

INNOVATION MANAGEMENT MODEL: THE MIC MODEL

IVÁN DÍAZ-MOLINA
PATRICIO CORTÉS

**Most
Innovative
Companies**
CHILE



Universidad de los Andes

Cátedra de Innovación Grupo GTD

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THE MIC MODEL

The MIC Model is a system to manage innovation within the organization. This view is particularly relevant since proper identification and understanding of the different areas needed to innovate is required for the efficient and effective innovation management within the firm. Also, viewing innovation as a system is key for creative leadership that needs a global and integrating view.

ELEMENTS OF THE MIC MODEL

The MIC Model includes eight elements: leadership, strategy, human resources and organization, key assets management, products and services innovation processes, results and culture. Leadership, strategy, human resources and organization are bundled in what is called the Innovation Ecosystem. The cultural dimension embeds all others and an explicit interaction with the firm's outside environment is also considered. The proposed system is shown in the following figure.

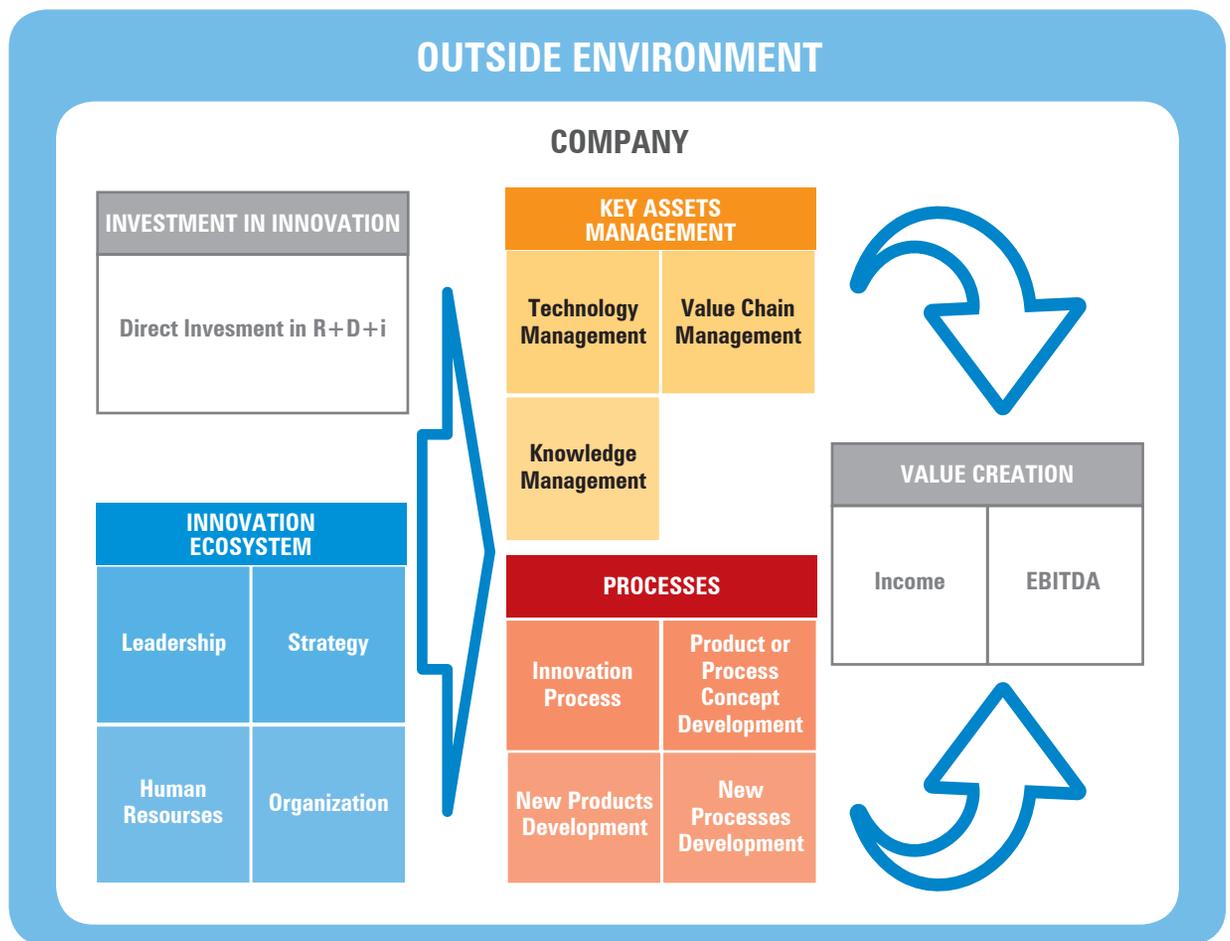


FIGURE 1: The MIC Model

Source: The MIC Model

THE INNOVATION ECOSYSTEM

The Innovation Ecosystem is the foundation of the Model; no innovation could take place in a sustainable way in a firm without a thorough intervention and transformation of these four areas, i.e. leadership, strategy, HR and organization.

LEADERSHIP

Innovation is a top-down effort. There is no point in pursuing an innovative organization if top management is not supportive of the idea. The first and foremost important task in an organization is to convince top management that innovation is required and get their enthusiastic support.

A detail list of competencies, attitudes and knowledge required by management to lead a firm into becoming an innovative organization is included as a guide for the selection of proper leadership:

- Innovation is knowledge. Leadership needs to enhance its knowledge base beyond its area of responsibility.
- Adaptation to change. Leaders and their teams need to be able to adapt to changes. If not, they would resort to their comfort areas, killing the innovation.
- Flexibility is a requirement. Leadership should allow for its own beliefs to be challenged and other perspectives should be accepted. Leadership should have emotional strength to be able to deal with ambiguity.
- Tolerance to failure is key. Leadership need to accept failure as part of the innovation process.
- Original Thinking. Leadership need to develop original thinking capabilities, to tie knots that are not obvious. It also needs to be able to conceptualize and visualize in order to think in a synthetic and integral way.
- Lead by example. If leadership does not show its commitment to innovation with gestures and actions, the organization will not be convinced and motivated.

- Leadership should allow the organization to innovate. Proper resources, time and space should be available to the organization.
- Group, as well as individual competences, is needed to innovate. Leadership should provide support networks to facilitate innovation.
- Group work requires experience and opinion diversity. Leadership should encourage them.
- Group work requires competencies in communication, persuasion, conflict resolution and sharing.

Also leadership should:

- Define the innovation model.
- Select the innovation strategy.
- Enabling the correct culture.

STRATEGY

Innovation fits in the strategic effort of the organizations in different ways:

- The organization could undertake an innovative strategy, that is, changing the rules of the game in what is called "value innovation" by Kim and Mauborgne (Kim & Mauborgne, 2006). Examples of this approach are IKEA, Inditex, CNN among others.
- The organization could use an innovative approach to achieve its strategic goals. In this case, the strategy is not necessarily innovative but the way it achieves its strategic goals could be. In order to achieve this, innovation should be part of the strategic thinking process.

Leadership needs to define what role should innovation play in the strategy of the organization.

In order to implement innovation into the organization, leadership needs to answer the following three questions (Dávila T., 2006):

- How much innovation does my company need?
- What are the areas I should focus the innovation in?
- What portfolio of innovation types do I need? How much business model innovation? How much technology innovation? What mix of incremental, semi-radical and radical innovation?

The innovation Strategy should fit the company’s situation. Each company needs to decide how much innovation it can handle, how much more it needs in the future and the dynamics of how to get there (Dávila T., 2006).

When an organization is focused on product innovation, New Product Development, strategy involves the following:

- NPD strategy should be clearly defined and visible to the organization.
- NPD should be viewed as a long term strategy.
- NPD goals should be aligned with the mission and the strategic plan.
- NPD programs and projects are reviewed on a regular basis.
- Opportunity identification is ongoing and can redirect the strategic plan

Dávila et al. (Dávila T., 2006) identify six levers for innovation, three technological and three related to business models. The six levers are shown in the following figure

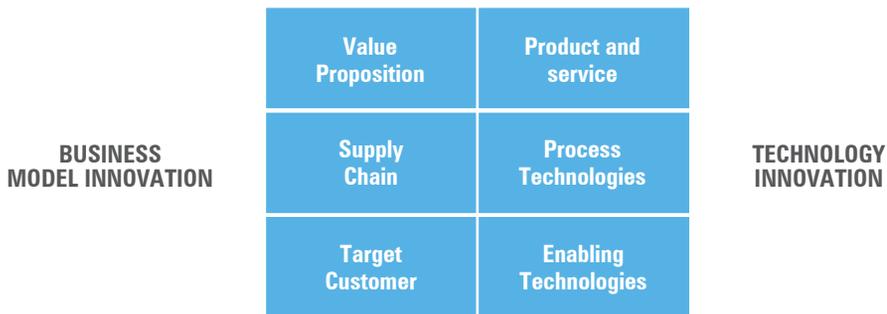


FIGURE 3: Innovation Levers

Source: Dávila et al.

From a business model point of view:

- Value Proposition: Changes in the value proposition of products or services could be entire new products or services or an expanded proposition to existing ones. A good example of this case is Starbucks.
- Supply chain: This lever is related to how the product or service is delivered to the market. It focuses on how an entity organizes,

partners and operates, how it redefines its relationships with its suppliers and clients. The typical example here is Dell Computers and its direct-sale channel.

- Target Customers: Changes into whom you sell. Small modifications to products to accommodate the needs of new customers could render significant value. The Simpsons is a good example of cartoons targeting a grown-up audience instead of the traditional children-based audience.

From a technological point of view:

- **Products and Services offerings:** This is the typical “innovation”, that people recognize immediately given its high visibility. It represents a significant change in an existing product or service or an entirely new one.
- **Process Innovation:** This is an innovation on how products or services are manufactured or performed. It usually is not visible and impacts mostly the processes needed to deliver products or services.
- **Enabling Technologies:** It refers to technological innovation that could expedite the execution of the strategy like ICT. It also refers to the exchange of information in the value chain to facilitate business model innovation.

We add a fourth lever in the technology area, and that is “The innovative way a Product or Service could be used”. Perhaps with very small changes, a technological innovation created for a specific purpose could be put to use for an entirely different task. A good example is the famous Post-It.

We identify three distinct levels of innovation:

- Incremental Innovation
- Semi-Radical Innovation
- Radical Innovation

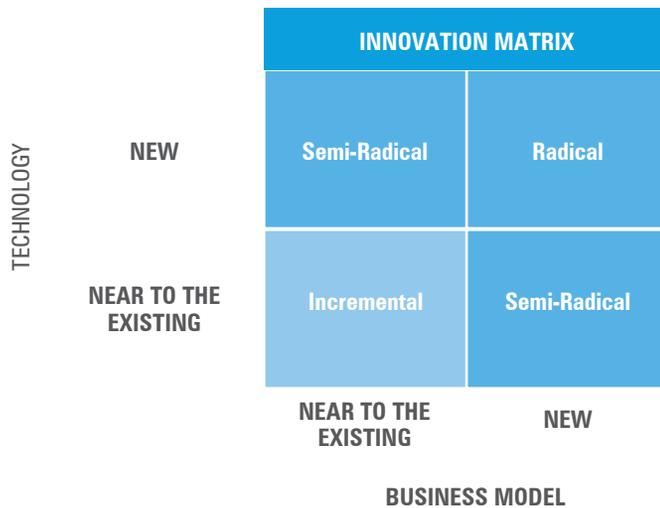


FIGURE 4: Types of Innovation

Source: Dávila et al.

Incremental Innovation: Represents small improvements to existing products or business processes.

Semi-Radical Innovation: Represents significant improvements to existing products or services delivered in traditional way or the same products or services delivered in a significantly different way.

Radical Innovation: Represents significant improvements to existing products or services delivered in a significantly different way.

Organizations must choose what type of innovation they want to tackle because how they innovate determines what they innovate.

A representation of the levers and the types of innovation is shown in the following figure.

Types of Innovation \ Levers	Business Model Levers			Technology Levers		
	Value Proposition	Value Chain	Target Customer	Product and Service	Process Technology	Enabling Technology
Incremental	Small change in one or more of the six levers					
Semi-Radical Business Model Driven	Significant change in one or more of the three levers			Small change in one or more of the three levers		
Semi-Radical Technology Driven	Small change in one or more of the three levers			Significant change in one or more of the three levers		
Radical	Significant change in one or More of the three levers			Significant change in one or more of the three levers		

FIGURE 5: Levers and Types of Innovation

Source: Dávila et al.

ORGANIZATION

Innovative organizations need to facilitate:

- Team work
- Vertical and horizontal communication and cooperation
- Flexibility

- Holistic view
- Facilitate projects development
- Management of multiple projects

The ideal innovative organization should migrate from a vertical/functional organization to a more flexible, process/project oriented organization:

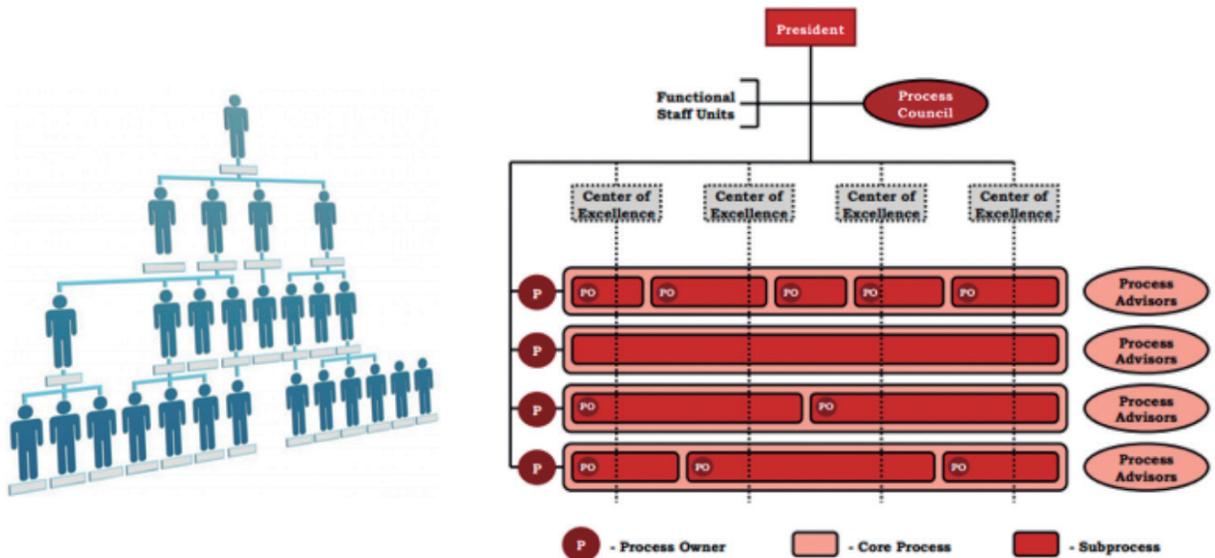


FIGURE 6: Functional Organization and Process /Project-based Organization

As Dávila et al. indicate, the great challenge is to balance within the organization creativity (also called exploration) with value capture (also called exploitation). An organization that harbors both is called an “ambidextrous” organization. Both skills are needed for innovation, but have very different approaches, while the creativity process needs:

- Out-of-the-box thinking
- Experimentation
- Uncertainty
- Research
- Intuition
- Courage
- Surprise
- Explore the unknown
- Seize the opportunity
- Include incremental and radical innovation

The value capture process needs:

- In-the-box thinking
- Engineering/manufacturing
- Precision

- Well-calculated trade offs
- Doing things right
- Avoid major risks
- Get the product into the market
- Bias for incremental innovation

O’Reilly and Tushman (O’Reilly & Tushman, 2004) also acknowledge the tension between “exploring” and “exploiting” tasks within the organization. The exploring task is related to the innovation role within the company and the exploiting task is related to the value capture goal. They link the organizational structure with the type of innovation. Three levels of innovations are identified:

- Incremental Innovation: defined as small improvements in existing products and operations, similar to the definition by Dávila et al.
- Architectural innovations: A fundamental change of a component or element of the business, similar to the semi-radical innovation definition by Dávila et al.
- Discontinuous innovations: radical advances that may profoundly alter the basis for competition in an industry, similar to the radical innovation definition by Dávila et al.

There is, according to O’Reilly and Tushman, a correspondence between the innovation level and the organizational structure: Functional designs are well suited for incremental innovation.



FIGURE 7: Functional Organization suited for incremental innovation

Source: (O’Reilly & Tushman, 2004)

Ambidextrous organizations, that establish project teams that are structurally independent units, each having its own processes,

structures and cultures, but are integrated into the existing management hierarchy are better suited for radical innovation.



FIGURE 8: Separate Exploring Organization suited for Radical Innovation

Source: (O'Reilly & Tushman, 2004)

Semi-radical innovation could be dealt with by using unsupported teams or cross-functional teams.



FIGURE 9: Cross-functional or unsupported teams for semi-radical innovation

Source: (O'Reilly & Tushman, 2004)

An ambidextrous organization requires very different strategies, structures, processes and cultures coexisting. These different

alignments are held together through senior team integration, common vision and values and common senior team rewards.

ALIGNMENT OF:	EXPLOITATIVE BUSINESS	EXPLORATORY BUSINESS
Strategic Intent	Cost, profit	Innovation, growth
Critical Tasks	Operations, efficiency, incremental innovation	Adaptability, new products, breakthrough innovation
Competencies	Operational	Entrepreneurial
Structure	Formal, mechanistic	Adaptive, loose
Controls, rewards	Margins, productivity	Milestones, growth
Culture	Efficiency, low risk, quality, customers	Risk taking, speed, flexibility, experimentation
Leadership role	Authoritative, top down	Visionary, involved

After reviewing many examples of ambidextrous organizations, O'Reilly and Tushman (O'Reilly & Tushman, 2011) also concluded that five conditions needed to be present at the firm for a successful implementation:

- **A compelling strategic intent** that intellectually justifies the importance of both exploration and exploitation
- **An articulation of a common vision** and values that provide for a common identity across the exploitative and exploratory units.
- **A senior team that explicitly owns the unit's strategy of exploration and exploitation**; there is a common-fate reward system; and the strategy is communicated relentlessly.
- **Separate but aligned organizational architectures** (business models, structure, incentives, metrics and cultures) for the exploratory and exploitative units and targeted integration at both senior and tactical levels to properly leverage organizational assets.
- **The ability of the senior leadership to tolerate and resolve the tensions** arising from separate alignments.

PEOPLE

Six practices related to personnel management could incentivize motivation and commitment to innovate:

- The existence of a challenge
- Freedom
- Available resources
- Team work
- Recognition
- Appraisal and reward systems including innovation goals

The Centre for Business Innovation of the Conference Board of Canada identifies several skills, attitudes and behaviors individuals need to be innovative. They are organized in four pillars:

- Generating Ideas
- Taking calculated risks and being entrepreneurial
- Developing and maintaining interpersonal relationships
- Turning ideas into products, processes and services

In a self-assessment questionnaire, the employee identifies his/her own profile and that corresponding to his/her position. Any gap identified would require an action plan to close. The questionnaire is included in Annex D.

The following personnel policies and procedures, as a minimum, should be implemented to facilitate and promote the innovation among the employees:

- A performance review process that include innovation goals
- An incentive policy that includes individual, team and organizational goals
- Job assignments and promotion policies and criteria that consider project specific performance and guarantee rotation back from projects to line jobs.
- Multitasking and multirole policies that allow supporting employees with part time allocation to innovation projects.
- Recruiting policies that include diversity and job descriptions that allow for multiple individual profiles.
- Policies that prevent day-to-day activities from interfering with innovation (i.e. time allocation for exploratory work, etc.).
- Succession planning that allow for the continuous allocation of key personnel to innovation projects.

