

CIMS Innovation Management Framework:

A model for managers who want to grow their business

I. Executive Summary

Growth is again dominating discussions in boardrooms around the world. When asked, the majority of CEO's cite "growth through new products and services" as their number one strategic objective.¹ The globalization of markets has created a highly competitive arena where survival depends on a continuous stream of successful new products. Barriers to competition have fallen precipitously as regulations ease and markets become more global. After two decades of cost cutting and restructuring in response to a formidable set of Asian competitors, firms are turning their attention to growth. These CEO's realize the winners will be those companies that distinguish their products and services i.e. that create competitive advantage.

According to PDMA (Product Development and Management Association), successful high technology companies have found that more than 50% of their current sales were coming from new products². In the case of the most successful, this figure was over 60%. The next round of competitive positioning will be based on innovation, and a company's innovation capabilities will determine its future growth potential. This is creating a special challenge for senior management. Only innovation increases the size of the pie, which means its mastery is vital to a company's long-term well-being. Unfortunately, many managers may be better at, and even more comfortable with, controlling costs than creating innovative products that fuel top-line growth.

Companies have invested considerable resources and energy in becoming leaner and more nimble. The quest for productivity, quality, and speed has spawned a remarkable number of management tools and techniques: TQM, reengineering, outsourcing, Six Sigma, etc. However, many of these same companies that have applied these techniques are frustrated by their inability to translate gains into sustainable, profitable growth. The products and services of

¹ 2004 Global CEO Survey , IBM Business Consulting Services

² Handbook of New Product Development, Wiley and Sons, NY

these firms are indistinguishable. Bit by bit, these management tools have actually taken them away from viable competitive positions.

Management is waking up to innovation

To get ahead of the pack, managers at leading companies are asking fundamental questions of themselves: How can they move beyond producing only incremental innovations and create more radical innovations? Which emerging technologies have the greatest potential to be disruptive and generate breakthrough results? What adjacent market segments could they enter to leverage existing platforms? What is the resulting risk of these actions? They are also asking which internal capabilities do they need to be successful innovators and which business operations are critical to conceiving of, producing, delivering, and supporting their products and services? Differentiation arises from both the choice of activities and how they are performed.³ The CIMS IM Framework is intended to help manage all activities required to be a successful innovator – not just the R&D function – but all business functions; and at all points along the value chain.

But just “how to” innovate can be a difficult and complex problem. The CIMS Innovation Management (IM) Framework describes a systematic way to think about managing innovation. It “demystifies” innovation management by breaking it down into elements that can be learned, practiced, measured, and ultimately improved -- i.e. managed.

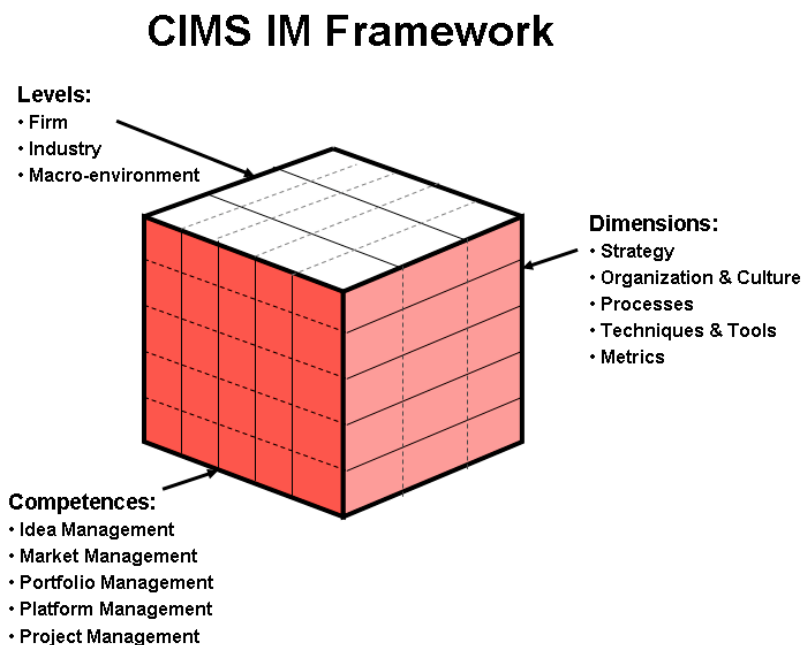


Figure 1

³ Michael E. Porter – “[What is Strategy?](#)” Harvard Business Review, November – December 1996

Competences

The IM Framework identifies five organizational ‘competences’ successful innovation companies possess: Idea Management, Market Management, Portfolio Management, Platform Management, and Project Management. It is CIMS’ point of view that a company must be proficient in all five competences to reliably and repeatedly produce differentiated products and services.

