic tools for developing strategies, aligning teams around a common purpose, and tracking the metrics that measure the output of their efforts.

> Communication strategies to distribute to innovation teams, so that they may socialize the principles of innovation within their organizations and inform their colleagues about the intent, desired results, and progress of the program

> A customized interface that enables the exchange of organizational models, allowing protect teams to leverage past experience prototyping potential outcomes.

SUMMARY

Why Designers (or Design Planners)?

Because designers are trained in design processes, critical thinking and creative problem solving, they are an important part of a healthy innovation team. Too often, companies rely solely on a marketing team to set new product development direction, and lose the opportunity to leverage designers (and design planners) in setting an innovation strategy. Design planners, and by this we mean people educated or trained in the practice of integrating strategy, design processes and human-centered methodologies, bring a rigorous and considered approach to creative problem solving that highlights a highly contextualized, informed decision-making process.

Infrastructure

Support for building capabilities, initiatives and implementation

INFRASTRUCTURE AND SYSTEMS DEVELOPMENT

- Infrastructure and systems development
- Market approach: establish channel relationships
- Modeling capability: pricing, financials
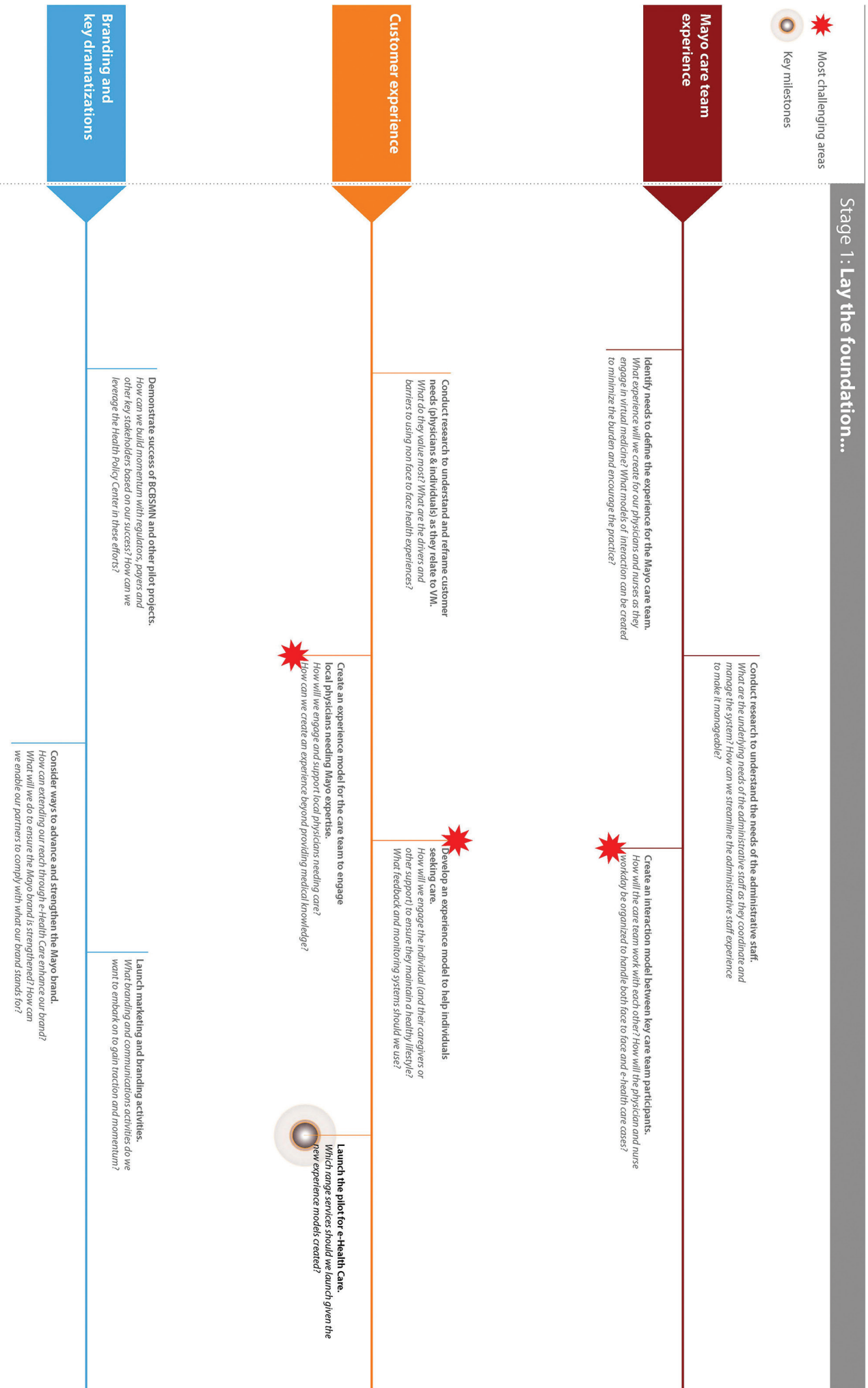- Mission-critical systems: ERP, project management