KEY ASSETS MANAGEMENT

Key assets are defined as knowledge management, technology management and value chain management with focus on the development of innovative products, services or processes.

Technology Management

Technology management is usually focused on solving a set of management problems in support of the business strategy. Companies should incorporate the following capabilities:

- Identify new and key technology through technological analysis of products from the competition, follow-up of new legislation, new patents, new technology trends, etc.
- Identify the organization's technical strengths and weaknesses
- Identify the technologies the company should focus on to innovate in processes, products and/or services
- Define the organization as a leader or follower regarding innovation
- Define if the technological development should be done in-house or acquired from the market through, licensing, JVs, acquisition, technology transfer with research institutions, etc.
- Define the allocation criteria for the technological resources to innovation projects
- How to organize the technology function and reporting within the company
- Intellectual Property protection
- Technology relationship between different areas of the company, coordination and leveraging

The following table summarizes the acquisition mechanisms and the rationale the firms use to apply such mechanisms based on two dimensions: Characteristics of the organization and characteristics of the technology:

ORGANIZATIONAL AND TECHNOLOGICAL FACTORS	ACQUISITION MECHANISM (MOST FAVORED/ALTERNATIVE)	RATIONALE FOR DECISION
I. Characteristics of the Organization	Cost, profit	Innovation, growth
Corporate Strategy:		
Leadership	In-house R&D/equity acquisition	Differentiation, first-mover, proprietary technology
Follower	License/customer and suppliers/contract	Low-cost imitation
Fit with competencies:		
Strong	In-house R&D	Options to leverage competencies
Weak	Contract/license/consortia	Access to external technology
Company Culture:		
External Focus	Various	Cost-effectiveness of source
Internal Focus	In-house/joint venture	Learning experience
Comfort with new technologies:		
High	In-house corporate/university	High risk and potential high reward
Low	License/customers and suppliers/consortia	Lowest risk option
II. Characteristics of the technology		
Base	Licence/contract/customers/suppliers	Lowest risk option
Key	In-house R&D/joint venture	Maximize competitive advantage
Pacing	In-house corporate/university	Future position/learning
Emerging	University/in-house corporate	Watching brief
Complexity:		
High	Consortia/universities/suppliers	Specialization of know-how
Low	In-house R&D/contract/suppliers	Division of labour
Codifiability:		
High	License/contract/university	Cost-effectiveness of source
Low	In-house R&D/joint venture	Learning/tacit know-how
Credibility Potential:		
High	Consortia/customer/government	High profile source
Low	University/contract/license	Cost-effectiveness of source

KNOWLEDGE MANAGEMENT

Knowledge Management is responsible for understanding:

- What does the organization know.
- Where this knowledge is located, e.g. in the mind of a specific expert, a specific department, in old files, with a specific team, etc.
- In what form this knowledge is stored e.g. the minds of experts, on paper, etc.
- How to best transfer this knowledge to relevant people, so as to be able to take advantage of it or to ensure that it is not lost.
- The need to methodically assess the organization's actual know-how vs the organization's needs and to act accordingly, e.g. by hiring or firing, by promoting specific in-house knowledge creation, etc.

Enclosed is a list of characteristics that describe Knowledge Management (KM):

- Focus on knowledge, understanding, and wisdom.

- Deal with both codified and un-codified knowledge. Un-codified knowledge - the most valuable type of knowledge - is found in the minds of practitioners and is unarticulated, context-based, and experience-based.
- Technology is useful, but KM's focus is on people and processes. The most valuable knowledge cannot effectively be (directly) transferred with technology, it must be passed on directly from person to person.
- Focus on locating, understanding, enabling, and encouraging - by creating environments, cultures, processes, etc. where knowledge is shared and created.
- Is largely about know-how, know-why, and know-who
- Is hard to copy, at least regarding the tacit elements. The connection to experience and context makes tacit knowledge extremely difficult to copy.

Within business and KM, two types of knowledge are usually defined, namely explicit and tacit knowledge. A third type is also usually considered, embedded knowledge.

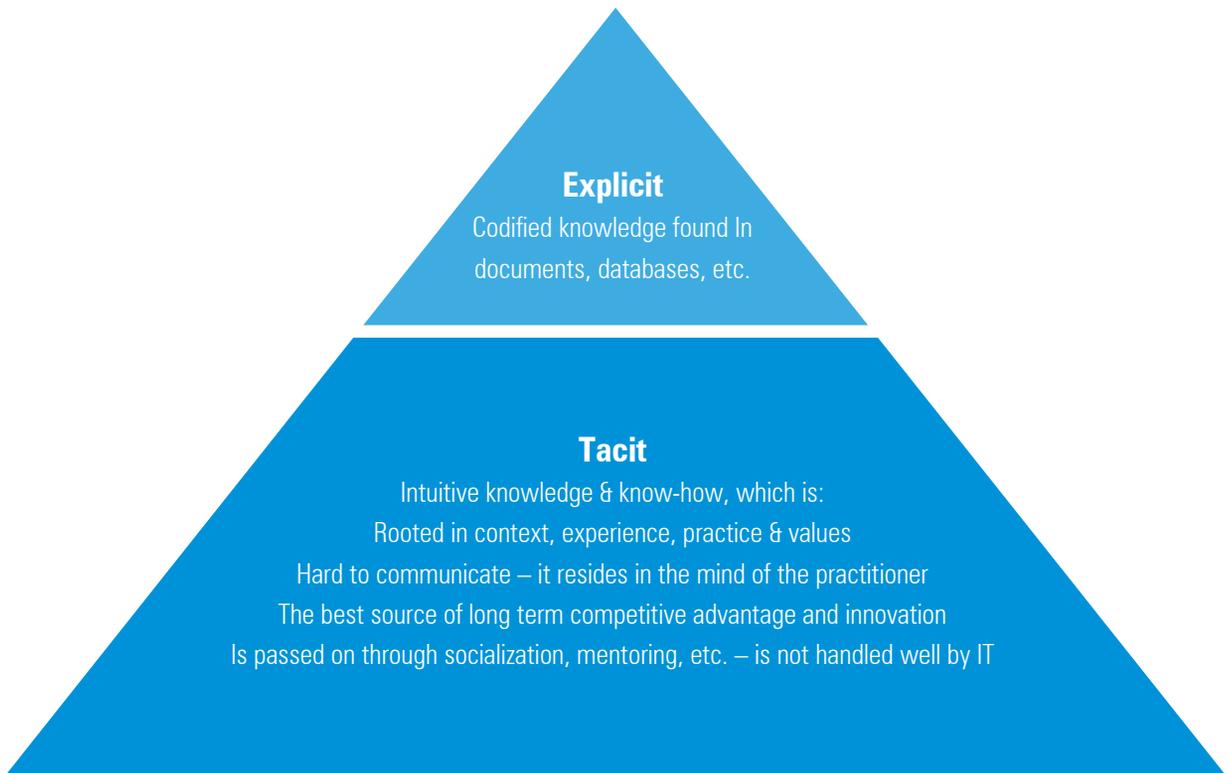


FIGURE 10: Types of knowledge

Source: Brown, 1997

Explicit Knowledge: This type of knowledge is formalized and codified, and is sometimes referred to as know-what (Brown & Duguid 1998). It is therefore fairly easy to identify, store, and retrieve (Wellman 2009).

Tacit Knowledge: This type of knowledge is sometimes referred to as know-how (Brown & Duguid 1998) and refers to intuitive, hard to define knowledge that is largely experience based.

Embedded Knowledge: Embedded knowledge refers to the knowledge that is locked in processes, products, culture, routines, artifacts, or structures (Horvath 2000, Gamble & Blackwell 2001). Business knowledge can exist on several different levels:

- Individual: Personal, often tacit knowledge/know-how of some sort. It can also be explicit, but it must be individual in nature, e.g. a private notebook.
- Groups/community: Knowledge held in groups but not shared with the rest of the organization.
- Structural: Embedded knowledge found in processes, culture, etc.
- Organizational: Organizational knowledge is therefore defined as: all the knowledge resources within an organization that can be realistically tapped by that organization.
- Extra-organizational: Defined here as: Knowledge resources existing outside the organization which could be used to enhance the performance of the organization.

Knowledge Management Frameworks

At the most basic level, KM consists of the following steps:

- Identification of needs
- Identification of knowledge resources
- Acquisition, creation, or elimination of knowledge related resources/processes/environments
- Retrieval, application and sharing of knowledge
- Storage of knowledge

There are essentially three questions that a knowledge management framework may choose to answer:

- What/How?
- Why?
- When?

“What/How?” refers to the actual processes of knowledge management.

“Why?” refers to an indication of the reasons behind using one method or the other.

“When?” refers to the timing for using one method or another, and is very closely related to “Why?”

Following, there is a very useful framework outlined by Botha et al (2008) titled the “knowledge management broad categories”.

YOU DON'T KNOW	KNOWLEDGE DISCOVERY	EXPLORE, RESEARCH, CREATE
You know	Cost, profit	Innovation, growth
Critical Tasks	Operations, efficiency, incremental innovation	Adaptability, new products, breakthrough innovation
Competencies	Operational	Entrepreneurial
Structure	Formal, mechanistic	Adaptive, loose
Controls, rewards	Margins, productivity	Milestones, growth
Culture	Efficiency, low risk, quality, customers	Risk taking, speed, flexibility, experimentation
Leadership role	Authoritative, top down	Visionary, involved

An integrated knowledge management model is presented. This model, developed by Frost (Frost, 2012) combines the main aspects of the topics discussed on this site into a model that focuses on the strategic perspective. The integrated knowledge management

model attempts to link both process and strategy, while offering specific initiatives at different stages. The model also outlines the relationship of information and information management systems to knowledge management (KM).

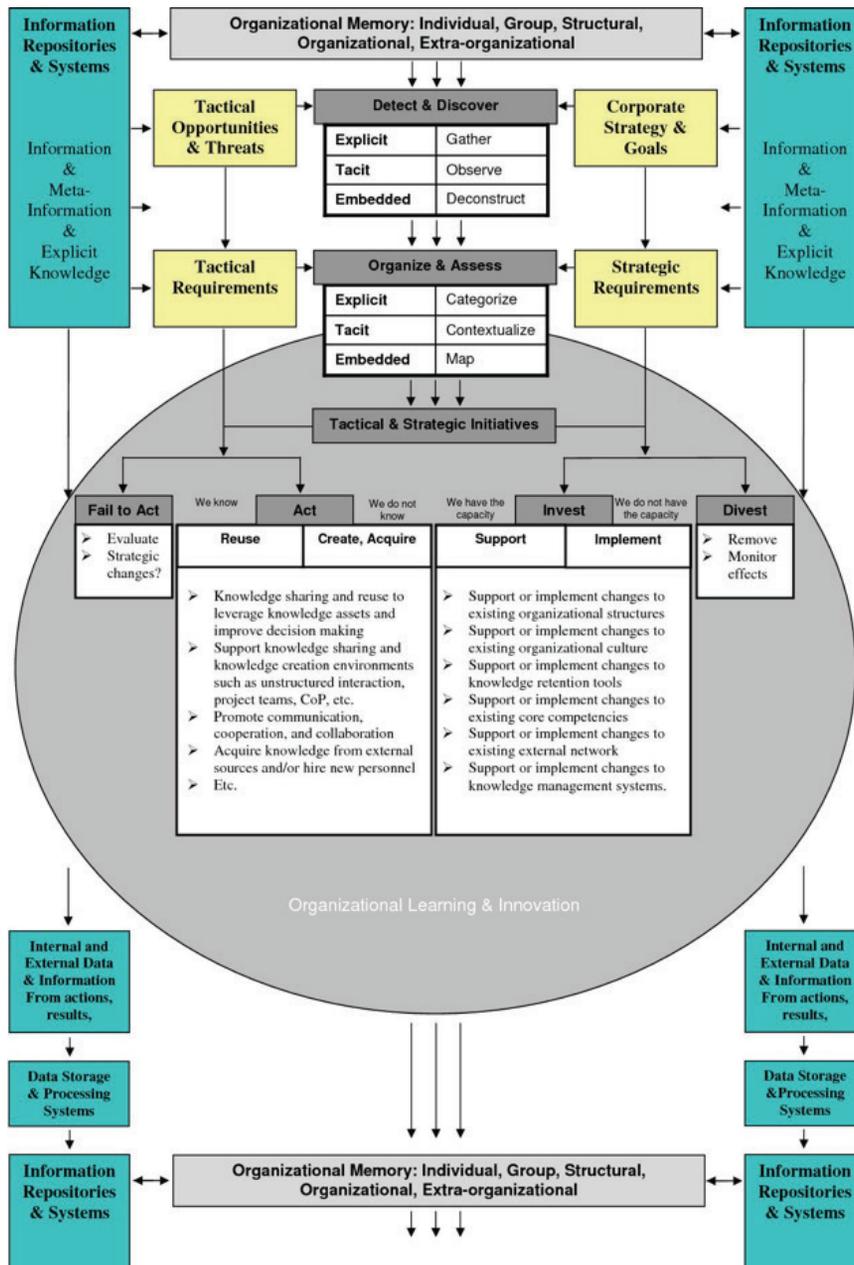


FIGURE 11: Integrated Knowledge Management Model by Frost

Source: (Frost, 2012)

The dark gray elements represent KM initiatives, the yellow boxes represent corporate strategy, while the teal boxes depict data and information systems and repositories. The process is initiated from the tactical and strategic considerations, illustrating the way KM strategy goes hand in hand with corporate strategy. The non-bolded elements in the gray oval indicate the knowledge related processes that go on within the organization as it operates, and which management affects/enhances through its initiatives.

The integrated knowledge management model is sequential, offering a simplified view for ease of understanding. The steps are as follows:

- **Detect & Discover:** Search for existing knowledge as well as hidden knowledge within information and data.
- **Organize & Assess:** Organization and assessment of knowledge assets. Knowledge is categorized, evaluated, and made easier to access (by providing maps etc.).
- **KM tactical initiatives:**
 - **Act - Reuse:** If the firm can use existing knowledge to meet a tactical opportunity or threat, the role of KM is to identify this knowledge and enable it to be used. This means that if it is required by a different person/group, then KM is responsible for making it available to all relevant parties. Knowledge reuse thus combines the previous points on detection and organization with a new aspect: knowledge sharing.
 - **Act - Create/acquire:** If the right knowledge resources do not exist, the firm may create or acquire them, assuming the right processes and systems are in place to support this. For example, the knowledge may be acquired from partners if the right relationships are in place. Knowledge creation depends on the right internal environments that allow for combination and conversion of knowledge assets.
 - **Failure to act:** This is not really a KM initiative in itself, but it does have some implications. In the event that a firm fails to act there is still a lesson to be learned. Management must evaluate if this is something that needs to be addressed in the future. This decision is fed back into the loop, affecting future strategic choices.
- **KM Strategic Initiatives:**
 - **Invest:** Support or implement. Here I refer to the organizational structures, culture, knowledge retention, competencies, external network, and systems that direct, affect, and/or enable the KM initiatives discussed above in the long term. Strategic initiatives may, for example, involve creating a knowledge sharing culture, restructuring the firm, establishing a beneficial partnership, or implementing a new IT system. If the right environment, system, etc. is already in place, management must make sure to continuously support it. It is important to note that some of these do not fall solely within KM, and they are all fields of study in their own right. However in this case, we are interested solely in the way these broader strategic initiatives shape the focus and direction of KM in the long term.
 - **Divest:** When knowledge assets become obsolete they need to be removed. KM is responsible for maintaining relevant knowledge assets

VALUE CHAIN MANAGEMENT:

The design stage represents a small part of the innovation costs, but it determines about 80% of the product or service cost. Those organizations that have realized this fact are incorporating suppliers, clients, complementors into early stages of their design processes, since a significant amount of the knowledge needed to innovate reside on them.

Monczka et al. (Mnczka, Handfield, Scanell, Ragatz, & Frayer, 2003) describe the process a company should follow to determine a strategic relationship with suppliers. It starts with the identification of current and future needs of key competencies and capabilities, follow by the decision to develop them in-house or seek them outside the organization. If the latter is selected, proper selection of suppliers is required. The following picture depicts the process.

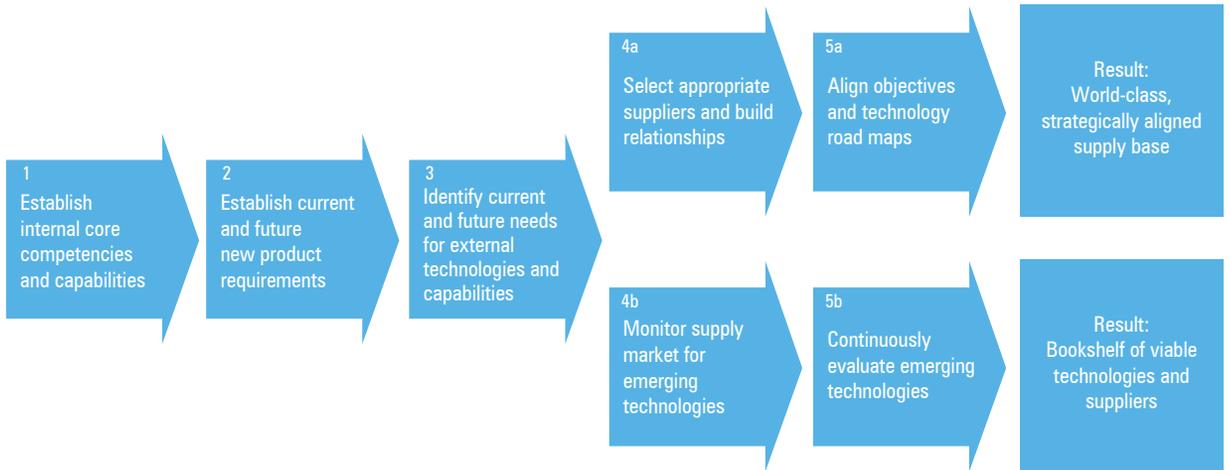


FIGURE 12: Supplier Strategic Relationship Process

Source: (Mnczka, Handfield, Scannell, Ragatz, & Frayer, 2003)

Also, the way the supplier is included in the process needs to be designed for maximum efficiency, the following figure depicts the five steps recommended for such integration.

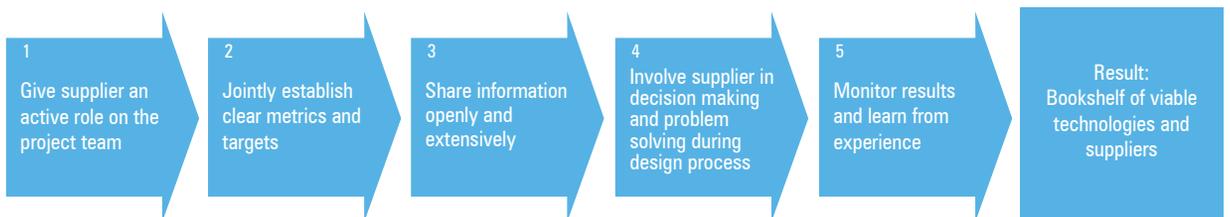


FIGURE 13: Supplier Inclusion Process

Source: (Mnczka, Handfield, Scannell, Ragatz, & Frayer, 2003)

As stated above, eighty percent of the cost of a product is defined in the early design stages, incorporating suppliers as early as possible could make this process even more efficient, as shown in the following figure.