It should be noted that competences are not processes - although there is a logical work flow from breakthrough ideas ultimately evolving into high impact R&D projects. Innovation processes can vary greatly based on the size and maturity of the firm, the industry that firm operates in, etc. IM Competences, on the other hand, are the basic capabilities of innovation. They represent the inclination, aptitude, and practice of the organization in achieving specific IM objectives e.g. managing ideas, markets, portfolios, etc. Proficiency in IM competences is essential to any innovation process (See Section II – The CIMS IM Framework Structure – Competences). Moreover, CIMS believes organizations can learn and master IM Competences; and it is management’s job to ensure they do.

Dimensions

To assist managers in this task, the IM Framework breaks down each competence into five ‘dimensions’: Strategy, Organization & Culture, Processes, Techniques & Tools, and Metrics. From CIMS experience, these “cross-cut” each IM Competence and represent the management activities needed to build strong, durable innovation management capabilities. Taken together, IM Competences and Dimensions provide a complete and integrated system for helping organizations get results (See Section II – The CIMS IM Framework Structure – Dimensions).

Levels

The primary focus of the CIMS IM Framework is to help managers of its sponsoring companies build strong and competitive innovation capabilities in their respective firms. For many of these managers just keeping up with the day-to-day demands of customers, suppliers, channel partners, and creditors can be a full time job. Yet events take place outside the boundaries of the firm that also determine the course of innovation e.g. the acts of standard bodies, policies of governments, or the actions of new industry entrants. Successful innovation organizations look beyond their boundaries and pay attention to their environment. The last part of the IM Framework deals with the unique innovation challenges and activities found at three levels of the environment: Firm, Industry, and Macro-environment (See Section II – The CIMS IM Framework Structure – Levels).

The resulting framework, in fact, turns out to be a cube. And when populated with synopses of CIMS leading academic research, simple assessment tools, and management training courses, it provides managers with a straightforward

means to identify gaps or weaknesses in their organization and to develop roadmaps for improvement.

CIMS is planning a number of interesting uses for the IM Framework. For a complete understanding of these initiatives see Section III – Next Steps and Examples. All of these actions are aimed at one thing and that is to put the control over managing innovation - *and the ability for firms to generate profitable growth* - in the hands of CIMS Sponsors.

II. The CIMS IM Framework Structure

From CIMS' experience in studying how innovation occurs in organizations, we started with the essential competences, or capabilities, leading organizations possess that enable them to recognize new opportunities, select appropriate technologies, design and efficiently develop new and attractive solutions. In CIMS' opinion, the five **IM Competences** represent the inclination, aptitude and practice of organizations to produce truly differentiated and valuable market offerings i.e. to successfully innovate. Mastering these competences is vital to the growth and long term health of the organization.

Competences

A. Idea Management

Idea Management is the ability of a firm to effectively identify, assimilate, and qualify information regarding new technologies, or ideas, that can lead to highly differentiated, breakthrough products and services.

Activities include: *Boundary Spanning, Technology Scanning and Evaluation, Applied Research, Collaboration with Early Adopters/Scientific Centers, etc.*

Idea Management begins to answer the question of competitive advantage by simultaneously examining technology and market factors. Ideas about possible market opportunities made feasible by new technologies is often the point where innovation begins. In an all out race to gain competitive advantage over their competitors, managers of leading companies personally go to great extents to make sure the climate of the organization for "ideation" is optimum. They personally sit on review boards, offer monetary incentives, and free employees from their day-to-day routine – all in the effort to glean ideas that ultimately have commercial value.

To "systematize" Idea Management these firms often divide their R&D portfolio, and management attention, into multiple "horizons" to make sure they have the adequate investments and talents aimed at the early identification and maturation of new, promising technologies.