Most challenging areas

Key milestones

Mayo care team experience

Customer experience

Branding and key dramatizations

Identify needs to define the experience for the Mayo care team.
What experience will we create for our physicians and nurses as they engage in virtual medicine? What models of interaction can be created to minimize the burden and encourage the practice?

Conduct research to understand the needs of the administrative staff.
What are the underlying needs of the administrative staff as they coordinate and manage the system? How can we streamline the administrative staff experience to make it manageable?

Create an interaction model between key care team team participants.
How will the care team work with each other? How will the physician and nurse workday be organized to handle both face to face and e-health care cases?

Conduct research to understand and reframe customer needs (physicians & individuals) as they relate to VM.
What do they value most? What are the drivers and barriers to using non face to face health experiences?

Develop an experience model to help individuals seeking care.
How will we engage the individual (and their caregivers or other support) to ensure they maintain a healthy lifestyle? What feedback and monitoring systems should we use?

Create an experience model for the care team to engage local physicians needing Mayo expertise.
How will we engage and support local physicians needing care? How can we create an experience beyond providing medical knowledge?

Launch the pilot for e-Health Care.
Which range services should we launch given the new experience models created?

Demonstrate success of BCBSMN and other pilot projects.
How can we build momentum with regulators, payers and other key stakeholders based on our success? How can we leverage the Health Policy Center in these efforts?

Launch marketing and branding activities.
What branding and communications activities do we want to embark on to gain traction and momentum?

Consider ways to advance and strengthen the Mayo brand.
How can extending our reach through e-Health Care enhance our brand? What will we do to ensure the Mayo brand is strengthened? How can we enable our partners to comply with what our brand stands for?

Figure 8: *Innovation Roadmaps* – Visualizing steps and calling out key events guide implementation of innovation initiatives.

Several of the skills designers bring to innovation capability building can be cited for their importance, including the following abilities:

• Externalizing and visualizing dynamic elements of a system or process
• Fostering an innovation process, and achieving differentiated results
• Generating and prototyping solutions that allow senior management to 'see' and potentially validate desired results
• Creating an overall experience that feels different from the current process and situation existing within a company
• Identifying critical components of an innovation initiative and aiding a company in an overall implementation plan

This paper has identified a new problem in the innovation consulting industry – how to move from solution-focused engagements to methods that improve the internal innovation capabilities of an organization. As a result of our initial experiences working with companies, we discovered a common set of experiences and insights into how to make these engagements more effectively. Specifically, we introduced a high-level model that can guide organizations in assess their current capabilities and developing programs for enhanced innovation effectiveness. In this final section, we began to sketch out potential responses to these challenges, modes through which designers can engage with the problem.

