Organizational Design for Innovation
Applying the Creative Solving Process to Drive Innovation Effectiveness

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"Every system is perfectly designed to get the results it delivers."
— *W. Edwards Deming*

This paper outlines a robust approach to improving innovation effectiveness by combining best practices from Organizational Design and Creative Problem Solving."

Organizational Design for Innovation (ODI) must begin with an objective assessment of the organization's current state to identify gaps and barriers to achieving the desired end state to support long-term business goals. Robust ODI must answer the following kinds of questions:

- What new innovation work processes will be needed to achieve our innovation goals?
- What new organization structures, roles, and responsibilities will be needed?
- How might we get the right people with right the capabilities in the right roles to do the work?

The ODI process must acknowledge the realities of the current state while preparing a transition plan to the desired end state. The transition plan must instill a sense of urgency without overwhelming the organization - embracing a philosophy of "We can't do everything at once, but we must do something at once."

This paper describes
- A framework for Organizational Design for Innovation based on the Creative Problem Solving process
- Tools for assessing and closing the gap between the current state and the desired end state of your organization's innovation capability

What is Innovation?

One helpful definition of innovation is **a continuous cycle of proactively seeking important new problems to solve, identifying new approaches to solve existing problems, and finding new ways to implement business-building ideas.** This definition reinforces the critical role of the Creative Problem Solving (CPS) process in innovation.

Creative Problem Solving Framework

The three phases of ODI (Assess, Design, and Mobilize) correspond directly to the three phases of Min Basadur's Simplex[TM] CPS Framework: Problem Formulation, Solution Finding, Planning and Execution (Basadur, 2001). Thus, during ODI, the objective is to innovate how we innovate.
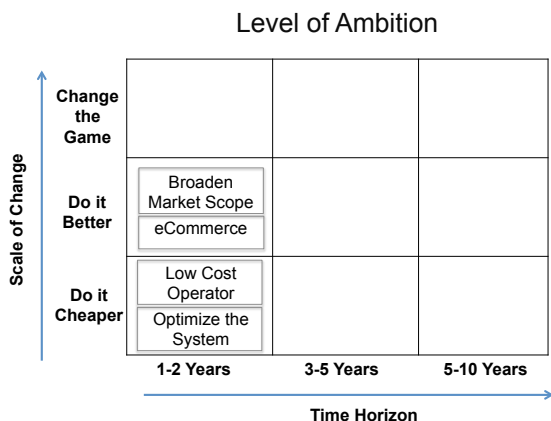
In this paper, you'll see how to apply Creative Problem Solving principles and tools to understand the current state of the organization, identify what changes are needed to overcome barriers to innovation, and develop a transition plan to achieve the desired future state. The accompanying workbook outlines in more detail the tools used during the problem definition or assessment phase of ODI.

ASSESSMENT PHASE

The first phase of ODI – the Assessment Phase – corresponds to the Problem Formulation phase of CPS (Opportunity Finding, Fact Finding, Problem Definition steps). Problem Formulation is the most important phase in CPS, but it is often the most challenging phase for teams to lead themselves through. During innovation workshops, roughly half of the available time is dedicated to Problem Formulation. Likewise in ODI, the Assessment Phase is the most important phase and represents roughly half of the total effort associated with an ODI project.

Step 1. Defining the Innovation Strategy

The objective of any innovation program is to deliver business results faster and more reliably. The Level of Ambition template is a great tool to clearly link an organization's business goals and innovation strategy. Once an innovation strategy is defined and communicated, the entire organization will know what business goals it is striving to accomplish and, importantly, *how* those goals will be delivered (answering the questions of "where to play" and "how to win").

Level of Ambition

Scale of Change		1-2 Years	3-5 Years	5-10 Years
Change the Game				
Do it Better		Broaden Market Scope / eCommerce		
Do it Cheaper		Low Cost Operator / Optimize the System		

Time Horizon

This company mapped their business goals on a Level of Ambition chart. They were originally focused on short-term incremental cost-saving and improvements in customer service. As part of their ODI program, they recognized a need to identify bigger, longer term challenges with the potential for delivering breakthrough business results.

Step 2. Innovation Readiness Assessment

A key fact-finding activity in ODI is to assess the health of the current innovation processes and organizational climate. The workbook provides a quick assessment tool for both process and climate that design teams can use to jump-start this step and identify key barriers to innovation effectiveness.

Assessing the Organization's Innovation Processes

The Product Development and Management Association (Kay, 2012) has found that outstanding corporate innovators consistently have Front End of Innovation (FEI) processes that incorporate the following key elements:

- An **Innovation Strategy** that summarizes "Where to Play" and "How to Win" choices for each business unit.

- A robust customer-driven **Idea Generation** process to generate a sustained pipeline of short- to long-term innovation projects.

- A **Portfolio Management** process that prioritizes innovation projects (against other competing business priorities) and maximizes the combined Net Present Value of innovation projects to achieve the 3-5 year revenue growth goals.