Much has been written on how to manage innovation through the “fuzzy front end” i.e. when information regarding the market application of new technologies is scant causing forecasting headlights to dim⁴. For some technologies – and budding entrepreneurs - this can be the “valley of death”. NC State’s own Hi TEC (Technology Entrepreneurship Commercialization) Initiative has studied this problem for years and has come up with a novel new “algorithm” for managing nascent technologies through this period.⁵

For example, the race to leverage nanotechnologies will place even more demand on a firm’s Idea Management capabilities. These technologies are barely emerging and are largely the domain of science. In their seminal report, the Chemical Industry Technology Partnership predicted many of these technologies may be 20 years away from broad commercial use⁶. Nevertheless, the allure of what potentially can be created with nanotechnologies is so great companies around the world are going back to school on Idea Management.

B. Market Management

Market Management selects market opportunities and plans offerings in response to them that represent the greatest value to both the organization and to its customers.

Activities include: *Determining Customer Buying Preferences, Market Segmentation, Creating Market Attack Plans, Pricing, Advertising and Promotional Activities, Account Management, etc.*

The long-term competitiveness of any company depends ultimately on the acceptance and attractiveness of its product and service offerings in the marketplace. A differentiated offering is pivotal for profits, improving market position, creating new standards, and creating new niche markets.

Market Management provides a “market-understanding” framework that allows the organization to focus on profitable markets, customers and business opportunities to pursue. It relies on developing insight - through research and fact-based analysis of market data - that identifies and anticipates potential market opportunities related to the organizations’ strategic direction. Market information, however, exists in many forms.

⁴ Koen, P. et al (2001). Providing clarity and a common language to the “fuzzy front end”. Research Technology Management, 44(2):46-55.

⁵ Markham, S.K ; Baumer, D.L; Aiman-Smith; L., Kingon; A.I. & Zapata, M. III. (2000). An Algorithm for High Technology Engineering and Management Education. Journal of Engineering Education, pg. 209-218.

⁶ Chemical Industry Technology Partnership, (2003 December). Chemical Industry R&D Roadmap by Design: From Fundamentals to Function. DOE and NSF proceedings.

A comprehensive Market Management capability defines the types of information, the owners of this information and how this information will be used in defining and analyzing market characteristics. It requires segmenting macro markets in a manner that provides insight into how to define product characteristics or features that promise competitive advantage in existing, or new markets. Lastly, the capability needs to spell out exactly how the attractiveness of potential market segments will be described and prioritized to support investment decisions in these segments.

C. Portfolio Management

Portfolio Management allows a firm to manage a set of investment projects that are aligned with the business strategy, balanced, and generates the greatest economic return.

Activities include: Risk/Reward Assessment, Real Option Analysis, Periodic Portfolio Review, Project Evaluation and Selection, and Pipeline Loading.

Portfolio Management is fundamental to creating true business value. The investment choices made today determine the business value realized in the future. Often a firm's portfolio of projects is crammed with too many "me-too" projects, projects that steal valuable resources and management attention from those few "good" projects that will really differentiate the firm in the marketplace. Having a portfolio of high-value projects that is properly balanced, and is directly tied to the business strategy is essential to optimizing the value realized.

While Project Management is dynamic and milestone driven, Portfolio Management tends to be more stable with much longer, more strategic objectives. It is not however a "static" process. What many firms call Portfolio Management is in fact a misnomer. To these companies Portfolio Management is often relegated to a once-a-year "project prioritization" event usually to feed the annual budgeting cycle.

Leading firms realize that effective portfolio management is much more than this; it is a continuous process of allocating resources to best achieve the firm's business objectives. They constantly strive to balance the portfolio i.e. determining the optimal investment mix between risk and return, maintenance versus growth, and short-term versus long-term gains. Portfolio Management keeps a firm's portfolio fresh and responsive to market and strategy shifts.

D. Platform Management

Platform Management establishes the platform strategy, reference architecture, set of modular subsystems, and development plan for an entire product or service line.