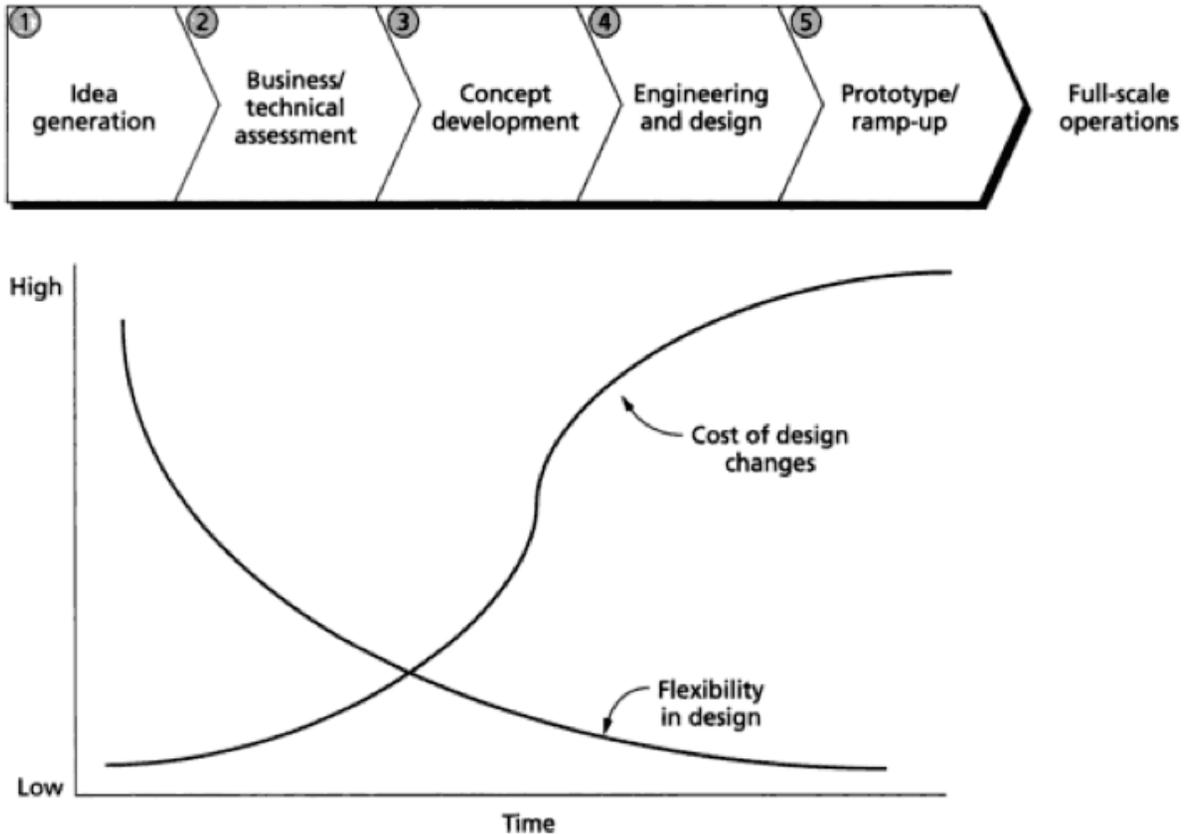


FIGURE 14: Flexibility vs Cost in Product/Service Design Process

Source: (Mnczka, Handfield, Scannell, Ragatz, & Frayer, 2003)

INNOVATION PROCESSES

There are many innovation processes, we focus on a widely used one developed by Cooper (Cooper R. , 1990), called the “stage-gate” process. This process is linear and includes “stages”, where the idea suffers some kind of transformation and “gates”, where decisions are made to go forward, iterate or discard the idea.

Each “stage-gate” process should be design for the particular organization but in general it includes the following phases:

- i. Idea generation
- ii. Idea selection based on strategic alignment criteria

- iii. Conceptual development
- iv. Virtual prototyping (if possible)
- v. Prototyping and testing in the relevant market
- vi. Business Model generation
- vii. Business and Commercial Planning
- viii. Detailed product/service development
- ix. Manufacturing (if product) and commercialization

Business Model Innovation: For this particular type of innovation, particular attention should be put in early stages of the process, to the different components of the business model and validation ("proof of concept") since in general, these are radical innovations.

Also, the transformation of an idea into a successful product includes seven critical success drivers according to Cooper (Cooper R. G., 2011):

- A unique superior product
- Building in the voice of the customer
- Doing the homework and front-end loading the project
- Getting sharp and early product and project definition
- Spiral development
- A well-conceived and properly executed launch
- Speed.

A typical idea-to-launch stage-gate process is shown in the following figure. It includes five stages and five gates. At each stage a transformation of the original idea takes place, the new knowledge coming from the new status of the idea is presented at the next gate where decisions are made. The decision shall include Go/Kill/Hold or Reprocess recommendations. At each and all stages interaction with the customer or user is required.

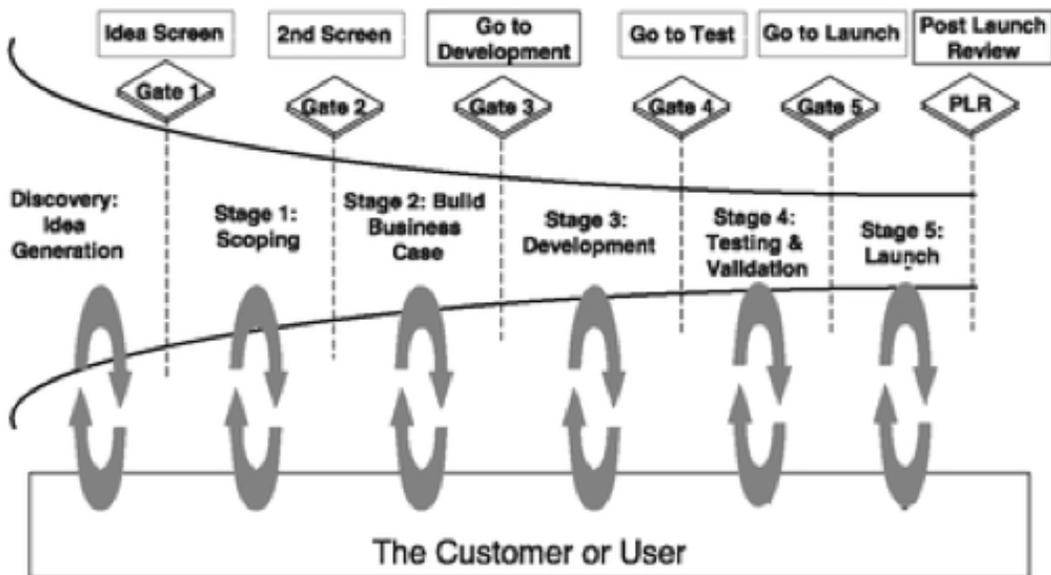


FIGURA 15: Typical Stage-Gate Process

Source: (Cooper R., 1990)

Actions taking place at each gate are included in the following figure.

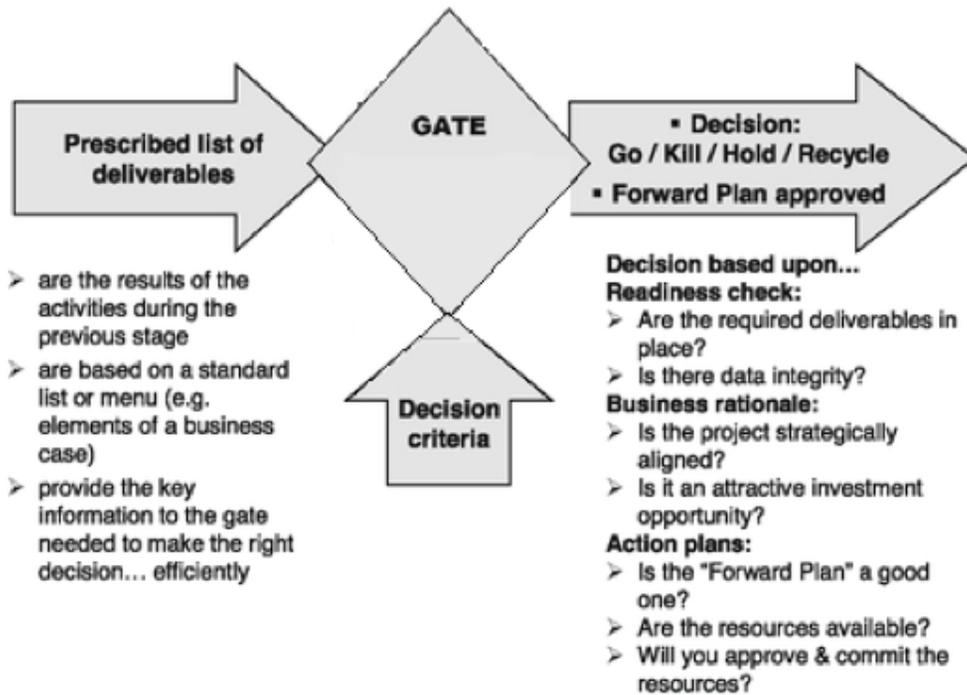


FIGURE 16: Generic Actions at each gate

Source: (Cooper R., 1990)

Discovery Stage: The first stage includes a defined, proactive idea-generation and capture system. Many procedures could be used to generate ideas, best practices include:

- Directed technical research (R+D)
- Identifying new technological possibilities
- Working with lead or innovative users
- Capture unarticulated needs or customer problems using VoC (Voice of Customers)
- Competitive analysis and inverse brainstorming of competitive products
- Implementing idea generation and capturing schemes for your own employees
- Scanning the outside world
- Utilize open innovation
- Work with other elements of the value chain

A more detailed description of this stage is shown in the following figure.

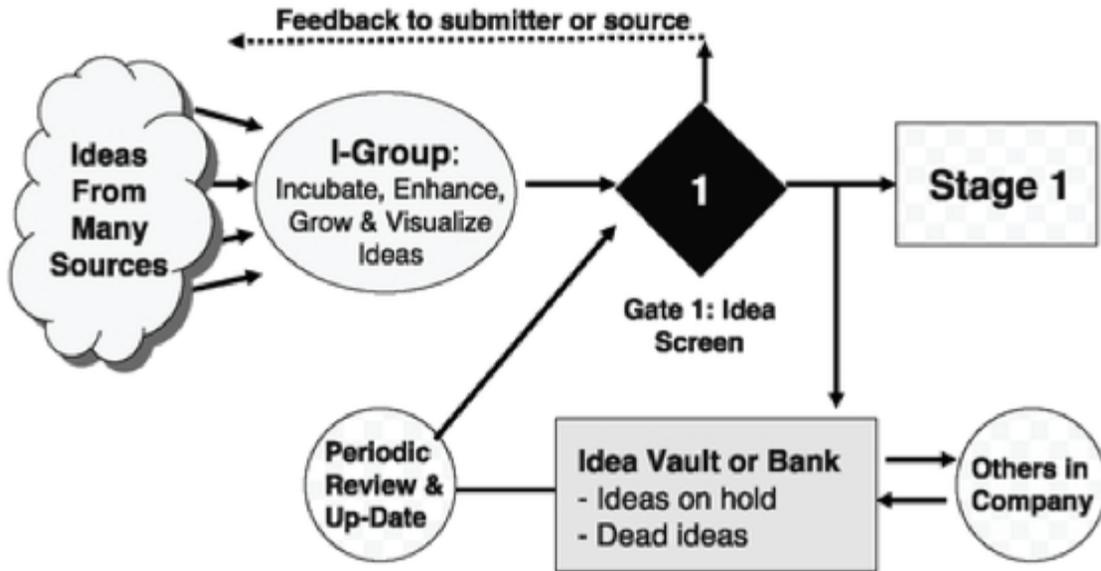


FIGURE 17: Discovery Stage – Details

Source: (Cooper R., 1990)

Sources of ideas are mainly two: Internal and External. Recognized internal sources tools are:

- Ideas Tournaments
- Ideas Brainstorming/Brainwriting or other creativity-motivating technique

The external source could include members of the value chain (suppliers, complementors, customers, distributors) or specialized third parties (universities, research institution, government agencies, etc.). A proven tools is the Voice of Customer (VoC) methods. We list some of the most widely used in this book but for more detailed description see Cooper (Cooper R. G., 2011):

- Ethnographic Research
- Customer Visit Teams
- Focus Groups
- Lead-user Analysis

- User Designs
- Customer Brainstorming and Inverse Brainstorming
- Customer Panel
- Community of Enthusiasts

Gate 1: Idea Screen. Strategic fit is tested at this gate. The idea is confronted with a set of criteria under “Must have” and “Must not have” lists. In order for the idea to pass the gate, all the “Must have” and none of the “Must not have” criteria should be met. If the idea is accepted it becomes a project.

Stage 1: Scoping Stage. The goal of this stage is to determine the technical and market merits of the project. A preliminary market assessment is performed, activities include: Internet search, library search, contact with key users, a quick concept test with potential users. The purpose is to un-expensively determine market size, market potential, likely market acceptance and product concept.

Also, a preliminary technical assessment is conducted. A quick and in-house appraisal of the proposed product is made. The appraisal should include: development and operations routes, technical and operations feasibility, potential time and cost to execute, technical, regulatory and legal risks. The input to Gate 2 is a preliminary and approximate financial analysis (simple payback time calculated) and business analysis.

Gate 2: Value Screen. Confirmation of the “Must have” of the first gate is conducted. If this first filter is passed, then a list of “Should have” is evaluated based on a rating scale. The criteria to be rated are:

- Strategic (Importance and Fit)
- Product and competitive advantage
- Market Attractiveness
- Synergies (levering of core competences)
- Time to market
- Technical feasibility
- Financial reward (simple payback)

Stage 2: Build the Business Case. This stage involves multiple activities:

- Build a business case using the Business Model Canvas tool.
- In case of product innovation, essential and desired product features, attributes, requirements and specifications are developed.
- Market studies are undertaken.
- A competitive analysis is conducted.
- Concept testing with selected potential customers
- A technical appraisal is made in terms of “doability” of the product. In case of services, the same concept applies.
- A business and financial analysis is made, supporting the Business Model

Deliverables to the decision gate are:

- Business Model Canvas
- Integrated Product/Service definition
- Project Justification

- Detailed project action plan (includes Development Plan and preliminary Marketing and Operational Plans)

Gate 3: “The money gate”. This is the last gate before heavy spending on development. Most of the projects are killed before or at this gate. “Must have” and “Should have” are checked again and emphasis is put on the business and financial analysis. A hurdle rate and criteria needs to be defined to facilitate the selection process. At this stage, if approved, a full blown project team is assigned.

Stage 3: Development. In this stage, the Development Plan is implemented, including the physical development of the product or mapping out the details of the service. Also, in parallel, marketing and operational plan are finalized. Constant customer opinion is sought through the built-test-feedback-revise spiral.

The deliverable at the end of this stage is a partially tested prototype of the product, along with revised financial analysis and regulatory, patent and legal issues are sorted out. Also a Validation (Testing) Plan is presented

Gate 4: Go to Testing. Prototype is reviewed to check compliance with Gate 3 specifications. Also the financial analysis is reviewed for potential deviations. The Validation Plan is reviewed and approved.

Stage 4: Testing. Entire project is validated: the product, production and operation, customer acceptance and economics. The activities performed at this stage are:

- In-house product/service test
- Field trials of the product/services
- Pilot productions/operation
- Simulated Test Market
- Revised business or financial analysis

Gate 5: Go to Launch. This gate is the last opportunity to kill or have the project revised. This gate focuses on the quality of the activities in the Testing and Validation stages. The criteria used in this gate could be summarized as follows:

- Stage 4 tests results are positive
- Expected financial return is met
- Launch or operation start up remain within plan

- Commercial area is ready for launch
- Operations and Marketing plan are approved for implementation
- Product Life Cycle Plan is reviewed and approved (if applicable)

Stage 5: Launch. Activities in this stage include:

- Market Launch Plan implementation
- Operations Launch Plan implementation
- Logistics pipeline is filled
- Selling starts

Post-Launch Review: Between 6 to 18 months after launch, the New Product/Service project is terminated and the product/service

is transferred to production. At this time the product/service performance is reviewed against projections. Also a post launch audit is performed. The audit includes:

- Project strengths and weaknesses
- Lessons learned (identification, documentation and dissemination)
- Implementation of lessons learned in new projects

Another element incorporated to the process, adding flexibility, is the simultaneous execution. The rationale to incorporate simultaneous execution is to move forward when the information is reliable and stable. Simultaneous execution will increase the risk of the project.

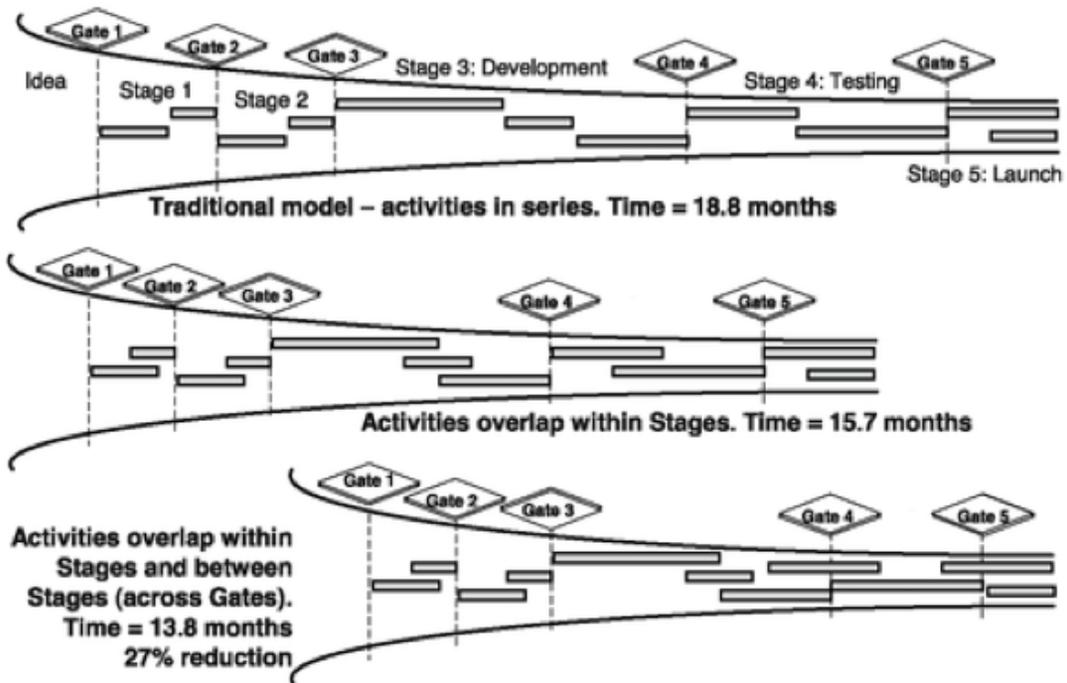


FIGURE 18: Stage-Gate Process Simultaneous Execution

Source: (Cooper R., 1990)

As shown in this figure, for a traditional model time span of 18.8 months, the overlapping option could achieve a reduction of up to 27% of the time. Overlapping activities could increase significantly the risk of the project; it needs to be properly managed.

RESULTS

Results represent the outcome of the innovation process, or in another words, the value generated with the innovation. The metrics should measure the capacity of the organization to transform ideas into valuable results for the company.

Financial Results Impact: These indicators vary according to the type of innovation the organization is undertaking, but in general they should include:

- Sales from products/services introduced to the market in the previous 24 months as a percentage of total sales.
- Sales from products/services introduced to the market in the previous 12 months as a percentage of total sales.