- A **Master Planning and Resource** allocation process that ensures top innovation projects are adequately staffed with (primarily) full-time dedicated resources.

- A **Stage-Gate Review** process to evaluate the progress of innovation projects against their stated objectives. Early stage project work focuses on "killer issues" that quickly prove or disprove the viability of the project.
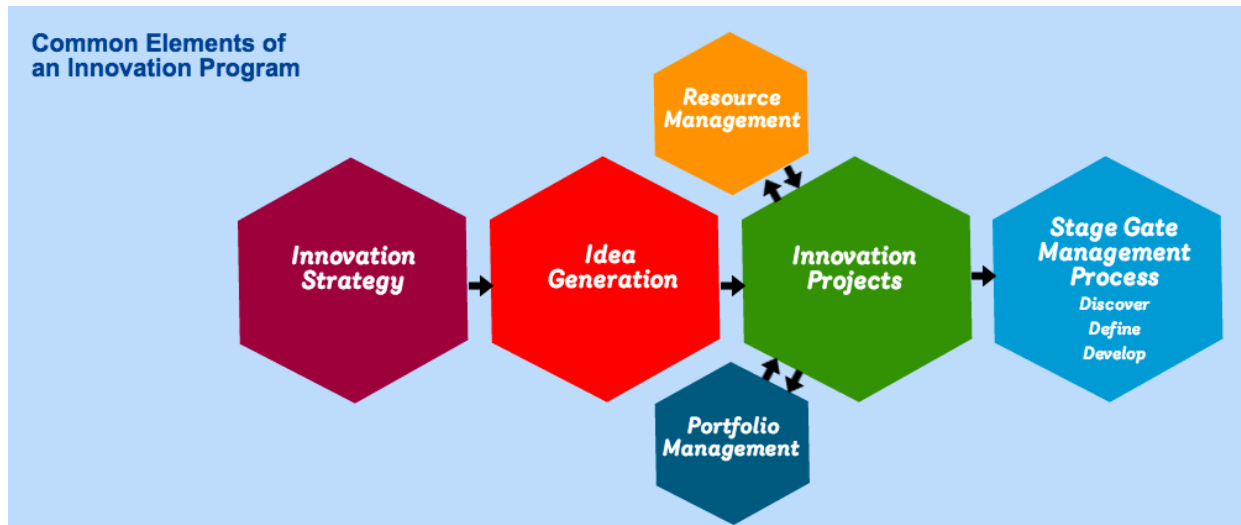
This assessment should include a review of process flow diagrams for each of these FEI elements.

Assessing the Organization's Innovation Culture

The working atmosphere within an organization is as important as its processes for innovation productivity. Climate is defined as the observed and recurring patterns of behavior, attitudes, and feelings that characterize life day-to-day in the organization. Over time, these behaviors, attitudes, and feelings translate into a sustained innovation culture (Isaksen, 2011).

Researchers have identified nine critical climate factors for innovation. These factors are engagement, idea time, idea support, autonomy and empowerment, multi-lensing, risk-taking, playfulness and humor, openness and trust, and conflict management.

The climate assessment tool in the workbook helps to identify specific behaviors that hinder or promote innovation in an organization. Improvements in the organization's innovation climate will accelerate the adoption of the new processes, roles, and structures by encouraging and supporting new behaviors.

Step 3. Stakeholder Interviews

Stakeholder interviews are used in the Assessment phase to understand the organization's current capability to execute against its innovation strategy. Stakeholders could include internal organization members, interdepartmental stakeholders, customers, suppliers, and other external

stakeholders. The workbook includes an example interview guide for multifunctional members within an innovation project team.

The stakeholder analysis will identify gaps between prescribed processes and actual practices. The resulting comparison will reveal how problems are currently solved, and will allow you to evaluate the capability of the people in the roles to execute those processes.

The output of each interview is a set of "problems to be solved", often written in the form of "How Might We?" statements. Twenty interviews are usually sufficient to provide a sound 360-degree perspective on the key challenges to be addressed during the Design Phase.

Step 4. Gap Analysis

The gap analysis tool provides a framework to organize all the information collected thus far and to begin projecting the ideal future state of the organization. Comparing the current reality to the desired state helps identify the most important gaps to address during the Design Phase.

Some examples of the types of barriers to innovation in organizations are:
- A mismatch in functional time horizons; e.g. R&D is focused on the long-term while Marketing is focused on the short-term
- No clear separation of upstream and downstream processes to move ideas forward quickly; the organization tends to lose interest on slow-moving ideas
- A single function driving innovation (e.g. R&D), rather than multi-functional teams
- Insufficient dedication of resources to innovation projects

The example below is from an organization attempting to introduce an innovation program for the first time.