Activities include: *Reference Platforms, Architecture Review Process, Modular Design, Parts/Subsystem Rationalization, Integrated Design/Sourcing Decisions.*

Platform Management is the ability to simultaneously design and plan a line, or family of products, or services, from a set of common building blocks. Single-product development approaches lack efficiency in that they fail to exploit the benefits of commonality among different products and product lines. A platform design approach provides multiple benefits by:

- Lowering “total” costs (i.e. R&D, production, inventory, maintenance, etc.) due to needing fewer part numbers and achieving higher parts reuse.
- Reducing product development risks and expense by using proven building blocks, and
- Increasing market share through reduced cycle times and faster time to market.

Platform Management is inextricably linked to Market Management. It involves understanding the market attractiveness for niche-specific platforms where product differentiation is a key leverage, or horizontal platforms where adjacent market segments could be exploited within the cost/performance tiers or vertical platforms where either higher or lower cost/performance tier products could be leveraged up or down.

E. Project Management

Project Management reliably and predictably guides projects through their phases of development so they deliver the economic and strategic values originally intended for them.

Activities include: *A Structured Project Development Process, Stage-gate Reviews, Fact-based Go/Kill Decisions, Integrated Financial Management, and Lifecycle Planning.*

It is important to do Project Management well; otherwise, the flow of development projects to their successful completion, launch, and realization of objectives may be impeded. Thus, a chief concern of senior management is to make sure that nothing constricts “the flow” of the project pipeline. Having too many projects imposes high demands on critical resources, which extends lead times, and requires frequent and unscheduled management interventions.

It is important managers not “meddle” with projects but limit their intervention to well defined checkpoints. Their focus should be on provisioning projects with adequate resources - both human and capital. They should empower project teams to “run their project like a business”. Managers should make decisions only on facts and “kill” marginal projects as early as possible to keep the number of remaining projects matched to the development capacity. Clearly effective Portfolio Management is necessary to drive effective Project Management.

Finally, the product evolves as it progresses through its lifecycle and eventually is replaced by a newer product – this must also figure into the planning because it requires resources and careful decision making to determine when the product should be retired and/or replaced, and how. Lifecycle decisions are much more than the “last phase” of development -- or the problems and tasks an organization encounters “in the field”. Leading companies plan for the full lifecycle of a product from its conception to when it’s withdrawn from service. They also consider not only the financial impact of this program but also how it impacts the firm’s promise of brand value and ultimately its profitability.

Dimensions

Given CIMS mission - to help industrial sponsors better manage innovation - it is insufficient to conclude the IM Framework with simply a description of the essential competencies. The framework calls out the specific actions managers take to build strong and durable IM competences. From CIMS’ experience in managing innovation, five **IM Dimensions** were identified (See Figure 1 – CIMS IM Framework). Taken together these dimensions provide managers with a prescription for improving their organization’s IM proficiency.

A. Strategy

Strategy defines the specific goals of the organization and exactly how the organization will achieve them. Strategy is only valuable when it creates change in the marketplace.

Activities Include: Targeted Business Arenas/Markets, Barriers to Entry, Value Proposition, Strategic Control Points, S.W.O.T Analyses, Benchmarking and Competitive Evaluation, etc.

The core of any business strategy - connecting a company’s internal process to improved outcomes with customers - is the value proposition delivered to the customer⁷. The value proposition describes the unique mix of product, price, service, relationship and image that the provider offers its customers. A clearly

⁷ Robert S. Kaplan and David P. Norton – “The Strategy Focused Organization”, Harvard Business Press, 2001

stated value proposition provides the ultimate target for focusing a business' strategy.

Business strategies "tell the story" of the organization by answering the following questions:

- What is our market position?
- How will we sustain / grow this position?
- What makes our products and services different from competition?
- How do we measure success?
- What organizational capabilities do we need to acquire/develop to be successful?

It must also lay out the innovation strategy in support of the business strategy for indeed the two are intertwined. For example:

- What percent of revenue is to come from new products and services?
- Are we to be first to market -- or a fast follower?
- Will we even do R&D internally or will we form alliances?

Good strategies are long on detail and short on vision. Good strategies start with massive amounts of quantitative analysis: hard difficult analysis that is blended with wisdom, insight and risk-taking⁸.

B. Organization & Culture

Culture is the common language and background of how things get done. It is developed over time as people in the organization learn to deal with problems of adaptation and integration. Organization, on the other hand, is the formal alignment and direction of a firm's resources and skills towards achieving common goals.