- Gross Margin (Sales minus COGS) for a 24 month period over total Gross Margin.
- Gross Margin (Sales minus COGS) for a 12 month period over total Gross Margin.
- Expenses savings from processes developed in the prior 24 months.
- Expenses savings from processes developed in the prior 12 months.

CULTURE

According to Cameron and Quinn (Cameron & Quinn, 2011), culture refers to the taken-for-granted values, underlying assumptions, expectations, and definitions that characterize organizations and their members.

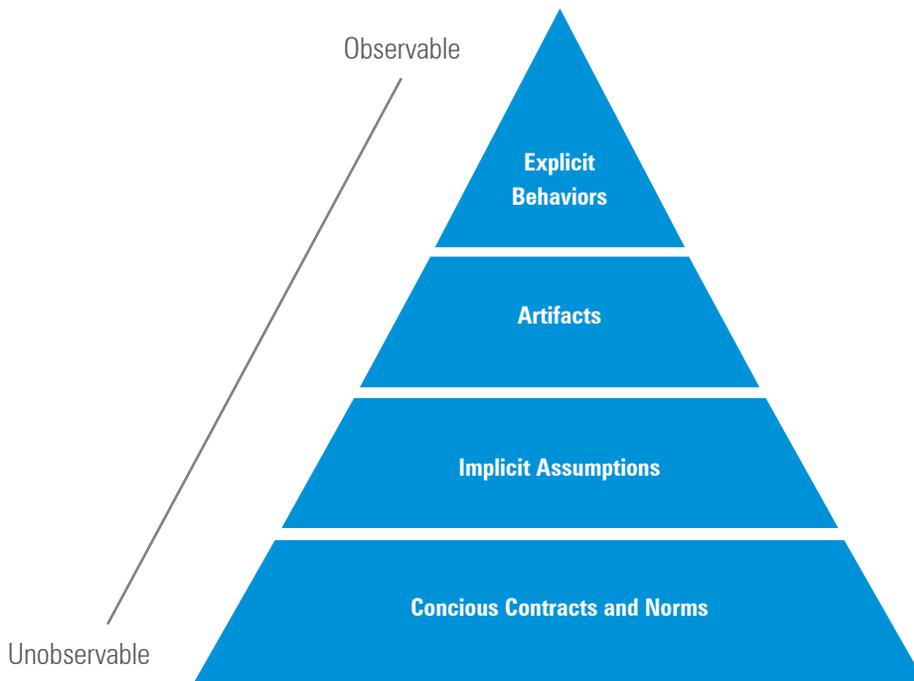


FIGURE 19: Elements of an Innovative Culture

Source: (Cameron & Quinn, 2011)

According to Dávila et al (Dávila T., 2006), the culture within an organization is comprised of unwritten rules, shared beliefs, and mental models of the people. The culture has to be not only compatible with innovation but it needs to lever all the elements of its model. Culture encompasses all systems and processes of the organization as a network of social interaction.

Elements of a successful innovation culture are:

- Diversity in ideas, people and methods
- Sensitivity for new ideas from within or outside the organization
- Discipline to evaluate and execute on new ideas
- Pride in the organization and its achievements
- Sense of uneasiness
- Controlled risk-taking
- Freedom within known rules
- Trust within a larger controlled environment
- Strong leadership

To effectively change a culture to a mixed innovative-value-capturing organization an intervention coming from top management is needed. This intervention could be usually broken into three phases:

- Sensitize the organization in the need for the new culture and what is about
- Train the organization in the new ways of doing and thinking about things
- Anchor the culture. The most challenging phase, people need to do and think the new way automatically, it needs to be part of their new behavior and beliefs

The first step in the culture-change intervention is to determine what type of culture the organization has. We recommend using the Cameron and Quinn (Cameron & Quinn, 2011) methodology.

According to Cameron and Quinn, all organizations develop a dominant type of organizational culture, identifying four cultural types:

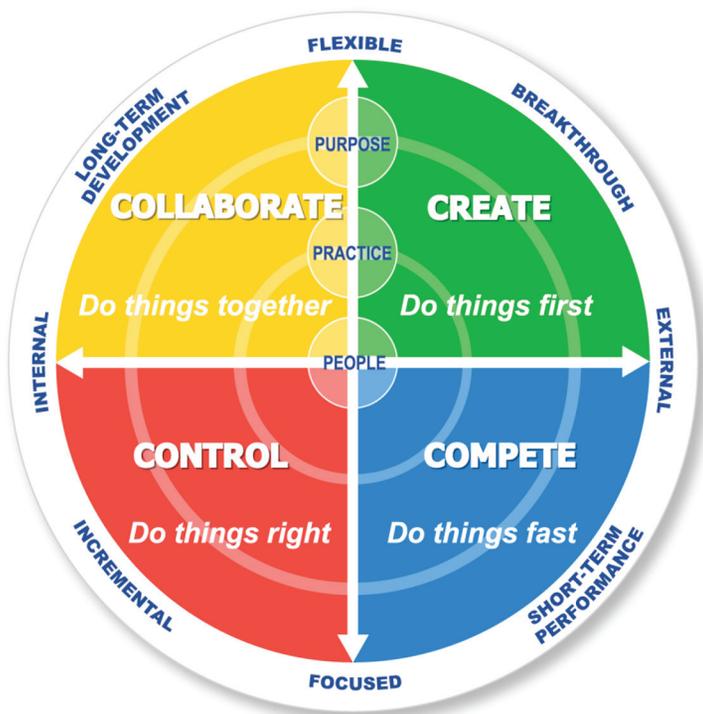


FIGURE 20: Competing Values Framework

Source: (Cameron & Quinn, 2011)

MANAGING THE INNOVATION PORTFOLIO

We have defined as part of our model, three levels of innovation depending on how much transformation was performed on the business' innovation drivers. Incremental Innovations was defined as a small change to one or several drivers. Semi-radical innovation was defined as small changes plus at least one significant change to the drivers and Radical innovation was defined as several significant changes to the drivers. The question we are addressing in this chapter is what is the right (optimal) mix of innovation projects? There is no unique answer to that question, it depends on several factors:

- Relevant Industry dynamics,
- Risk profile of the organization,
- Level of resources available,
- Resources restrictions, to mention a few.

As a result of a research effort, Nagji and Tuff (Nagji & Tuff, 2012) concluded that an innovation investment allocation of 70% for incremental, 20% semi-radical and 10% radical innovations was the most effective value-creation mix (Nagji and Tuff relate to the classification as core, adjacent and transformational), with a

P/E premium of 10 to 20%. Also the same authors, on a different study, concluded that the returns arising from this investment profile are exactly the opposite. Incremental innovation typically contributes 10% of the long term, cumulative return on innovation investment; semi-radical contributes 20% and radical innovation contributes 70%.

THE INNOVATION AUDIT

The starting point of the innovation change in an organization is to define the base line, or the status of the organization at the beginning of the process. This could be achieved by conducting an "innovation audit". There are many tools devoted to this audit. The MIC Model Audit Tool uses three distinct sources to perform the audit:

- A questionnaire, derived from IESE questionnaire, but reduced to 49 questions.
- Key personnel interviews
- Use of selected input and output KPIs.

The MIC Model questionnaire is included in Annex A.

ANNEX A

DIAGNOSTIC QUESTIONNAIRE

	SITUACIÓN ACTUAL DE LA EMPRESA	SITUACIÓN FUTURA DESEADA
1. Nuestros clientes saben lo que necesitan y lo exigen cada vez más.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
2. La competencia de nuestra empresa ha aumentado y se vuelve cada vez más dura.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
3. Esta empresa se ve obligada a preocuparse de mantener bajos sus costos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
4. En esta empresa se necesita cada vez más que el personal tenga mayor especialización y conocimiento técnico.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
5. Nuestro sector está sujeto a cambios tecnológicos frecuentes.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
6. El buen resultado de la empresa es afectado por factores económicos, políticos y sociales externos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
7. La dirección de mi empresa (gerente general + directores) integra el concepto de innovación en todos los procesos de esta empresa.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
8. La dirección de mi empresa (gerente general + directores) está comprometida con la innovación: facilita recursos, motiva la iniciativa personal, entre otros.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
9. La dirección de mi empresa (gerente general + directores) ha establecido y promueve a la innovación como uno de los valores fundamentales de nuestra empresa.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
10. La dirección de mi empresa (gerente general + directores) está comprometida en la revisión permanente de la forma en que innovamos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
11. La empresa tiene una manera definida y clara para establecer su estrategia y para aplicarla integradamente en las distintas áreas de ella.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
12. La empresa está dispuesta a incorporar ideas innovadoras (tanto de los colaboradores internos como de personas o empresas externas) para definir sus estrategias.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
13. La empresa tiene un plan de trabajo, recursos financieros y personal suficiente para cumplir con los objetivos de innovación.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR

	SITUACIÓN ACTUAL DE LA EMPRESA	SITUACIÓN FUTURA DESEADA
14. La diferencia entre el escenario actual de la empresa y el escenario ideal es analizado para definir nuevos objetivos y mejoras periódicas.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
15. Para fortalecer el plan de innovación, la selección de personal busca atraer personas con experiencias y conocimientos distintos al que ya tenemos en la empresa.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
16. Nuestras políticas de desarrollo de personal promueven el conocimiento técnico, creatividad y trabajo en equipo que apoyan la innovación.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
17. Las evaluaciones del personal favorecen la iniciativa y los aportes de los trabajadores.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
18. Las políticas de reconocimiento (monetario y no monetario) premian el espíritu emprendedor, favorecen la innovación y las ideas originales.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
19. La empresa tiene sistemas para compartir nuevas ideas e innovaciones.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
20. La empresa incentiva a los trabajadores a conocer otras experiencias de forma de apoyar el desarrollo de la innovación.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
21. En mi empresa hay una o más áreas con la responsabilidad específica de innovar.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
22. En mi empresa el responsable de innovación depende directamente de la Gerencia General.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
23. En mi empresa hay un presupuesto específico para proyectos de innovación que está separado al presupuesto normal.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
24. En mi empresa existen equipos multidisciplinarios con la responsabilidad de lograr innovación para la empresa.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
25. El día a día y la presión por resultados no son obstáculos para poder innovar.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
26. Mi empresa identifica e incorpora nuevas tecnologías que pueden impactar en sus procesos y resultados.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
27. En esta empresa aprovechamos al máximo la tecnología que tenemos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
28. Mi empresa promueve activamente el que se establezcan relaciones de colaboración con proveedores, clientes y otros agentes externos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR

	SITUACIÓN ACTUAL DE LA EMPRESA	SITUACIÓN FUTURA DESEADA
29. Mi empresa busca que la relación con proveedores y clientes sean estables y duraderas.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
30. Mi empresa tiene una "biblioteca" con experiencias, proyectos, ideas, innovaciones, etc., disponibles para ser consultados por aquellos que lo requieran.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
31. Con la pérdida de personal clave esta empresa pierde conocimiento crítico.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
32. En esta empresa tenemos muy claro los conocimientos críticos que necesitamos y NO tenemos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
33. La empresa incentiva a sus colaboradores a que usen el conocimiento obtenido por ella.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
34. En mi empresa se utiliza un acabado y estricto control de gestión, es decir se establecen objetivos e indicadores, asignan responsabilidades y se evalúan resultados.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
35. En mi empresa se ha establecido un proceso formal para la innovación (con actividades, responsables y puntos de decisión).	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
36. Hay revisiones constantes de nuestro proceso de innovación de forma de mejorarlo.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
37. La empresa planifica el desarrollo de nuevos productos y servicios, definiendo con claridad los objetivos, presupuestos y responsabilidades.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
38. El desarrollo de nuevos productos o servicios se inicia con un requerimiento específico.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
39. Mi empresa siempre hace prototipos o pruebas piloto para testear nuevos productos o servicios.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
40. La dirección de mi empresa (gerente general + directores) se preocupa que se rediseñen y mejoren constantemente los procesos de la empresa.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
41. Mi compañía revisa el cumplimiento de los objetivos y metas.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
42. Mi empresa ha definido objetivos formales específicos para la innovación (por ej.: porcentaje de ventas que proviene de nuevos productos).	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR

	SITUACIÓN ACTUAL DE LA EMPRESA	SITUACIÓN FUTURA DESEADA
43. El estilo de dirección en esta empresa fomenta la autonomía, la innovación, y la libertad para tomar riesgos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
44. En esta empresa los jefes son innovadores y emprendedores. Animán a los empleados a innovar, emprender, y a tomar riesgos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
45. Esta organización es un lugar muy dinámico y emprendedor. La gente está muy comprometida con su trabajo y está dispuesta a tomar riesgos.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
46. Lo que le da cohesión a nuestra empresa es la pasión por la innovación y el desarrollo de nuevos productos y servicios. Nos gusta estar a la vanguardia.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
47. La empresa hace énfasis en el crecimiento y en los nuevos desafíos. Se fomenta probar ideas nuevas y la búsqueda de nuevas oportunidades.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
48. La organización define el éxito en términos de contar con los productos y servicios más novedosos e innovadores. Se busca ser líderes en innovación.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR
49. En esta unidad puedes arriesgarte y probar cosas nuevas sin temor a que te ridiculicen o culpen si las cosas no salen bien.	5 4 3 2 1 NS/NR	5 4 3 2 1 NS/NR

ANNEX B

MANAGEMENT SKILLS ASSESSMENT INSTRUMENT

Kim S. Cameron

Robert E. Quinn

Self-Rating Form

The purpose of this assessment is to help you identify key areas of your managerial competency. What are your managerial strengths, and in what areas will you want to improve? The assessment produces a map of your managerial competencies based on factors that have been found to predict managerial success. That is, whereas no person possesses proficiency in all possible competency areas, the competencies included in this instrument are all associated with high managerial and organizational performance. Your profile helps identify your own areas of strength and capability. It also provides a profile of the kinds of competencies that you will need if you are to accomplish your highest aspirations in the future. The instrument helps you compare your current competencies, in other words, with those required for you to be a spectacular success as a manager.

Because it is based on the Competing Values Framework, the Managerial Competencies Assessment helps to create a common language among employees and gives them an easy way to be clear about desired results. This provides a way to discuss

the organizational culture, capabilities, performance outcomes, personal orientation issues, and change processes that can all be used to bring about the desired results.

The best way to obtain useful data is to complete this instrument yourself and then have a set of associates—superiors, peers, and subordinates—also complete the instrument rating you as the focal person. This provides “360 degree feedback” and allows you to compare your own perceptions with those of others. This process has been automated and can be administered, along with feedback reports, by Behavior Data Services (sherry.slade@b-d-s.com).

The survey should take approximately 20 minutes to complete. Management Skills Assessment Instrument (MSAI)

SELF-RATING FORM

Describe your behavior as a manager. Respond to the items as you actually behave most of the time, not as you would like to behave. If you are unsure of an answer, make your best guess. Use the following scale in your ratings:

- 5- Strongly Agree
- 4- Moderately Agree
- 3- Slightly Agree and/or Slightly Disagree
- 2- Moderately Disagree
- 1- Strongly Disagree

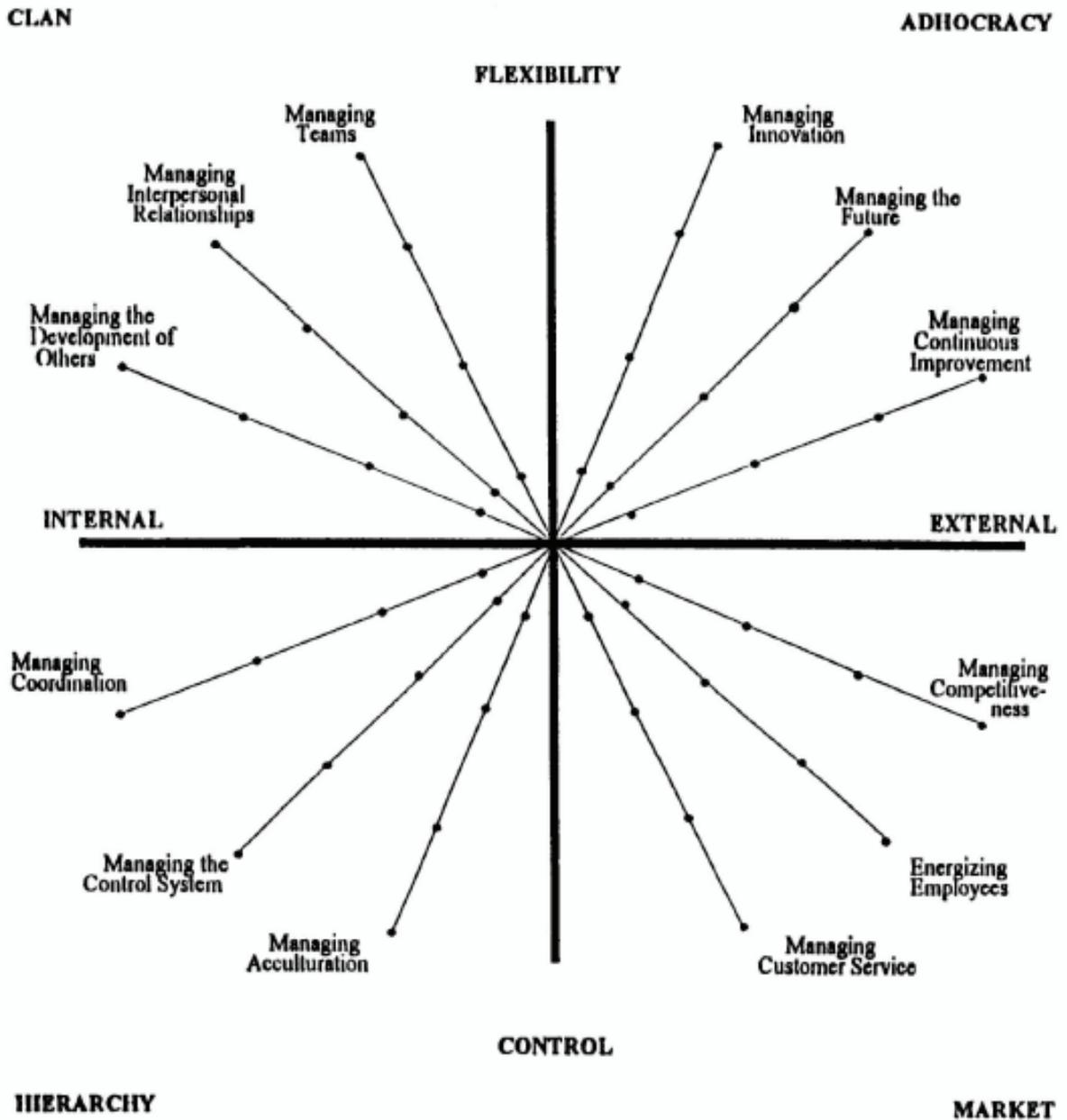
		STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE/DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE
1.	I communicate in a supportive way when people in my unit share their problems with me.	5	4	3	2	1
2.	I encourage others in my unit to generate new ideas and methods.	5	4	3	2	1
3.	I motivate and energize others to do a better job.	5	4	3	2	1
4.	I keep close track of how my unit is performing.	5	4	3	2	1
5.	I regularly coach subordinates to improve their management skills so they can achieve higher levels of performance.	5	4	3	2	1
6.	I insist on intense hard work and high productivity from my subordinates.	5	4	3	2	1
7.	I establish ambitious goals that challenge subordinates to achieve performance levels above the standard.	5	4	3	2	1
8.	I generate, or help others obtain, the resources necessary to implement their innovative ideas.	5	4	3	2	1
9.	When someone comes up with a new idea, I help sponsor them to follow through on it.	5	4	3	2	1
10.	I make certain that all employees are clear about our policies, values, and objectives.	5	4	3	2	1
11.	I make certain that others have a clear picture of how their fits with others in the organization.	5	4	3	2	1
12.	I build cohesive, committed teams of people.	5	4	3	2	1
13.	I give my subordinates regular feedback about how I think they're doing.	5	4	3	2	1
14.	I articulate a clear vision of what can be accomplished in the future.	5	4	3	2	1
15.	I foster a sense of competitiveness that helps members of my work group perform at higher levels than members of other units.	5	4	3	2	1
16.	I assure that regular reports and assessments occur in my unit.	5	4	3	2	1
17.	I interpret and simplify complex information so that it makes sense to others and can be shared throughout the organization.	5	4	3	2	1
18.	I facilitate effective information sharing and problem solving in my group.	5	4	3	2	1
19.	I foster rational, systematic decision analysis in my unit (e.g., logically analyzing component parts of problems) to reduce the complexity of important issues.	5	4	3	2	1
20.	I make sure that others in my unit are provided with opportunities for personal growth and development.	5	4	3	2	1
21.	I create an environment where involvement and participation in decisions are encouraged and rewarded.	5	4	3	2	1

		STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE/DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE
22.	In groups I lead, I make sure that sufficient attention is given to both task accomplishment and to interpersonal relationships.	5	4	3	2	1
23.	When giving negative feedback to others, I foster their selfimprovement rather than defensiveness or anger.	5	4	3	2	1
24.	I give others assignments and responsibilities that provide opportunities for their personal growth and development.	5	4	3	2	1
25.	I actively help prepare others to move up in the organization.	5	4	3	2	1
26.	I regularly come up with new, creative ideas regarding processes, products or procedures for my organization.	5	4	3	2	1
27.	I constantly restate and reinforce my vision of the future to members of my unit.	5	4	3	2	1
28.	I help others visualize a new kind of future that includes possibilities as well as probabilities.	5	4	3	2	1
29.	I am always working to improve the processes we use to achieve our desired output.	5	4	3	2	1
30.	I push my unit to achieve world-class competitive performance in service and/or products.	5	4	3	2	1
31.	By empowering others in my unit, I foster a motivational climate that energizes everyone involved.	5	4	3	2	1
32.	I have consistent and frequent personal contact with my internal and my external customers.	5	4	3	2	1
33.	I make sure that we assess how well we are meeting our customers' expectations.	5	4	3	2	1
34.	I provide experiences for employees that help them become socialized and integrated into the culture of our organization.	5	4	3	2	1
35.	I increase the competitiveness of my unit by encouraging others to provide services and/or products that surprise and delight customers by exceeding their expectations.	5	4	3	2	1
36.	I have established a control system that assures consistency in quality, service, cost and productivity in my unit.	5	4	3	2	1
37.	I coordinate regularly with managers in other units in my organization.	5	4	3	2	1
38.	I routinely share information across functional boundaries in my organization to facilitate coordination.	5	4	3	2	1
39.	I use a measurement system that consistently monitors both work processes and outcomes.	5	4	3	2	1
40.	I clarify for members of my unit exactly what is expected of them.	5	4	3	2	1
41.	I assure that everything we do is focused on better serving our customers.	5	4	3	2	1

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		STRONGLY AGREE	MODERATELY AGREE	SLIGHTLY AGREE/DISAGREE	MODERATELY DISAGREE	STRONGLY DISAGREE
44.	I facilitate a climate of continuous improvement in my unit.	5	4	3	2	1
45.	I have developed a clear strategy for helping my unit successfully accomplish my vision of the future.	5	4	3	2	1
46.	I capture the imagination and emotional commitment of others when I talk about my vision of the future.	5	4	3	2	1
47.	I facilitate a work environment where peers as well as subordinates learn from and help develop one another.	5	4	3	2	1
48.	I listen openly and attentively to others who give me their ideas, even when I disagree.	5	4	3	2	1
49.	When leading a group, I ensure collaboration and positive conflict resolution among group members.	5	4	3	2	1
50.	I foster trust and openness by showing understanding for the point of view of individuals who come to me with problems or concerns.	5	4	3	2	1
51.	I create an environment where experimentation and creativity are rewarded and recognized.	5	4	3	2	1
52.	I encourage everyone in my unit to constantly improve and update everything they do.	5	4	3	2	1
53.	I encourage all employees to make small improvements continuously in the way they do their jobs.	5	4	3	2	1
54.	I make sure that my unit continually gathers information on our customers' needs and preferences.	5	4	3	2	1
55.	I involve customers in my unit's planning and evaluations.	5	4	3	2	1
56.	I establish ceremonies and rewards in my unit that reinforce the values and culture of our organization.	5	4	3	2	1
57.	I maintain a formal system for gathering and responding to information that originates in other units outside my own.	5	4	3	2	1
58.	I initiate cross-functional teams or task forces that focus on important organizational issues.	5	4	3	2	1
59.	I help my employees strive for improvement in all aspects of their lives, not just in job related activities.	5	4	3	2	1
60.	I create a climate where individuals in my unit want to achieve higher levels of performance than the competition.	5	4	3	2	1

MSAI SCORING KEY	
SCALE	ITEMS
HIERARCHY	
Managing Acculturation	10,11,34,40,56
Managing the Control System	4,16,19,36,39
Managing Coordination	17,37,38,57,58
MARKET	
Managing Competitiveness	15,30,35,43,60
Energizing Employees	3,6,7,31,42
Managing the Control System	32,33,41,54,55
CLAN	
Managing Teams	12,18,21,22,49
Managing Interpersonal Relationships	1,13,23,48,50
Managing the Development of Others	5,20,24,25,47
ADHOCRACY	
Managing Innovation	2,8,9,26,51
Managing the Future	14,27,28,45,46
Managing Continuous Improvement	29,44,52,53,59



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ANNEX C

THE COMPETING VALUES CULTURE ASSESSMENT 3 A TOOL FROM THE COMPETING VALUES PRODUCT LINE

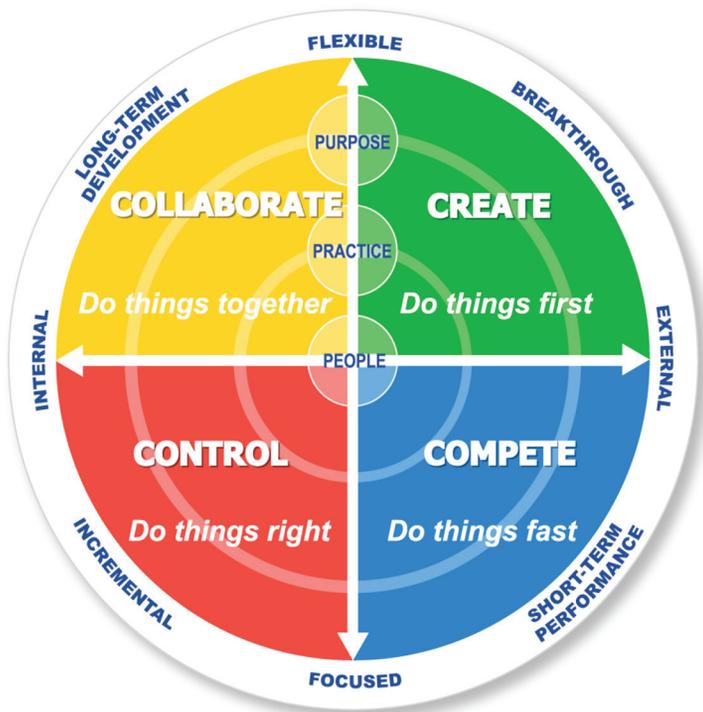
Kim S. Cameron
Robert E. Quinn

AN INTRODUCTION TO THE COMPETING VALUES FRAMEWORK

The Competing Values Framework (CVF) has been recognized as one of the forty most important models in the history of business. It originally emerged from empirical research on what factors make organizations effective. The framework has since been applied to a

variety of topics related to individual and organizational behavior. It has been the focus of empirical studies for more than 25 years, and it has been employed to help thousands of organizations and tens of thousands of managers improve their performance. References to a number of books and scholarly publications testing and validating the framework are available from the authors.

THE COMPETING VALUES FRAMEWORK



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THE FOUR QUADRANTS

The Competing Values Framework (CVF) consists of two dimensions—one drawn vertically and the other drawn horizontally—resulting in four quadrants. When studying the effectiveness of organizations more than two decades ago, it was discovered that some organizations were effective if they demonstrated flexibility and adaptability, but other organizations were effective if they demonstrated stability and control. Similarly, some organizations were effective if they maintained efficient internal processes whereas others were effective if they maintained competitive external positioning relative to customers and clients. These differences represent the different ends of two dimensions, and these dimensions constitute the rudiments of the Competing Values Framework. Each quadrant in the framework represents a way of being, seeing, managing, and organizing.

The Collaborate Quadrant

The Collaborate quadrant represents the kinds of people, purposes, and processes that give rise to cooperation and collaboration. People in the Collaborate quadrant tend to be committed to their community, focusing on shared values and communication. Their culture is oriented towards involvement and building commitment over time. Companies dominated by this Collaborate quadrant often seek to be the employer of choice. Driving purposes include cohesion and commitment. Leaders build the organization by encouraging trusting relationships and by nurturing a sense of community. Unified behavior produces a strong organizational image in the marketplace. Customers may be considered partners in an extended community. The Collaborate quadrant taken to an extreme becomes negative and turns into a permissive, lax environment where outcomes and results are under-emphasized.

The Create Quadrant

The Create quadrant represents the kinds of people, purposes, and practices that are associated with creativity, innovation, and vision. Individuals with this perspective tend to be change oriented. The culture that supports their work is characterized by experimentation, flexibility, and looking forward toward the future. The focus is on generating new ideas. These organizations tend to emphasize and support entrepreneurial activities. Companies in this Create

quadrant tend to seek to value things that are new. Driving purposes include innovation and growth. They orient their products, services, and ideas toward the future. Managers build the organization by developing a compelling vision and emphasizing new ideas and technologies, flexibility, and adaptability. These organizations can thrive in turbulent environments. The Create quadrant taken to an extreme becomes negative by being constantly chaotic, trying out multiple new ideas, and under-emphasizing the achievement of predictable outcomes and structure.

The Compete Quadrant

The Compete quadrant represents the kinds of people, purposes, and practices that are associated with aggressive competition and achievement. A focus on achieving results leads people to emphasize winners or losers. Individuals with this perspective tend to be focused on performance and goal achievement. Companies that emphasize this Compete quadrant tend to emphasize speed and getting results. Driving purposes include profits, obtaining market share, revenues, brand equity, and speed of response. Managers build the organization by clarifying objectives and improving the firm's competitive position through hard work, competitive strategy, and productivity. These organizations seek to deliver results to stakeholders as quickly as possible. Beating the competition is central. The Compete profile taken to an extreme becomes negative by giving rise to self-interests and conflict and by neglecting the more humane people issues.

The Control Quadrant

The Control quadrant represents the kinds of people, purposes, and practices that give rise to predictable, dependable performance. People in organizations dominated by the Control quadrant tend to be systematic, careful, and practical. The culture emphasizes planning, efficient systems and processes, and enforcing compliance. Companies that emphasize the Control quadrant tend to keep things running smoothly and efficiently. Driving purposes include obtaining high quality or optimization, sometimes expressed as predictability or minimizing variation and errors. Managers build the organization by optimizing processes, cutting costs, and establishing policies and procedures. Clear role definitions are important. These organizations tend to elaborate or extend existing products and services with minor variations. The Control quadrant

taken to an extreme becomes negative by leading to red tape, languishing bureaucracy, and organizational stagnation.

An advantage of the Competing Values Framework is that it is based on a well-developed theoretical and empirical foundation. A great deal of research has been produced to validate the CVF and its applications. It is consistent, for example, with the psychology of Jung, the sociology of Parsons, the philosophy of Wilber, and the brain physiology of Lawrence. Individuals taking the assessments, as well as organizations receiving data on their own attributes, can link their results to other well-developed elements of improvement.

Most importantly, the empirical research conducted by scholars in hundreds of organizations, coupled with the hundreds of interventions in real organizations that have utilized the Competing Values Framework, provide a rich array of guidelines and prescriptions for how to improve individual and organizational performance. These are not merely conveniently created instruments. They are, rather, an integrated array of assessment devices aimed to help enable and enhance consistent and comprehensive improvement.

THE COMPETING VALUES CULTURE ASSESSMENT

Why should I use the Competing Values Culture Assessment?

The purpose of this assessment is to diagnose your organization's current and desired culture. Unfortunately, most of us are not even aware of our organization's culture inasmuch as culture represents "just the way things are around here." Culture is the sum of the collective assumptions, expectations, and values that reflect explicit and implicit rules in the organization. Until challenged or violated, most people are not even aware that these assumptions and rules exist (such as speaking English or being polite). As a result, it is very difficult to intelligently discuss culture, not to mention try to change it. We learn about the culture of our organization through socialization processes, interactions under uncertain conditions—when we mostly rely on core habits and the most well-learned responses—and by contagion (or unconscious mimicking). Much of that learning, however, is not systematic or conscious.

Understanding organizational culture is important because it is

the single largest factor that inhibits organizational improvement and change. Research is clear that healthy cultures enhance success whereas unhealthy cultures inhibit success, but in order to take advantage of the power of organizational culture, it must be adequately measured. Research by Cameron and Mora found that 96 percent of the time successful mergers and acquisitions could be accurately predicted based solely on cultural match. Organizational change and improvement, in other words, is markedly affected by culture.

A change in organizational culture can occur simply by means of life cycle development—i.e., evolutionary changes—or as a result of a major threat or crisis when dramatic transformations occur. The most productive way to facilitate culture change, however, is through competent leadership and systematic change initiatives. This instrument helps identify the cultural profile of your organization which is a prerequisite for fostering organizational change and improvement. Because the instrument is based on the Competing Values Framework, it can help create a common language among employees within your organization and give them an easy way to discuss how to effectively achieve desired results.

The Competing Values Culture Assessment

These six questions ask you to identify the way you experience your organization right now, and, separately, the way you think it should be in the future if it is to achieve its highest aspirations. In the survey, "the organization" refers to the organization managed by your boss (or the organization in which you manage).

Please rate each of the statements by dividing 100 points between alternatives A, B, C, and D depending on how similar the description is to your firm. (100 would indicate very similar and 0 would indicate not at all similar). The total points for each question must equal 100. The assessment uses this method to better demonstrate how trade-offs always exist in organizations and resources—including time and attention—are never unconstrained. That is, the response scale demonstrates the inherent tradeoffs required in any approach to culture change.

First, rate how you perceive the organization to be at the present time in the NOW column. Second, rate the organization again in

the FUTURE column depending on how you think your organization must be if it is to accomplish its highest objectives and achieve spectacular success in three to five years.

You may divide the 100 points in any way among the four alternatives in each question. Some alternatives may get zero points, for example. Remember that the total must equal 100.

1. DOMINANT CHARACTERISTICS	NOW	FUTURE
A. The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.	A ____	A ____
B. The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	B ____	B ____
C. The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.	C ____	C ____
D. The organization is a very controlled and structured place. Formal procedures generally govern what people do.	D ____	D ____
Total	100	100
2. ORGANIZATIONAL LEADERSHIP NOW FUTURE		
A. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.	A ____	A ____
B. The leadership in the organization is generally considered to exemplify entrepreneurship, innovating, or risk taking.	B ____	B ____
C. The leadership in the organization is generally considered to exemplify an aggressive, results-oriented, no-nonsense focus.	C ____	C ____
D. The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	D ____	D ____
Total	100	100
3. MANAGEMENT OF EMPLOYEES		
A. The management style in the organization is characterized by teamwork, consensus, and participation.	A ____	A ____
B. The management style in the organization is characterized by individual risk-taking, innovation, freedom, and uniqueness.	B ____	B ____
C. The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.	C ____	C ____
D. The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.	D ____	D ____
Total	100	100

4. ORGANIZATIONAL GLUE NOW FUTURE	NOW	FUTURE
A. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.	A ____	A ____
B. The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.	B ____	B ____
C. The glue that holds the organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.	C ____	C ____
D. The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.	D ____	D ____
Total	100	100
5. STRATEGIC EMPHASES		
A. The organization emphasizes human development. High trust, openness, and participation persist.	A ____	A ____
B. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.	B ____	B ____
C. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	C ____	C ____
A. The organization emphasizes permanence and stability. Efficiency, control and smooth operations are important.	D ____	D ____
Total	100	100
6. CRITERIA OF SUCCESS NOW FUTURE		
A. The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.	A ____	A ____
B. The organization defines success on the basis of having the most unique or the newest products. It is a product leader and innovator.	B ____	B ____
C. The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.	C ____	C ____
D. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low cost production are critical.	D ____	D ____
Total	100	100

COMPUTING THE RESULTS:

Transfer all of your answers from the above questions onto the results key below. Follow the results key until you have the averages for A through D in both the "NOW and "Future" columns of the Assessment.

NOW

1A. ____ 1B. ____ 1C. ____ 1D. ____
 2A. ____ 2B. ____ 2C. ____ 2D. ____
 3A. ____ 3B. ____ 3C. ____ 3D. ____
 4A. ____ 4B. ____ 4C. ____ 4D. ____
 5A. ____ 5B. ____ 5C. ____ 5D. ____
 6A. ____ 6B. ____ 6C. ____ 6D. ____

FUTURE

1A. ____ 1B. ____ 1C. ____ 1D. ____
 2A. ____ 2B. ____ 2C. ____ 2D. ____
 3A. ____ 3B. ____ 3C. ____ 3D. ____
 4A. ____ 4B. ____ 4C. ____ 4D. ____
 5A. ____ 5B. ____ 5C. ____ 5D. ____
 6A. ____ 6B. ____ 6C. ____ 6D. ____

Add 1A through 6A to get your total (T) for the A column. Do the same with all the columns:

A. ____ B. ____ C. ____ D. ____

A. ____ B. ____ C. ____ D. ____

Divide Totals by 6 to get your Averages (A):

A. ____ B. ____ C. ____ D. ____

A. ____ B. ____ C. ____ D. ____

A - represents the **Collaborate** Quadrant (Upper Left Corner)

B - represents the **Create** Quadrant (Upper Right Corner)

C - represents the **Compete** Quadrant (Lower Right Corner)

D - represents the **Control** Quadrant (Lower Left Corner)

CREATING THE VISUAL RESULTS:

Creating a visual picture allows for you to think through your results with the CVF more effectively. A picture also helps you make more comparisons and capture more trends than analyzing numbers alone.

Create your visual results by taking your average number in column

A of the NOW section and plotting that point in the Collaborate quadrant. Continue to plot each column in NOW section until all the quadrants are complete. Then connect the plotted points so that you have created a kite-like shape (as in the example below).

Follow the same steps with the averages from FUTURE section but instead of using four solid lines use four dotted lines (or solid lines of a different color) to connect the plotted numbers in each quadrant.