	Current State	Future State	Key Gaps
Structure	Organization duplicates functional roles across departments.	Streamline and consolidate functional roles wherever possible.	Departments believe they need dedicated resources under their control.
Decision Making	Decisions are personality-driven and progressed through advocacy.	Decisions are data-driven leveraging multiple perspectives including customer feedback.	Lack of clear decision-making processes and owners.
Information &Technology	Information is not effectively shared across the organization.	Open, interactive channels promote communication across all levels.	No venue for communication beyond email and committee meetings.
Rewards	Reward system favors improving daily operations over delivering long-term strategy.	Reward system aligned with both long and short term performance measures.	Leadership focus and communication reinforce emphasis on short-term results.
Culture	Fear of failure perpetuates a risk-averse culture.	Operate with excellence while encouraging the risk-taking required for innovation.	Failed initiatives reflect on individual performance rather than organizational innovation processes.

DESIGN PHASE

The second phase of ODI – the Design Phase – corresponds to the Solution Finding phase of CPS (Idea Finding, Evaluate and Select steps). Fortunately, the challenges associated with ODI are fairly consistent across industries. It is easy to find published case studies that provide good alternative starting points for potential new work processes, organization structures, and innovation best practices.

Step 1. Industry Best Practice Review

The use of analogies – embracing that nagging feeling that "somebody, somewhere has already solved this problem" – is a powerful Idea Finding tool. A little research into the best practices of other innovative companies will likely provide insights into new ways to close the gaps identified in the Assessment Phase. This research may include taking field trips to their offices, bringing a representative to your offices, or studying everything you can find about them. Professional

associations such as the Product Development and Management Association (PDMA) are helpful sources of inspiration as well. PDMA studies and awards outstanding corporate innovators every year, and publishes a Book of Knowledge (Kahn, 2012).

<u>Step 2. Refine Existing Work Processes</u>

More often than not, companies do not explicitly define the details of their innovation work processes:

- *How are ideas generated?* How are they collected? Who contributes to them? In what depth are they explored?

- *How are ideas evaluated?* How are ideas assessed? Who assesses them? How do we know they're big enough opportunities? How do we mitigate the risk while maximizing the reward?

- *How are ideas implemented?* Who will transform the ideas into action, and with what resources? How do we separate the work of maintaining our core businesses while developing new, potentially game changing solutions?

In this case, a detailed review of recent major projects will provide an accurate map of existing work processes and highlight any inconsistencies between projects. Refined work flows and processes to support innovation should clearly identify key activities, inputs, outputs, and linkages across all functions.

<u>Step 3. Define New Roles and Responsibilities</u>

Often, entirely new roles will be needed to execute the new work processes. Existing roles will likely be clarified and include a mix of old and new job responsibilities. The old and new roles will then be mapped to the new work processes (who will do what, and what will be the key hand-offs and linkages).

<u>Step 4. Design the Organizational Structure</u>

Innovation work needs to be deliberately structured within an organization, and separated from the organization's core business. Innovation organizations vary widely in their structure. Examples of successful innovation structures include:

- Skunkworks – Projects are developed by a small and loosely structured group of people who research and develop a project primarily for the sake of radical innovation.
- Open Innovation – Problems are identified internally and solutions are sourced outside of the organization.
- Staff Suggestion Systems – Every employee has the opportunity to identify problems and/or offer solutions that are evaluated by a small group of people.
- Idea Time – Everyone is required to dedicate a certain amount of work time (15-20% is typical) to innovation projects outside their normal job responsibilities.

- SWAT Teams – An ad hoc team is formed to address a compelling business challenge, and the team members return to their regular roles once the problem is solved.

During this step, some key design decisions to be considered are:

- Are there full-time employees dedicated to innovation?
- Is everybody expected to innovate, or is there a dedicated group to do the work?
- Is innovation led by a single function, or by a multi-functional team?
- Is innovation sourced internally, through joint-development partnerships, or open-sourced?

MOBILIZATION PHASE

The third phase of ODI – the Mobilization Phase – corresponds to the Planning & Execution phase of CPS (Action Planning, Acceptance, Execute steps). The transition plan must provide a bridge from the current state to the future state.

Step 1. Assess Current Capabilities

This assessment answers the question, "Does the capability to do this work exist anywhere in the organization?" It also answers the question, "Do we have sufficient capacity to do the new work in addition to our current workload?"

Step 2. Match Skills to Roles

Allocating existing resources to the new roles will undoubtedly uncover skill gaps that will need to be addressed by retraining, internal transfers, or new hires.

Step 3. Train & Recruit

Unfortunately, the knowledge required to perform most innovation tasks is 20% explicit and 80% tacit. That is, the knowledge required to competently execute innovation work is largely gained from experience. Bringing in experienced innovation guides for hands-on coaching is one way to accelerate innovation work while growing internal capability.

Step 4. Deploy New Design

The new design will need to be piloted to "run water through the pipes" prior to formalizing the new best practices. This gives individuals within the organization an opportunity to "try on" their new roles, practice new behaviors, and fill in the details of the new work processes. Annual health checks and continual improvement will help ensure the new design continues to drive innovation effectiveness.

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