Activities include: Authority Relationships, Human Resources, Skills Acquisition and Development, (Organization); Organization's Basic Beliefs, Values, and Behaviors; Leadership, Motivation, and Rewards (Culture).

Culture isn't one aspect of the game; it is the game. In the end, an organization is nothing more than the collective capability of its people to create value⁹.

Organizations must organize for and promote a culture of innovation to survive. The two are interdependent and managers must take each into consideration when attempting to create an environment that fosters innovation. A company's orientation, business focus, type of people, and core competences can influence the way innovation is embraced and the degree that it is leveraged.

⁸ Bruce Harreld, Chief Strategy Officer, IBM Corporation

⁹ Lou V. Gerstner, [Making an Elephant Dance](#)

Most companies recognize the need for innovation in order to be successful in their respective markets. However few companies make this recognition central to their corporate culture. And the fact that the organization's culture, i.e. its very capacity to innovate, can be measured and managed is completely lost on these companies.

Management's job is to create a culture that supports risk taking and invokes a common sense of urgency. They must ensure all employees have meaningful work and establish a climate where employees speak out and are empowered to make decisions. Most of all managers must realize that all employees can innovate and create value¹⁰.

C. Processes

Processes define the patterns and actions of interaction, coordination, communication, and decision making that people use to get work done.

Activities include: *Workflow Optimization, Time-blocking Activities, Task Definition, and Roles and Decision Delineation.*

Process assets enable consistent performance across the organization and provide a basis for cumulative, long-term benefits to the organization. The organization's process asset library supports organizational learning and process improvement by allowing the sharing of best practices and lessons learned across the organization. It contains descriptions of processes and process elements, descriptions of life-cycle models, process tailoring guidelines, process-related documentation, and data. In a very real sense it is a blueprint of the business.

Companies that lack a process discipline are like ships without rudders and any competitive advantage they may achieve will be fleeting and not sustainable. Managers must continuously focus on their core business process, making sure they are stream-lined, documented and followed. And, no process is "more core" to a firm than its innovation process.

¹⁰ Goodrich, Nina; Aiman-Smith, Lynda (2005, March). Assessing your Organization's Potential for Value Innovation. Research-Technology Management Journal, pgs 37 – 42.

D. Tools and Techniques

Tools and Techniques provide a mechanical or mental advantage in accomplishing a task. They facilitate communications and help process, analyze, and present data to aid management in decision making.

Activities Include: *Virtual Workspaces, Team Rooms that facilitate Collaboration as well as Forecasting Models, Project Scoring Hierarchies, Competitive Evaluation Templates, etc.*

A vast array and range of tools are available to managers to more effectively and efficiently manage innovation. Sophisticated IT-based collaboration tools can synchronize communications across a firm's extended enterprise -- literally 24 X 7. For example, international members of a Product Development Team can simultaneously evaluate the design of a product or service from their respective regional points of view. As a consequence, the resulting offering is stronger, costs less, and is easier and faster to produce.

Similarly, a host of decision support tools is available to the same Product Development Team to determine the products sourcing, order demand, lifecycle costs, and overall competitiveness. The chief challenge for management is to select the minimum set of tools that provides the organization with the information it needs in a timely manner -- and then relentlessly institutionalize them. Employees need access to the tools and must understand when and how to use them. Only after a tool set has been integrated with the firm's innovation process and proven useful to decision making should management attempt to automate them. In their haste to find the "silver bullet", companies often waste precious resources and time trying to "digitize" tools before they are properly understood and tested.

E. Metrics

Metrics are a powerful management tool and are used to both motivate as well as measure the organization's IM proficiency.

Activities Include: *Key Performance Indicators, Balanced Scorecards, Compensation Plans, etc.*

Firms use a variety of metric types to gauge their proficiency as innovators. They use traditional customer outcomes (e.g. Market Share Growth, Customer Loyalty) and augment these with in-line operational metrics (e.g. Time to Profit and Percent of Preferred/Common Parts. Other firms add indicators of Knowledge or Learning (e.g. Number of Patents, etc.)