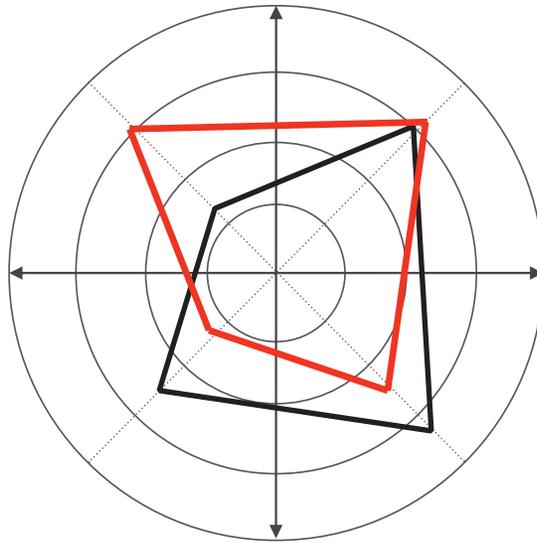
FOR EXAMPLE:

COLLABORATE

- NOW 13
- FUTURE 30

CONTROL

- NOW 24
- FUTURE 12



CREATE

- NOW 30
- FUTURE 32

COMPETE

- NOW 30
- FUTURE 26

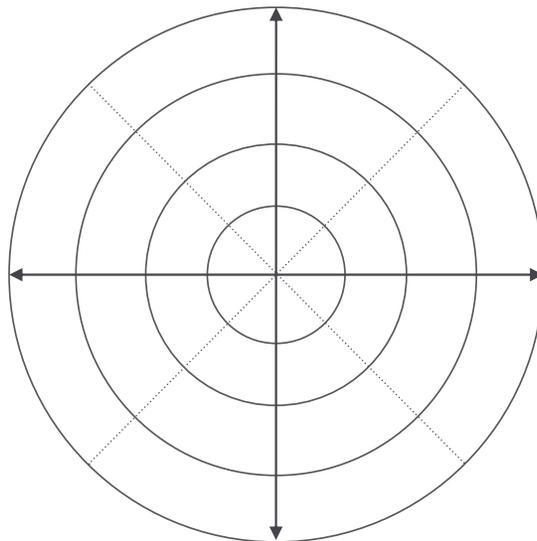
Plot your own results below:

COLLABORATE

- NOW
- FUTURE

CONTROL

- NOW
- FUTURE



CREATE

- NOW
- FUTURE

COMPETE

- NOW
- FUTURE

QUESTIONS GUIDING THE CULTURE CHANGE PROCESS

Discrepancies & Similarities

1. In which quadrants are the discrepancies the greatest between the NOW culture and the FUTURE culture?
2. What changes in organizational culture are implied by your scores?
3. To what extent do the discrepancies between NOW and FUTURE suggest a substantial, transformational change, or do they represent an incremental or evolutionary change?
4. In which quadrants are the discrepancies and similarities greatest between your own ratings of the culture and those of others? How much consistency exists among colleagues' ratings?
5. In which quadrants do differences exist among the different business units or functions in the organization? How much cultural congruence exists among units?

Planning for Action

After reviewing your NOW and FUTURE culture profiles and analyzing the extent to which congruence exists, follow these steps to begin a culture change process within your organization.

1. **Identify required culture CHANGE.** Based on the discrepancies in the culture plots, what needs to change in the organization? In which quadrants will you want to increase your emphasis and decrease your emphasis?
2. **Identify MEANING.** In light of your decision to make some changes to achieve the FUTURE culture, answer these two questions about each quadrant:
 - a. **What DOES IT MEAN to change in this quadrant?**
 - b. **What DOESN'T IT MEAN to change in this quadrant?**
3. **Tell Stories.** Identify one or two memorable stories or incidents that illustrate the underlying culture that characterizes your FUTURE culture. What anecdote symbolizes what you want to become?

4. **Identify STRATEGIES.** Develop two or three specific, actionable strategies that are imperative for changing the culture.
5.
 - a. **What should we do MORE of?**
 - b. **What should we STOP doing?**
 - c. **What should we BEGIN anew?**
6. **Identify immediate SMALL WINS.** Develop a list of key action steps that you can implement right away. These will likely be incremental improvements that can create immediate momentum for change.
7. **Identify METRICS, MEASURES, and MILESTONES.** Identify the indicators of success, how they will be assessed, and the time frame in which observable progress will occur.
8. **Articulate the LEADERSHIP implications.** Determine the learning and development activities that will be needed to develop the leaders you will need to guide the future culture.
9. **Determine the COMMUNICATION STRATEGY.** What symbols, logos, and mechanisms will be used to communicate the new culture? To whom will you communicate and how often?

ANNEX D

GENERAL INNOVATION SKILLS APTITUDE TEST 2.0

The General Innovation Skills Aptitude Test 2.0 (GISAT2.0)

The General Innovation Skills Aptitude Test (GISAT2.0) raises awareness and understanding around the skills, attitudes, and behaviors individuals and organizations need to be innovative—as listed in The Conference Board of Canada’s Innovation Skills Profile 2.0 (ISP2.0).

By identifying, and then assessing, the innovation skills found in individuals and required by organizations GISAT2.0 is a powerful tool that assists workplaces and individuals to better match their innovation skills capacities with their innovation needs.

Purpose

GISAT2.0 worksheets—on the following pages—help individuals and workplaces identify, understand and assess three essential innovation skills measurements:

1. The extent to which an individual demonstrates a desired innovation skill (and what it means to an organization and the individual);
2. The importance of an innovation skill to a particular job or job function (and what it means to an organization or an individual); and
3. The innovation skills gap that exist between individuals and their job functions (and what it means to an organization or an individual).

Using GISAT2.0 Results

Individuals and organizations can use the findings from GISAT2.0 to improve their innovation skills, and to improve the “fit” between individuals and individual job functions—in order to improve the overall innovation capacity and performance of a workplace.

GISAT2.0 can assist:

- Individuals identify their innovation skills strengths and weaknesses and act accordingly.

- Employers build highly innovative workplaces by matching the right people with the right jobs, and/or altering certain job functions.
- Human Resource managers in their hiring practices (selecting the right people for the right job) and in the development of training sessions to improve certain innovation skills in current employees

How to Use GISAT2.0

GISAT2.0 is an easy to use, hands-on, skills tool that offers individuals and organizations the opportunity to assess their own innovation capacities, and the fit between their innovation skills and job functions.

Self- and Job-Assessments:

Step:

1. Complete the left-hand columns of Section A (the Self-Assessments only) for all 4 Innovation Skills Pillars (Charts A1–A4). Add up your innovation pillar scores to find your **Total Self-Assessment Scores**.
2. Transfer your Total (Self-Assessment) Scores to Section B—Chart B1, and add them up. Refer to the accompanying range descriptor chart (also Chart B1) to understand what your self-assessment scores mean. Map your Self-Assessment Scores onto Diagram B2 to visualize your innovation skills for each of the four innovation pillars.
3. Return to Section A, and complete the right-hand columns (the Job-Assessments only) for all 4 Innovation Skills Pillars (Charts A1–A4). Add up your innovation pillar scores to find your **Total Job-Assessment Scores**.
4. Transfer your Total (Job-Assessment) Scores to Section B—Chart B3, and add them up. Refer to the accompanying range descriptor chart (also Chart B3) to understand what your job assessment scores mean. Map your Job-Assessment Scores onto Diagram B4 to visualize your innovation skills for each of the four innovation pillars.

Gap Analysis:

Once you have completed both columns of Section A (Charts A1–A4) for all 4 Innovation Skills Pillars, you will then be able to calculate your Innovation Skills Gap Scores.

Step:

5. Refer back to Section A. For each of the 4 Pillars (Charts A1–A4) subtract your Job-Assessment Total Score (right-hand column) from your Self-Assessment Total Score (left-hand column) to give you your innovation skills **GAP Score** for that innovation skills pillar.
6. Transfer your four Pillar Gap Scores—calculated in Section A (Charts A1–A4)—to Section C (Diagram C1). Add the four Pillar Gap Scores together (bottom of Diagram C1) to get your **Total Innovation Skills Gap Score**.
7. Retrace Diagrams B2 and B4 onto Diagram C2 to visualize your innovation skills gaps. Note the gaps between your self- and job-assessment scores.
8. Charts C3 – C6 provide gap analysis commentary for each of the four pillars of innovation found in the GISAT2.0—helping you to understand what the gap means.
9. Chart C7 provides commentary on your total innovation skills gap score—helping you to understand what the gap means.

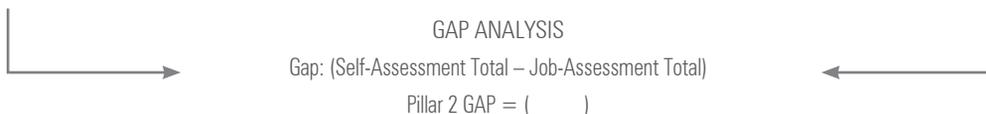
GENERAL INNOVATION SKILLS APTITUDE TEST2.0		
CHART A1 - GENERAL INNOVATION SKILLS ASSESSMENT: PILLAR 1		
SELF-ASSESSMENT	FOR EACH COLUMN (SELF AND JOB ASSESSMENTS) SELECT THE MOST APPROPRIATE MEASURE (1-5)	JOB-ASSESSMENT
Degree to which YOU demonstrate the skill, attitude, or behaviour	PILLAR 1 (P1): GENERATING IDEAS	Importance of the skill, attitude, or behaviour to YOUR job
Low High	CREATIVITY, PROBLEM-SOLVING, AND CONTINUOUS IMPROVEMENT SKILLS	Low High
Act and Contribute		
1 2 3 4 5	You look for new ways to create value in products, processes, services	1 2 3 4 5
1 2 3 4 5	You are good at identifying problems and potential solutions	1 2 3 4 5
1 2 3 4 5	You question assumptions and recognize opportunities for change	1 2 3 4 5
1 2 3 4 5	You like to seek different points of view	1 2 3 4 5
1 2 3 4 5	You are adaptable and flexible	1 2 3 4 5
1 2 3 4 5	You like to rethink the way things are done	1 2 3 4 5
1 2 3 4 5	You approach challenges creatively	1 2 3 4 5
1 2 3 4 5	You look for surprising connections	1 2 3 4 5
1 2 3 4 5	You put forward your own ideas with confidence	1 2 3 4 5
1 2 3 4 5	You like to suggest alternative ways to achieve goals	1 2 3 4 5
1 2 3 4 5	You evaluate solutions in order to make recommendations or decisions	1 2 3 4 5
Manage and Support Others		
1 2 3 4 5	You trust other people's ideas and actions	1 2 3 4 5
1 2 3 4 5	You nurture and promote creativity and inventiveness	1 2 3 4 5
1 2 3 4 5	You like to question and challenge the way things operate	1 2 3 4 5
1 2 3 4 5	You have a vision of where you (and your organization) want to go	1 2 3 4 5
1 2 3 4 5	You are open to new ideas and different ways of doing things	1 2 3 4 5
1 2 3 4 5	You like to keep track of your success and failures to find ways to improve	1 2 3 4 5
1 2 3 4 5	You recognize and reward original ideas and ideas for improvement	1 2 3 4 5
- - - - -	Pillar 1 Column Totals:	- - - - -
Self-Assessment Total: Pillar 1 Score ()	YOUR TOTAL (Pillar 1) SCORES Total score: (add column totals) (min. 18 pts. — max. 90 pts.)	Self-Assessment Total: Pillar 1 Score ()
GAP ANALYSIS Gap: (Self-Assessment Total – Job-Assessment Total) Pillar 1 GAP = ()		

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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

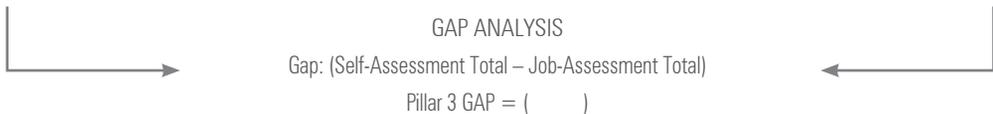
CHART A2 - GENERAL INNOVATION SKILLS ASSESSMENT: PILLAR 2

SELF-ASSESSMENT ← FOR EACH COLUMN (SELF AND JOB ASSESSMENTS) SELECT THE MOST APPROPRIATE MEASURE (1-5) → JOB-ASSESSMENT		
Degree to which YOU demonstrate the skill, attitude, or behaviour	PILLAR 2 (P2): TAKING CALCULATED RISKS AND BEING ENTREPRENEURIAL	Importance of the skill, attitude, or behaviour to YOUR job
Low▶ High	RISK ASSESSMENT AND RISK-TAKING SKILLS	Low▶ High
Act and Contribute		
1 2 3 4 5	You are comfortable pursuing new opportunities	1 2 3 4 5
1 2 3 4 5	You are able to identify, quantify and qualify a risk	1 2 3 4 5
1 2 3 4 5	You are comfortable taking appropriate risks	1 2 3 4 5
1 2 3 4 5	You identify, control, and avoid dangers and threats	1 2 3 4 5
1 2 3 4 5	You stay focused on what you are trying to achieve when suggesting alternative ways to get a job done	1 2 3 4 5
1 2 3 4 5	You can see your risk-taking paying off	1 2 3 4 5
1 2 3 4 5	You learn from your experiences and are not afraid to make mistakes	1 2 3 4 5
1 2 3 4 5	You are willing to experiment with new ideas	1 2 3 4 5
1 2 3 4 5	You can commit to an action without knowing every outcome or consequence	1 2 3 4 5
1 2 3 4 5	You have the confidence to apply your skills in new and unfamiliar situations	1 2 3 4 5
Manage and Support Others		
1 2 3 4 5	You encourage individuals and teams to bring forward new ideas	1 2 3 4 5
1 2 3 4 5	You support risk by monitoring and evaluating decisions and actions	1 2 3 4 5
1 2 3 4 5	You are resilient in the face of setbacks, mistakes, and potential mistakes	1 2 3 4 5
1 2 3 4 5	You do not penalize unforeseeable mistakes	1 2 3 4 5
1 2 3 4 5	You are accepting of failures and willing to learn from them	1 2 3 4 5
1 2 3 4 5	You recognize and reward the pursuit of new opportunities	1 2 3 4 5
- - - - -	Pillar 2 Column Totals:	- - - - -
Self-Assessment Total: Pillar 2 Score ()	← YOUR TOTAL (Pillar 2) SCORES → Total score: (add column totals) (min. 16 pts. — max. 80 pts.)	Self-Assessment Total: Pillar 2 Score ()



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GENERAL INNOVATION SKILLS APTITUDE TEST2.0		
CHART A3 - GENERAL INNOVATION SKILLS ASSESSMENT: PILLAR 3		
SELF-ASSESSMENT	FOR EACH COLUMN (SELF AND JOB ASSESSMENTS) SELECT THE MOST APPROPRIATE MEASURE (1-5)	JOB-ASSESSMENT
Degree to which YOU demonstrate the skill, attitude, or behaviour	PILLAR 3 (P3): DEVELOPING & MAINTAINING INTERPERSONAL RELATIONSHIPS	Importance of the skill, attitude, or behaviour to YOUR job
Low High	RELATIONSHIP-BUILDING AND COMMUNICATION SKILLS	Low High
Act and Contribute		
1 2 3 4 5	You engage others to make use of their skills, knowledge, and abilities	1 2 3 4 5
1 2 3 4 5	You build and maintain relationships inside and outside of your organization, and with people from diverse backgrounds	1 2 3 4 5
1 2 3 4 5	You recognize that relationships are reciprocal	1 2 3 4 5
1 2 3 4 5	You understand and work within the dynamics of a group	1 2 3 4 5
1 2 3 4 5	You share information and expertise inside your organization and among your business partners	1 2 3 4 5
1 2 3 4 5	You respect and support the ideas, approaches, and contributions of others	1 2 3 4 5
1 2 3 4 5	You listen to and value diverse opinions and perspectives	1 2 3 4 5
1 2 3 4 5	You accept and provide feedback and guidance in a constructive manner	1 2 3 4 5
1 2 3 4 5	You are able to overcome barriers among people that may impede results	1 2 3 4 5
Manage and Support Others		
1 2 3 4 5	You encourage, mentor, and coach others to share ideas and speak freely	1 2 3 4 5
1 2 3 4 5	You involve others by delegating responsibility and supporting their efforts	1 2 3 4 5
1 2 3 4 5	You make it easy for people to collaborate and deliver new solutions	1 2 3 4 5
1 2 3 4 5	You allocate resources for networking and the sharing of ideas and skills	1 2 3 4 5
1 2 3 4 5	You promote personal development in others	1 2 3 4 5
1 2 3 4 5	You provide guidance, honest praise and constructive feedback	1 2 3 4 5
1 2 3 4 5	You recognize and reward the success of individuals and teams	1 2 3 4 5
- - - - -	← Pillar 3 Column Totals: →	- - - - -
Self-Assessment Total: Pillar 3 Score ()	YOUR TOTAL (PILLAR 3) SCORES Total score: (add column totals) (min. 16 pts. - max. 80 pts.)	Job-Assessment Total: Pillar 3 Score ()



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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

CHART A4 - GENERAL INNOVATION SKILLS ASSESSMENT: PILLAR 4

GENERAL INNOVATION SKILLS APTITUDE TEST2.0														
CHART A4 - GENERAL INNOVATION SKILLS ASSESSMENT: PILLAR 4														
SELF-ASSESSMENT	FOR EACH COLUMN (SELF AND JOB ASSESSMENTS) SELECT THE MOST APPROPRIATE MEASURE (1-5)										JOB-ASSESSMENT			
Degree to which YOU demonstrate the skill, attitude, or behaviour					PILLAR 4 (P4): TURNING IDEAS INTO PRODUCTS, PROCESSES, AND SERVICES					Importance of the skill, attitude, or behaviour to YOUR job				
Low High					IMPLEMENTATION SKILLS					Low High				
Act and Contribute														
1	2	3	4	5	You set realistic goals and priorities	1	2	3	4	5				
1	2	3	4	5	You access and apply knowledge and skills from inside and outside your organization	1	2	3	4	5				
1	2	3	4	5	You exercise ingenuity when devising, planning and implementing solutions	1	2	3	4	5				
1	2	3	4	5	You plan for contingencies and are ready with alternative strategies	1	2	3	4	5				
1	2	3	4	5	You adapt to changing requirements	1	2	3	4	5				
1	2	3	4	5	You use the right tools and technologies to complete tasks and projects	1	2	3	4	5				
1	2	3	4	5	You are tenacious - you show initiative and commitment	1	2	3	4	5				
1	2	3	4	5	You accept feedback and are willing to learn from your mistakes	1	2	3	4	5				
1	2	3	4	5	You check to see if a solution works and act on opportunities for improvement	1	2	3	4	5				
1	2	3	4	5	You use metrics to measure and show the value of a solution	1	2	3	4	5				
1	2	3	4	5	You are accountable for what you and your group do	1	2	3	4	5				
Manage and Support Others														
1	2	3	4	5	You adopt and promote a "can do" attitude	1	2	3	4	5				
1	2	3	4	5	You understand how change affects the performance of your organization	1	2	3	4	5				
1	2	3	4	5	You are proactive in leading and responding to change	1	2	3	4	5				
1	2	3	4	5	You empower others to make decisions	1	2	3	4	5				
1	2	3	4	5	You are tolerant of mistakes when trying out new ideas	1	2	3	4	5				
1	2	3	4	5	You value, support, and reward initiative	1	2	3	4	5				
1	2	3	4	5	You make change visible by highlighting new/improved products, services, processes, strategies and capabilities	1	2	3	4	5				
1	2	3	4	5	You measure the impacts of a solution on performance, productivity and financial results	1	2	3	4	5				
_	_	_	_	_	← Pillar 4 Column Totals: →	_	_	_	_	_				
Self-Assessment Total: Pillar 4 Score ()					YOUR TOTAL (Pillar 4) SCORES Total score: (add column totals) (min. 19 pts. — max. 95 pts.)					Self-Assessment Total: Pillar 4 Score ()				

}

GAP ANALYSIS
 Gap: (Self-Assessment Total – Job-Assessment Total)
 Pillar 4 GAP = ()

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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

CHART B1—UNDERSTANDING YOUR INNOVATION SKILLS SCORES

Absolute Scores—Self :

1. Enter your Self-Assessment Scores for each Pillar, below, from Section A (Charts A1-A4). Look for the cell that matches your score for commentary.
2. Add your four Self-Assessment Pillar Scores together and write this down in the Self-Assessment Total Score cell. Look for the cell that matches your total score for commentary.