But just as the task of becoming more innovative has lately become the central challenge for businesses and organizations in a diverse set of industries, so too it has become a challenge for us as practitioners and educators. In this effort, we have presented a model of instilling organizational change and a set of lessons from recent experiences. But how do these two pieces – the design model and the consulting strategies fit together? How do they inform each other? What should that relationship be? Discovering the answer to these questions – for it is still very much a work in progress – and working as designers to develop the next generation of intellectual property that satisfies the needs of these organizations, is our central challenge moving forward. //

REFERENCES
Hamel, G. and Breen, B. (2007) *The Future of Management*, Cambridge: Harvard Business School Press: 19.
King, H. (2009) *Interview with Renna Al-Yassini*, Doblin, Chicago [May 2009].
Locsin, M. (2009) 'Innovation Archetypes' In *8 Innovation Models*, Chicago: Doblin [20 February 2009].
Schrage, M. (2000) *Serious Play*, Cambridge: Harvard Business School Press: 65.
Seif, R. (2009) *Interview with Renna Al-Yassini*, Doblin, Chicago [May 2009].
Spurgeon, M. (2009) *Interview with Renna Al-Yassini*, Doblin, Chicago [May 2009].
Sullivan, P. H. (1998) *Profiting from Intellectual Capital: Extracting Value from Innovation*, New York: Wiley: 97.
Tyson, R. (2009) *Interview with Renna Al-Yassini*, Doblin, Chicago [May 2009.]
Van Wagener, B. (2009) *Interview with Renna Al-Yassini*, Doblin, Chicago [May 2009].

Kelly Costello
Director of User Research
Doblin, Inc.
111 E. Wacker
Suite 300
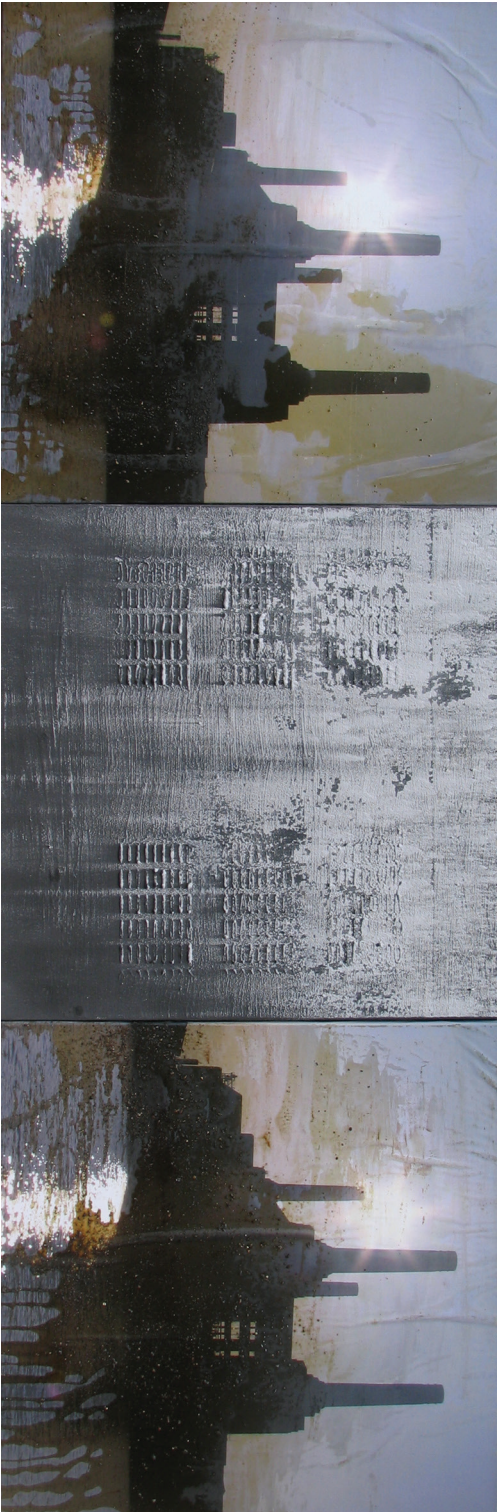Chicago, IL 60601

kcostello@ameritech.net

Roger Mader
Global Account Manager
Monitor Innovation
New York, New York

Jessie Gatto
Consultant
Doblin, Inc.
111 E. Wacker
Suite 300
Chicago, IL 60601