No matter what the scorecard of metrics selected it is important that:

- **The set of metrics chosen articulate the firm's innovation strategy.** For example if a company's strategic intent is to be first to market it does little good to measure traditional cycle times. What counts is the number of times the company is first. If a company wants to be the low cost producer than perhaps measuring the Percent of Preferred/Common Parts used across its platform is a better gauge of success.
- **Employee compensation is tied to their results.** Many firms spend considerable resources benchmarking best practices, designing and documenting a new innovation process, then leave reward systems unconnected to the innovation process. It's no wonder why business performance doesn't improve - employees know innovation really isn't the priority.

Properly used, metrics can propel the organization towards improving their IM proficiency and ultimately winning in the market.

Levels

A central problem of management is orchestrating organizational activities to meet the challenge of the environment¹¹. Organizations can be viewed as systems that are intricately linked and in constant interaction with their environment. Depending on how "attuned" the organization is to the environment can greatly alter their economic performance. The last part of the IM Framework deals with the unique innovation challenge and activities caused at three **Levels** of the environment: Firm, Industry, and Macro-environment.

A. Firm

The Firm Level captures the set of innovation management activities stemming from customers, suppliers, partners, and competitors directly related to the firm.

These activities represent the major stages in the problem solving process firms undergo to manage innovation¹². Hopefully, at this point, the role and importance that IM Competences play in this process is clear. Opportunity Recognition depends on being proficient in Idea Management; Technology/Market evaluation depends on Idea Management as well as possessing effective Market Management capabilities; they both depend on rigorous Portfolio Management, and so forth.

¹¹ Narayanan, V.K. (2001), Managing Technology and Innovation for Competitive Advantage, Prentis Hall

¹² A simplified version of the model developed by Marquis, Donald G (1969), The Anatomy of successful Innovations, Innovation

Management can have a great effect on innovation at this level. By the organization structures they put in place, managers can include employees in decision making and gain more proprietary ownership for results. Organizational learning is a major factor of successful innovation. How “open” the organization is to external information can have a significant impact. The higher the level of communication is with customers and outside technical experts, the higher the probability for innovation. Managers should also encourage and support the informal flow of communications across the firm. This will result in a freer flow of information and exchange of ideas, thus helping the process of innovation.

Again, at this point, the role IM Dimensions play in establishing the firm’s environment should be evident. IM Dimensions represent the necessary management activities needed to motivate, build, and improve innovation throughout the firm.

B. Industry

The Industry Level captures the innovation management activities caused by a firm and its competitors functioning in the same industry.

Activities include: *Competitive Analysis, Participation in Industry Organizations e.g. Trade Associations, and Spatial Clustering.*

Beyond the firm is the environment of new entrants and incumbent competitors functioning in the same industry. At this level environmental factors directly impact all competitors in the industry. Consequently, any “patterns” that emerge, i.e. common problems with common solutions, may be useful to companies operating in that industry. For example, knowing who and what represents “best practice” in a particular IM Competence would be valuable to the competitors of that company. For this reason company’s innovation models are often classified “for internal use only”.

Due to a number of factors, including the difficulty and costs associated with knowledge transfer just the opposite effect can be observed at the Industry Level. In Spatial clusters, like the Research Triangle Park of North Carolina, firms in the Biotech and Pharmaceutical industries have located operations in this area to draw on an “information infrastructure” of world-class universities, entrepreneurs, and venture capitalists. The value of knowledge is so great to these firms that it forces even the most ardent competitors to come together.

Successful Innovation firms need to sort out their industry competitors, partners, suppliers, and customers. Ironically, in an economy where no one company can possibly do it all, they may be the same.

C. Macro-environment

The Macro-environment Level or macro environment captures social, political, economic, and technological innovation management affecting all industries.

Activities include: *Understanding Demographics and Lifestyle Trends, Responding to Policy Decisions, Laws, and Regulations, Scientific Discovery Surveillance*

Successful innovation organizations continuously monitor the social, political, economic, and technological environment for issues impacting their firms. For example, innovative firms in the consumer product industry are keenly aware of ethnic mix, education levels, household formation, consumption patterns, and social habits. Successful innovation firms are also cognizant of the social acceptance of new technologies, like “green” technologies or genetically altered grains and vegetables. In the United States, they need to stay active in the national technological environment and watch discoveries coming out of the many national Scientific Centers.