SELF-ASSESSMENT SCORES		YOUR SELF-ASSESSMENT SCORES SUGGEST THAT...			
Pillar 1: (min. 18 pts. - max. 90 pts.) (Generating Ideas)	()	18 - 36: You like consistency and routine. You tend to work best within well-defined parameters and boundaries. You prefer to follow the lead of others. You look for patterns and trends.	37 - 53: You approach challenges in a structured, logical, and mannerly fashion. You tend to focus on issues that are clearly defined and well understood. You consider both new and tried solutions.	54 - 71: You share a good balance between careful observation and getting the ball rolling on important tasks. You enjoy developing issues—often before they are apparent to others. You like to seek out new solutions.	72 - 90: You like to challenge things. You tend to experiment with new ideas and applications. You like to solve problems and make decisions by finding new solutions. You nurture and recognize creativity.
Pillar 2: (min. 16 pts. - max. 80 pts.) (Risk-Taking)	()	16 - 32: You tend to avoid risk. You prefer to plan things out systematically. You tend to logically analyze ideas. Typically, you think through plans step-by-step and study at length before making decisions.	33 - 47: You are attentive to detail and analysis. You prefer to understand situations and assess risks thoroughly before determining how best to overcome a situation or challenge. Once prepared, you act.	48 - 63: You are flexible in responding to changing circumstances. You tend to be open to discussing and negotiating new solutions. You are comfortable taking on actions without knowing the outcomes.	64 - 80: You are confident. You willingly take on new challenges and risks. You like to experiment with new ideas. You encourage others to put forward new ideas. You learn from your experiences-good or bad.
Pillar 3: (min. 16 pts. - max. 80 pts.) (Relationship-Building)	()	16 - 32: You prefer to work alone. You tend to make decisions without consulting others. You prefer to deal with issues and solve problems by reading, analyzing models, or attending lectures.	33 - 47: You work comfortably with others, or alone, and are willing to assume full responsibility for your actions. You tend to wait for others to collaborate and build relationships with you. You are tolerant and respectful of others.	48 - 63: You prefer to work with others. You recognize and respect individual differences and perspectives. You share information and expertise willingly. You make an effort to build and maintain good working relationships.	64 - 80: You seek out and engage others in teams. You respect other peoples' ideas and insights. You work best when sharing information with others. You encourage others to share ideas and to collaborate.
Pillar 4: (min. 19 pts. - max. 95 pts.) (Implementing)	()	19 - 38: You tend to observe and reflect rather than act. You like to gather information and analyze situations. You demonstrate practical know-how. You prefer to get projects underway.	39 - 56: You tend to focus on procedures and processes. You offer a range of possibilities and solutions for an issue or task. You enjoy planning contingencies and adaptive strategies.	57 - 75: You tend to see things through to completion. You enjoy working on new projects from start to finish. You are pragmatic and are accountable for your actions, and the actions of others.	76 - 95: You embrace change. You consistently see new projects through to conclusion. You think of new ways to get a job done, and then act. You are persistent. You value and support initiative.
SELF-ASSESSMENT TOTAL SCORE: (min. 69 pts. - max. 345 pts.)	()	69 - 138: You prefer to focus your skills and attention on fact gathering and information analysis. You shy away from doing things differently, or doing new things. You seek stability and clarity.	138 - 206: You are insightful. You are accountable for your actions. You are honest and credible. You work well independently and you are adaptable and flexible when needed to be.	207 - 275: You tend to seek out the meanings, significance, and implications of your actions and the actions of others. You leverage diversity of thought. You enjoy taking new ideas and transferring them into new solutions.	276 - 345: You exhibit strong innovation skills, attitudes, and behaviours. You tend to seek resolution and action. You like to think about future directions and next steps. You constantly challenge yourself.

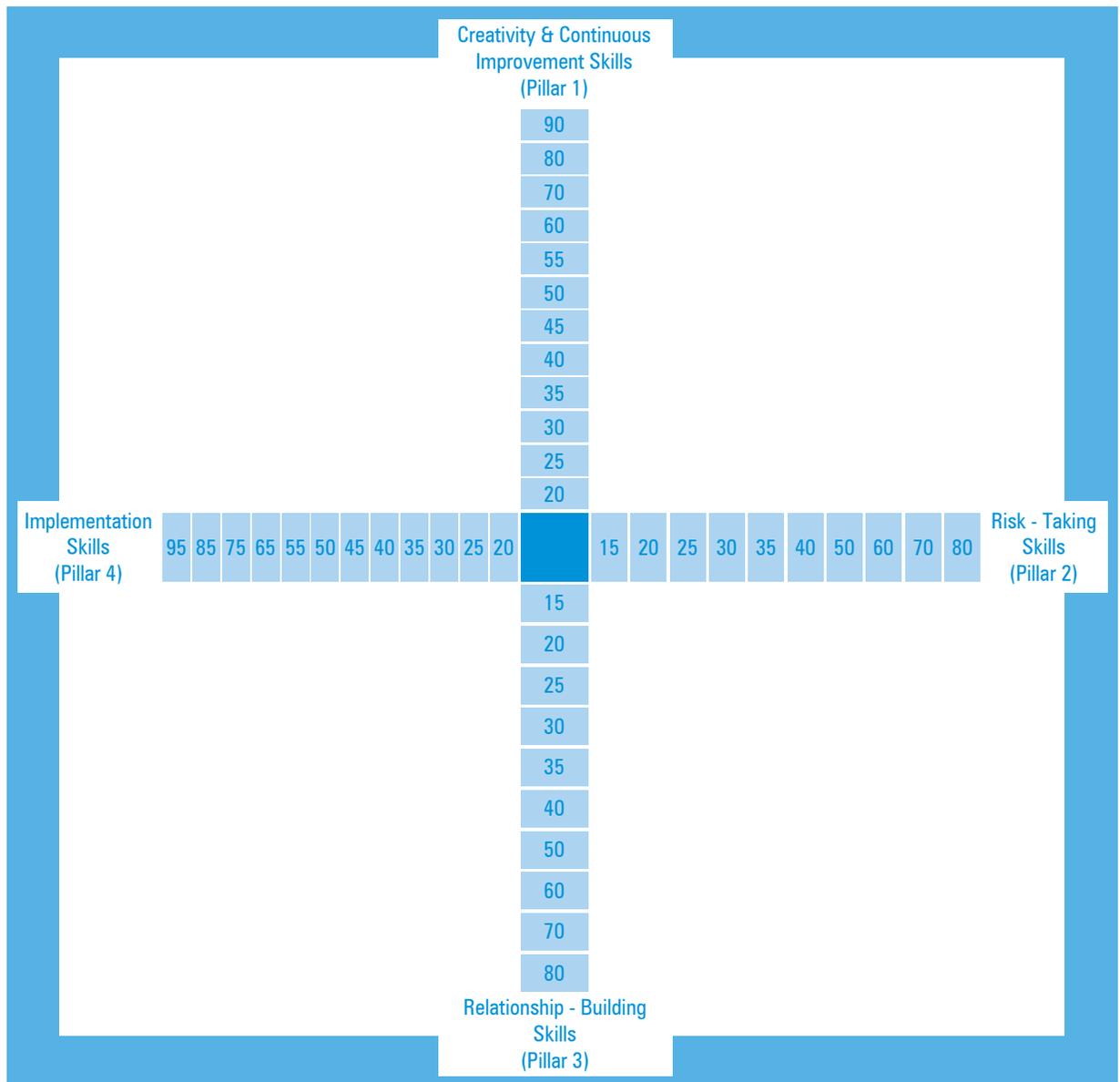
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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

DIAGRAM B2—MAPPING AND VISUALIZING YOUR INNOVATION SKILLS (SELF) SCORES

Absolute Scores - Self:

1. On the diagram below, mark the points on the corresponding lines to indicate your Pillar 1, 2, 3, and 4 absolute self scores (from Chart B1—left-hand column).
2. Connect the dots to form a “kite-shaped” pattern on the chart. You can see by the placement of the dots which of the four innovation skills learning pillars you tend to exhibit strengths in (generating ideas; taking risks; developing relationships; turning ideas into products, processes and services).



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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

CHART B3—UNDERSTANDING YOUR INNOVATION SKILLS SCORES

Absolute Scores - Job

1. Enter your Job-Assessment Scores for each Pillar, below, from Section A (Charts A1-A4). Look for the cell that matches your score for commentary.
2. Add your four Job-Assessment Pillar Scores together and write this down in the Job-Assessment Total Score cell. Look for the cell that matches your total score for commentary.

JOB - ASSESSMENT SCORES		YOUR JOB-ASSESSMENT SCORES SUGGEST THAT...			
Pillar 1: (min. 18 pts. - max. 90 pts.) (Generating Ideas)	()	18 - 36: Your job requires someone who works well with routine. It is suited for someone who works best within well-defined parameters, and who prefers to follow the lead of others.	37 - 53: Your job requires someone who approaches challenges in a structured and mannerly fashion. It is suited for someone who prefers working on issues that are clearly defined and well understood.	54 - 71: Your job requires someone who likes to seek out new solutions. It is suited for someone who enjoys developing issues and getting the ball rolling while at the same time carefully observing situations.	72 - 90: Your job requires someone who likes to challenge things. It is suited for someone who likes to experiment with new ideas, solve problems, and make decisions.
Pillar 2: (min. 16 pts. - max. 80 pts.) (Risk-Taking)	()	16 - 32: Your job is suited for someone who tends to avoid risk or uncertainty. It requires someone who likes to plan things out systematically, and study things at length before making decisions.	33 - 47: Your job requires someone who is attentive to detail and analysis. It is suited for someone who prefers to clarify the nature of a problem, understand situations, and assess risk before acting.	48 - 63: Your job requires someone who is flexible when responding to changing circumstances. It is best suited for someone who is open to discussing and negotiating new solutions, and promoting change.	64 - 80: Your job requires someone who is confident, willing to take on new challenges and risks. It is suited for someone who likes to experiment, lead change, and encourage others to raise new ideas.
Pillar 3: (min. 16 pts. - max. 80 pts.) (Relationship-Building)	()	16 - 32: Your job is suited for someone who prefers to work alone. It requires someone who tends to make decisions without consulting others - preferring to find solutions by reading.	33 - 47: Your job requires someone who works well with others, or alone, and who is willing to take full responsibility for their actions. It is suited for someone who is tolerant and respectful of others.	48 - 63: Your job is suited for someone who prefers to work with others. It requires someone who recognizes and respects individual differences and perspectives, and makes an effort to build and maintain good working relationships.	64 - 80: Your job requires someone who seeks out and engages others. It is suited for someone who respects other peoples' ideas and insights, shares information, and encourages others to collaborate.
Pillar 4: (min. 19 pts. - max. 95 pts.) (Implementing)	()	19 - 38: Your job requires someone who tends to observe and reflect rather than act. It is suited for someone who likes to gather information and analyze situations.	39 - 56: Your job is suited for someone who tends to focus on procedures and processes. It requires someone who can offer a range of possibilities and solutions for an issue or task.	57 - 75: Your job requires someone who sees things through to completion. It is suited for someone who enjoys working on projects from start to finish, and who is pragmatic and accountable for their actions.	76 - 95: Your job requires someone who is persistent and embraces change. It is suited for someone who supports initiative, and consistently sees new projects through to conclusion.
JOB - ASSESSMENT TOTAL SCORE: (min. 69 pts. - max. 345 pts.)	()	69 - 138: Your job requires someone who prefers to focus their skills and attention on fact gathering and information analysis. It is suited for someone who seeks stability and clarity.	138 - 206: Your job requires someone who is insightful. It is suited for someone who is accountable for their actions, honest and credible, who works well independently, and who is adaptable and flexible.	207 - 275: Your job is suited for someone who tends to seek out the significance and implications of one's actions and the actions of others. It requires someone who can take new ideas and turn them into new solutions.	276 - 345: Your job requires someone who constantly challenges themselves and others. It is suited for someone who seeks resolution and action, and who thinks about future directions and next steps.

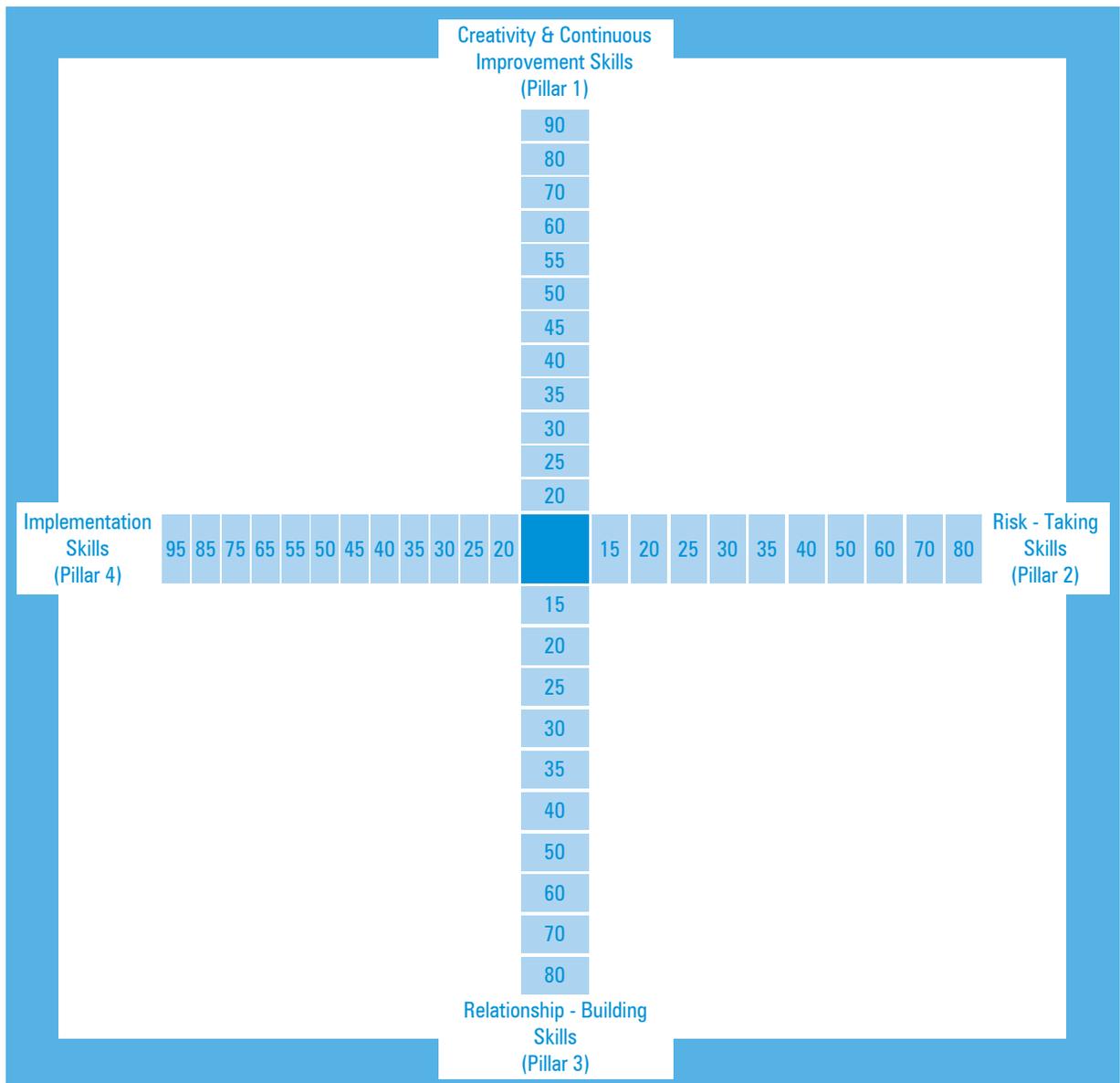
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GENERAL INNOVATION SKILLS APTITUDE TEST 2.0

DIAGRAM B4—MAPPING AND VISUALIZING YOUR INNOVATION SKILLS (JOB) SCORES

Absolute Scores - Job

1. On the diagram below, mark the points on the corresponding lines to indicate your Pillar 1, 2, 3, and 4 absolute job scores (from Chart B3—left-hand column).
2. Connect the dots to form a “kite-shaped” pattern on the chart. You can see by the placement of the dots which of the four innovation skills learning pillars your job requires of you (generating ideas; taking risks; developing relationships; turning ideas into products, processes and services).



GENERAL INNOVATION SKILLS APTITUDE TEST2.0

INNOVATION SKILLS WORKSHEET B5

Looking at sections B1 - B4 what are three challenges that come to your attention (e.g., are there any differences in the “fit” between your skills and your job requirements)?

- _____
- _____
- _____

How might you overcome these challenges? What do you need to do? Picture your challenges as goals (e.g., I will...to overcome...). Write down three goals that will address these challenges:

- _____
- _____
- _____

How will you measure your success? How will you know when you are succeeding in reaching your goals? Write down three ways you will measure your success (e.g., you will take a training course on...team-building and creativity):

- _____
- _____
- _____

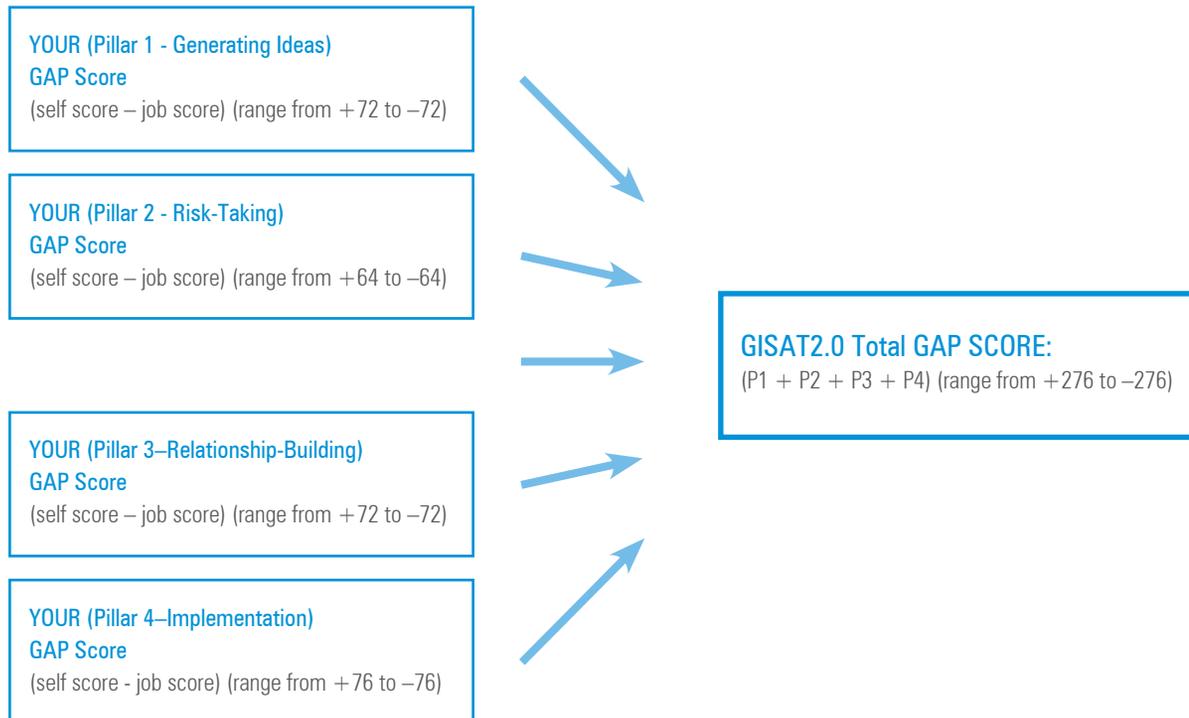
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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

DIAGRAM C1 - GAP ANALYSIS TOTAL SCORES

Your Innovation Skills Gap Scores

(Enter your Gap Scores for each Pillar, below, from Section A (Charts A1–A4). Add all four GAP Scores together to obtain your Total Gap Score. Turn to Chart C2 and Charts C3–C6 for commentary).

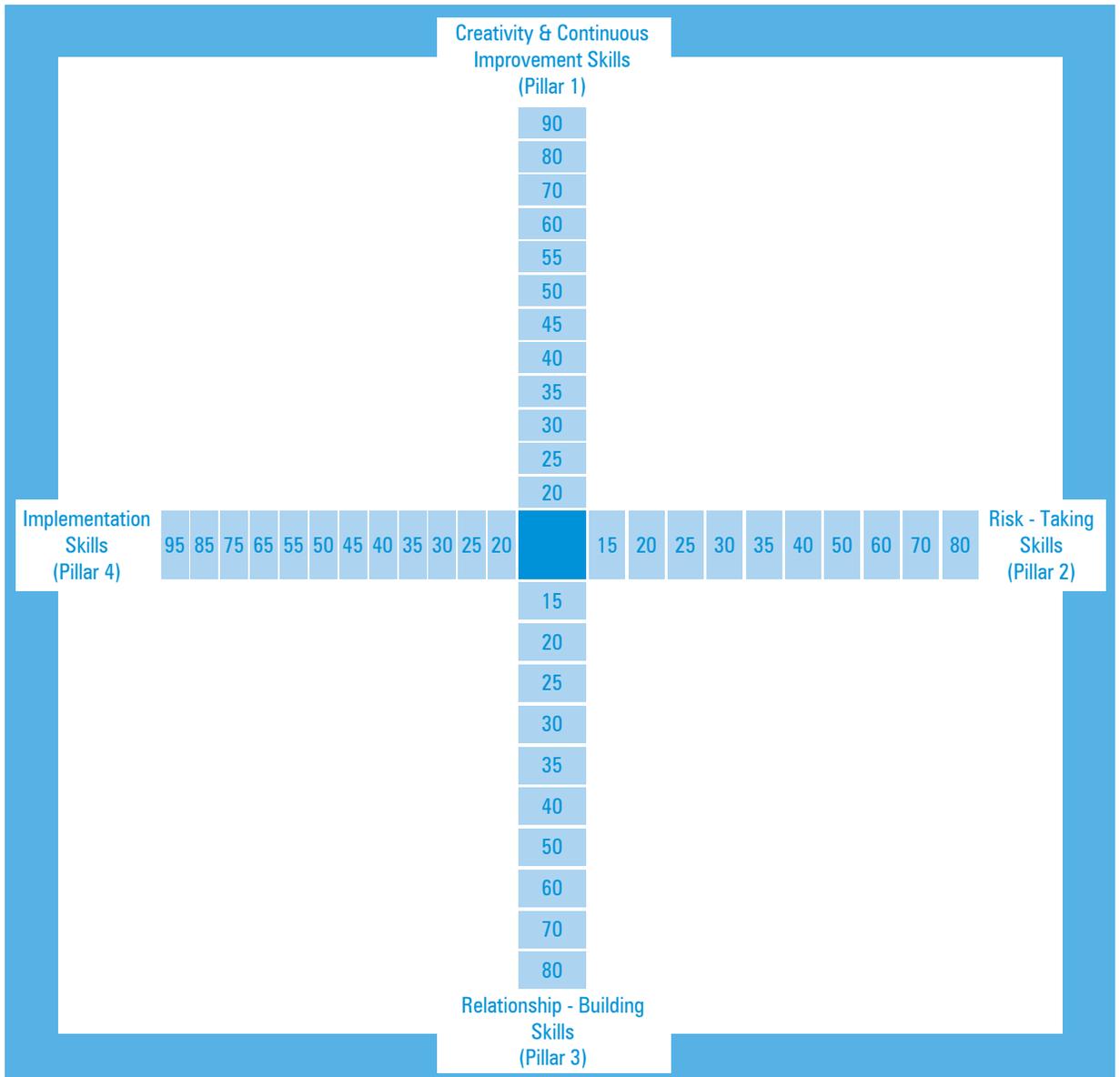


GENERAL INNOVATION SKILLS APTITUDE TEST2.0

DIAGRAM C2—MAPPING AND VISUALIZING YOUR INNOVATION SKILLS GAP SCORES

The Gap Map

1. On the diagram below, mark the points on the corresponding lines to indicate your Pillar 1, 2, 3, and 4 **absolute SELF and JOB scores** (transfer from Diagrams B2 and B4).
2. Connect the dots to form a “kite-shaped” pattern on the chart for your SELF and JOB scores and mark which lines are for SELF and JOB scores.
3. The space between your SELF and JOB scores indicate your **“innovation GAP scores”**. You can visualize—by the placement of the dots—which of your four innovation skills pillars have the largest gaps (generating ideas; taking risks; developing relationships; turning ideas into products, processes and services).



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GENERAL INNOVATION SKILLS APTITUDE TEST 2.0

CHART C3—UNDERSTANDING YOUR IDEA GENERATING SKILLS (PILLAR 1) GAP SCORE

(Pillar 1) Creativity and Continuous Improvement Skills—Generating Ideas

YOUR TOTAL (Pillar 1) GAP SCORE _____

Total Pillar 1 Score: (Pillar 1 self score – Pillar 1 job score)

P1 GAP RANGE (RANGE FROM +72 TO –72)	UNDERSTANDING YOUR CREATIVITY AND CONTINUOUS IMPROVEMENT SKILLS (PILLAR 1) GAP SCORE:
over +28	<p>Extreme Surplus: Overall your creativity and continuous improvement skills exceptionally exceed your current job requirements. You are a prolific idea generator. You should carefully consider your job 'fit' and think about either changing jobs within your workplace-to make better use of your creativity and continuous improvement skills-or to re-position your job (e.g., enhance your job requirements and responsibilities to tap into your creativity and continuous improvement skills). This excessive or extreme surplus is a solid indication of unused creativity and continuous improvement skills-something that your organization might want to tap into.</p>
+17 to +28	<p>Substantial Surplus: Overall your creativity and continuous improvement skills exceptionally exceed your current job requirements. You are a prolific idea generator. You should carefully consider your job 'fit' and think about either changing jobs within your workplace-to make better use of your creativity and continuous improvement skills-or to re-position your job (e.g., enhance your job requirements and responsibilities to tap into your creativity and continuous improvement skills). This excessive or extreme surplus is a solid indication of unused creativity and continuous improvement skills-something that your organization might want to tap into.</p>
+1 to +16	<p>Moderate Surplus: Overall your creativity and continuous improvement skills moderately exceed your current job requirements. You are well suited for your current job. There is a strong 'fit' between your creativity and continuous improvement skills and the innovation skills required for your job. Overtime, you may wish to work with your manager or employer to see how you can fully leverage your underutilized creativity and continuous improvement skills.</p>
EVEN	
–1 to –16	<p>Moderate Deficit: Overall your current job requirements moderately exceed your creativity and continuous improvement skills capacity. This deficit is something that you may wish to discuss with your manager or employer at some time. You may decide to pursue opportunities or experiences (e.g., creativity skills training programs or mentoring) to boost your creativity and continuous improvement skills one notch higher.</p>
–17 to –28	<p>Substantial Deficit: Overall your current job requirements substantially exceed your creativity and continuous improvement skills capacity. You should consider your job 'fit' and look at ways to either: re-position your job requirements (i.e., dropping some of your creativity and continuous improvement responsibilities), get training that focuses on improving your creativity and continuous improvement skills; or consider seeking an alternative position at your workplace that better suits your skills.</p>
under –28	<p>Extreme Deficit: Overall your job requirements exceptionally exceed your creativity and continuous improvement skills capacity. Look closely at those creativity skills that you have your greatest challenges and consider how you can best develop those skills-the sooner the better. If the gap is too great or too difficult to close, in a reasonable amount of time, you may wish to seek alternative responsibilities within your workplace or significantly shift your current job requirements (in consultation with your manager or employer).</p>

GENERAL INNOVATION SKILLS APTITUDE TEST2.0

CHART C3.2—REFLECTING ON YOUR IDEA GENERATING SKILLS (PILLAR 1) GAP SCORES

QUESTIONS TO CONSIDER: WHAT IMPLICATIONS MIGHT YOUR P1 GAP SCORE HAVE ON... (WRITE DOWN ANY THOUGHTS, WORDS, OR IDEAS THAT COME TO MIND)	
Your Self?	
Working Groups, Teams?	
Your Place of Work?	

ADDITIONAL NOTES, COMMENTS, OR THOUGHTS:

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GENERAL INNOVATION SKILLS APTITUDE TEST 2.0

CHART C5—UNDERSTANDING YOUR RELATIONSHIP-BUILDING SKILLS (PILLAR 3) GAP SCORE

(Pillar 3) Relationship-Building and Communication Skills—Developing & Maintaining Interpersonal Relationships

YOUR TOTAL (Pillar 3) GAP SCORE _____

Total Pillar 3 Score: (Pillar 3 self score – Pillar 3 job score)

P3 GAP RANGE (RANGE FROM +64 TO -64)	UNDERSTANDING YOUR RELATIONSHIP-BUILDING SKILLS (PILLAR 3) GAP SCORE:
over +26	<p>Extreme Surplus: Overall your relationship-building skills exceptionally exceed your current job requirements. You are a prolific collaborator and team-builder yet your job does not require, nor demand that you have such strong relationship-building skills. You should carefully consider your job 'fit' and think about either changing jobs within your workplace—to make better use of your relationship-building skills—or see how you might go about re-positioning your job (e.g., enhance your job requirements and responsibilities to tap into your relationship-building skills). This excessive or extreme surplus is a solid indication of unused creativity relationship-building skills capacity—something that your organization might want to tap into in the future.</p>
+18 to +26	<p>Substantial Surplus: Overall your relationship-building skills substantially exceed your current job requirements. You are a strong relationship-builder whose talents of developing and maintaining interpersonal relationships are not being used to their capacity. You may wish to consider your job 'fit' by looking for ways to add to, or re-position your current job requirements. You may also wish to consider taking on new responsibilities or activities within your workplace that require you to tap into your team-building skills.</p>
+1 to +17	<p>Moderate Surplus: Overall your relationship-building skills moderately exceed your current job requirements. You are well suited for your current job. There is a strong 'fit' between your relationship-building skills and the innovation skills required for your job. Overtime, you may wish to work with your manager or employer to see how you can maximize your full relationship-building skills capacity.</p>
EVEN	
-1 to -17	<p>Moderate Deficit: Overall your current job requirements moderately exceed your relationship-building skills capacity. This deficit is something that you may wish to discuss with your manager or employer at some time. You may wish to pursue opportunities or experiences (e.g., team-building and working-with-others training programs or mentoring activities) that will help boost your relationship-building skills to the next level.</p>
-18 to -26	<p>Substantial Deficit: Overall your current job requirements substantially exceed your relationship-building skills capacity. You should consider your job 'fit' and look at ways to either: re-position your job requirements (i.e., dropping some of your relationship-building responsibilities); get training that focuses on improving your abilities to develop and maintain interpersonal relationships; or consider seeking an alternative position at your workplace that better suits your skills.</p>
under -26	<p>Extreme Deficit: Overall your job requirements exceptionally exceed your relationship-building skills capacity. Look closely at those interpersonal skills that give you your greatest challenges and consider how you can best develop them. For your own sake, as well as the sake of others, and your workplace—the sooner the better. If the gap is too great or too difficult to close in a reasonable amount of time, you may wish to seek alternative responsibilities within your workplace—one's that do not call on you to constantly develop and maintain interpersonal relationships. You may also wish to explore (in consultation with your manager or employer) ways to significantly shift or re-position your current job requirements.</p>

GENERAL INNOVATION SKILLS APTITUDE TEST2.0

CHART C5.2—REFLECTING ON YOUR RELATIONSHIP-BUILDING SKILLS (PILLAR 3) GAP SCORES

QUESTIONS TO CONSIDER: WHAT IMPLICATIONS MIGHT YOUR P3 GAP SCORE HAVE ON... (WRITE DOWN ANY THOUGHTS, WORDS, OR IDEAS THAT COME TO MIND)	
Your Self?	
Working Groups, Teams?	
Your Place of Work?	

ADDITIONAL NOTES, COMMENTS, OR THOUGHTS:

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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

CHART C6—UNDERSTANDING YOUR PILLAR 4 GAP SCORE

(Pillar 4) Implementation Skills—Turning Ideas Into Products, Processes, and Services

YOUR TOTAL (Pillar 4) GAP SCORE _____

Total Pillar 4 Score: (Pillar 4 self score – Pillar 4 job score)

P4 GAP RANGE (RANGE FROM +76 TO -76)	UNDERSTANDING YOUR IMPLEMENTATION SKILLS (PILLAR 4) GAP SCORE:
over +30	<p>Extreme Surplus: Overall your implementation skills exceptionally exceed your current job requirements. You are a prolific implementer of ideas yet your job does not require this of you. You should carefully consider your job 'fit' and think about either changing jobs within your workplace-to make better use of your creativity and continuous improvement skills-or to re-position your job (e.g., enhance your job requirements and responsibilities to tap into your creativity and continuous improvement skills). This excessive or extreme surplus is a solid indication of unused creativity and continuous improvement skills-something that your organization might want to tap into.</p>
+18 to +30	<p>Substantial Surplus: Overall your implementation skills substantially exceed your current job requirements. You are a strong implementer of ideas whose talents are not being used to their capacity. You may wish to consider your job 'fit' by looking for ways to add to, or re-position your current job requirements. You may also wish to consider taking on new responsibilities or activities within your workplace that will draw on your implementation skills.</p>
+1 to +17	<p>Moderate Surplus: Overall your implementation skills moderately exceed your current job requirements. You are well suited for your current job. There is a strong 'fit' between your implementation skills and the innovation skills required by your job. Overtime, you may wish to work with your manager or employer to see how you can better utilize your somewhat underutilized implementation skills and turn more ideas into more new and improved products, processes and services.</p>
EVEN	
-1 to -17	<p>Moderate Deficit: Overall your current job requirements moderately exceed your implementation skills capacity. This deficit is something that you may wish to discuss with your manager or employer at some time in the future. You may wish to look at opportunities or experiences (e.g., turning ideas into products training programs or mentoring activities) to boost your implementation skills.</p>
-18 to -30	<p>Substantial Deficit: Overall your current job requirements substantially exceed your implementation skills capacity. You should consider your job 'fit' and look at ways to either: re-position your job requirements (i.e., dropping some of your current responsibilities that require you to turn ideas into new or improved products, processes, and services), get training to improve the implementation skills your job requires of you; or consider seeking an alternative position at your workplace that better suits your current portfolio of skills.</p>
under -30	<p>Extreme Deficit: Overall your job requirements exceptionally exceed your implementation skills capacity. Look closely at those implementation skills that give you your greatest challenges and consider how you can best overcome them-the sooner the better. If the gaps are too great or too difficult to close in a reasonable amount of time, you may wish to seek alternative responsibilities within your workplace or significantly shift your current job requirements (in consultation with your manager or employer).</p>

GENERAL INNOVATION SKILLS APTITUDE TEST2.0	
CHART C6.2—REFLECTING ON YOUR IMPLEMENTATION SKILLS (PILLAR 4) GAP SCORES	
QUESTIONS TO CONSIDER: WHAT IMPLICATIONS MIGHT YOUR P4 GAP SCORE HAVE ON... (WRITE DOWN ANY THOUGHTS, WORDS, OR IDEAS THAT COME TO MIND)	
Your Self?	
Working Groups, Teams?	
Your Place of Work?	

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GENERAL INNOVATION SKILLS APTITUDE TEST2.0

CHART C7—UNDERSTANDING YOUR TOTAL GAP SCORE

RANGE IN GAP SCORE (RANGE FROM +276 TO -276)	UNDERSTANDING YOUR GISAT2.0 TOTAL GAP SCORE:
over +106	<p>Extreme Surplus: Overall your innovation skills exceptionally exceed your current job requirements. You should carefully consider your job 'fit', and think about either changing jobs—to make better use of your skills, or to re-position your job (e.g., enhance your job requirements and responsibilities through discussions with your manager or employer). Having a surplus is not a negative mark; however, it is an indication that there is unused innovation skills capacity within your workplace.</p>
+62 to +106	<p>Substantial Surplus: Overall your innovation skills substantially exceed your current job requirements. You may wish to consider your job 'fit' by looking for ways to add or re-position your job requirements overtime. You may also wish to consider taking on new responsibilities and activities, or changing jobs within your workplace—to a position where your innovation skills will be better utilized.</p>
+4 to +61	<p>Moderate Surplus: Overall your innovation skills moderately exceed your current job requirements. You are well suited for your job. There is a good fit between your innovation skills and the skills required in your job. Overtime, you may wish to discuss with your manager or employer adding additional responsibilities to your current job to make use of your latent innovation skills capacity—which will ultimately enhance the innovation output of your workplace.</p>
EVEN	
-4 to -61	<p>Moderate Deficit: Overall your current job requirements moderately exceed your innovation skills capacity. This moderate deficit is something that you should address with your manager or employer. You may wish to look at opportunities to boost or enhance your innovation skills (e.g., skills training programs or mentoring).</p>
-62 to -106	<p>Substantial Deficit: Overall your current job requirements substantially exceed your innovation skills capacity. You may wish to consider your job 'fit' by looking at ways to re-position your job requirements (i.e., removing some responsibilities or activities). You may also wish to consider seeking additional innovation skills training to boost your innovative capacity. Finally you may wish to consider finding another job within your workplace that better fits your abilities.</p>
under -106	<p>Extreme Deficit: Overall your job requirements exceptionally exceed your innovation skills capacity. You should look at where your greatest challenges are and consider how you can best develop your skills in those areas. If the gap is too great or too difficult to close in a reasonable amount of time, you may wish to consider shifting your job requirements (in discussion with your manager or employer) or seeking an alternative job within your workplace that suits your skills better.</p>

	QUESTIONS TO CONSIDER: WHAT IMPLICATIONS MIGHT YOUR P4 GAP SCORE HAVE ON... (WRITE DOWN ANY THOUGHTS, WORDS, OR IDEAS THAT COME TO MIND)
Your Self?	
Working Groups, Teams?	
Your Place of Work?	

GENERAL INNOVATION SKILLS APTITUDE TEST2.0

INNOVATION SKILLS WORKSHEET C8

Looking at sections C1 – C7 what are three gap challenges that come to your attention (e.g., are there extreme gaps in the 'fit' between your skills and job requirements)?

- _____
- _____
- _____

How might you overcome these gap challenges? What do you need to do? Picture your challenges as goals (e.g., I will...to overcome...). Write down three gap goals that will address these challenges:

- _____
- _____
- _____

How will you measure your success? How will you know when you are succeeding in reaching your gap goals? Write down three ways you will measure your success (e.g., I will take training in...and in 3 months time have HR re-evaluate my skills/job 'fit'):

- _____
- _____
- _____



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