This can represent a time consuming and expensive proposition for companies. And with the increasing economic interdependence of nations, the economic environment, and as a result the technological environment, is becoming more global. Nevertheless, it is well established that technological innovations can be traced to scientific research and the interplay with leading industry practitioners.

III. Next Steps and Examples

Beyond a structured way of thinking about managing innovation, the framework doesn't come alive until it is populated. CIMS plans to “fill in” the cube with case studies, simple assessment tools, and short training courses based on the discoveries of our researchers -- and the best practice of our sponsors in putting these findings to work in their operations. At that point, the IM Framework becomes a useful repository for managers charged with improving their own organization's IM capabilities.

Improved Search

The CIMS library is literally teeming with research on every facet of innovation. The challenge is what exactly have we learned that will help CIMS sponsors excel in the global, and fiercely competitive, markets of the next century? With the help of graduate assistants from North Carolina State University's College of Management, some 500 work products - created by CIMS researchers over the last 20 years – were categorized using the IM Framework.

To facilitate access to this information they created the CIMS Research Studies database along with a new search capability. Users will be able to use simple search arguments (e.g. “competence, dimension, and level”) to locate the work of prominent CIMS thought leaders. Managers can use this knowledge to inform their own company’s thinking, and strategies, to increase innovation.

Value Innovation Quotient Assessments

Over the past 3 years, CIMS Research Associate, Dr. Lynda Aiman-Smith, working in collaboration with the Industrial Research Institute (IRI), has developed a robust Value Innovation Quotient assessment tool that assesses a firm’s potential to generate “value” innovations. Organizations must innovate all across the value chain, not just in R&D, in order to succeed in today’s rapidly changing environment. Value Innovation occurs when members of the organization work on better ways to serve current customers as well as identify new customers and markets for growth.

The Value Innovation Quotient assessment tool looks across the Organization and Culture dimension of the IM Framework at factors known to relate to innovation (See Dimension > Organization & Culture). Using the results of the assessment, CIMS subject matter experts can facilitate a workshop for the senior management team - the main purpose of which is to open a dialog on the organizational systems and cultural norms that commonly promote, or stymie, innovation.

Breakthrough Innovation Workshops

CIMS offers workshops in other areas of the IM Framework. The CIMS Breakthrough Innovation Workshop is aimed at management teams interested in developing breakthrough products using “upstream” technologies i.e. technologies that are still largely the domain of science. The workshop is part of a 3 year grant from the NSF to CIMS to develop new methods for managing the potentially lucrative upstream science of nanotechnology – as it unfolds around us. The workshop explains what CIMS believes is a leading practice in Idea Management - NC State University’s Hi TEC Algorithm (See Competence > Idea Management). It allows participants to experience some of the tools used to discern the value in upstream science and to make cogent business decisions. It then explores how to implement the new method by defining the dimensions of Strategy, Organization & Culture, etc. needed at the very front end of organizations’ IM models.

Innovation Management College

In partnership with North Carolina State University’s College of Management Executive Education Program and the Industrial Research Institute, the Innovation Management College will offer custom training to companies desiring to create exciting new, breakthrough products and services. Working from the premise that innovation is a multidisciplinary process and no longer the province of R&D, the curriculum targets cross-functional "SBU teams" (up to 20

participants) of participating companies. While other universities may offer "developmental" programs aimed at managers of technology, the college's instruction, and team exercises, are geared to representatives from all business functions (Sales, Operations, Finance, Human Resources, Field Service, etc.) in a workshop format that allows participants to experience the diversity of viewpoints so critical to innovation.

The IM Framework serves as the reference platform for education offering development. Multi-level education "tracks" are developed around each essential IM competence (e.g. Idea Management). Each track offers "Basic, Experienced, and Advanced" instruction through 2.5 day education "modules" with time in between levels for participants to apply their knowledge to SBU operations. Education modules contain 80% standard content with 20% of the module customized according to the SBU's industry and particular innovation type (product, process, or service). This progressive and modular design provides companies with a number of entry points into the college based on its business strategy and current IM proficiency.

All of these actions are aimed at one thing and that is to put innovation -- and the ability for their firms to generate profitable growth – back in the hands of management.