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From Vision to Action:

Igniting the Passion and Imagination of an Organization to Introduce Positive Change

IS 31-1

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From Vision to Action:

Igniting the Passion and Imagination of an Organization to Introduce Positive Change

Prepared by
Construction Industry Institute
Implementation Research Team IS 31, Vision to Action

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Contents

Chapter		*Page*
	Executive Summary	v
1.	Introduction	1
2.	Literature Review	5
3.	Methodology	9
4.	Data Analysis	13
5.	The “Hot List” for Innovation Champions	25
6.	Impact Assessment Tool	27
7.	Conclusions and Recommendations	29
	References	33

Executive Summary

Continuous improvement is the essential component of long-term success. Whether viewed as promoting innovation, progress, or a competitive edge, the introduction of new ideas creates a sustainable advantage for engineering, procurement, and construction (EPC) organizations. However, to achieve success, organizations must recognize that introducing new ideas requires the stimulation of interest and curiosity within the organization. Maintaining this motivation throughout the process of implementing such innovations is critical to continuous improvement. The continuing challenge for organizations is to inspire, foster, and expand the passion for innovation and new practices throughout this process.

Having conducted a literature search, a survey, structured interviews, and a series of case studies, CII IS 31, Vision to Action Implementation Research Team found empirical evidence of a gap between the initial step of establishing a vision for new practices and the overall implementation process. These findings prompted the development of two implementation resources: 1) Implementation Strategy (IS) 31-2, *The Implementation Process Action Tool: Igniting the Passion and Imagination of an Organization to Introduce Positive Change*, a guide that provides a qualitative and a quantitative foundation for moving from vision to action; and 2) IS 31-3, *The Vision to Action Hot List*, a laminated reference for motivating executive management to consider new ideas and then act on them.

The journey across the vision to action gap requires organizations to take the following seven steps:

1. **Preparing to Cross** – Focus on management buy-in and the development of the appropriate vision for implementation.
2. **Getting on the Bridge** – Establish metrics and statements of necessity to ensure the organization's understanding of why the implementation is needed and how it will be evaluated.

3. **Starting the Journey** – Ensure that a team is in place to guide the implementation and to gather resources to support the implementation.
4. **Checking the Supports** – Determine whether the appropriate cultural, managerial, and technical support is in place for a successful implementation.
5. **The Main Crossing** – Ensure that the organization has a defined plan and roadmap for completing the implementation effort.
6. **Addressing the Barriers** – Determine whether the implementation will encounter common barriers and if the team is prepared to address these barriers.
7. **Exiting to Action** – Ensure that the organization can communicate what it has done, how it will build on this action, and why the new practice is important to the organization.

The first challenge for anyone seeking to improve existing paradigms within EPC organizations is to capture the imagination of executives, and the IS 31 team developed the short-form "Hot List" resource for this purpose. Once upper-level management has committed to the new practice or innovation, the champion should then use the IMPACT tool to assess commitment to implementation and continuous improvement. Ultimately, organizations must determine whether they are willing to put the resources and management support behind the continuous improvement opportunities presented by innovative ideas.

1

Introduction

This research addresses the essential question of how to ignite the passion and imagination of an organization to introduce positive change. The introduction of research into an organization unfolds in three stages: 1) vision, 2) evaluation, and 3) action. The CII knowledge base addresses the importance and the challenges of both the vision phase and the actual implementation of a new practice. Similarly, in its other implementation guidance documents, the Implementation Strategy Committee addresses the development of implementation plans that incorporate evaluation and action protocols. However, the implementation process cannot be undertaken without a commitment to taking new ideas from vision statement to actionable goal. Successfully navigating this transition continues to be a challenge for many organizations, since the initial passion for innovation and new practices often fades with the emergence of barriers and project realities.

The ISC team undertook the Vision to Action research effort in response to the need for guidance on how to generate and foster the passion and imagination needed to bridge the gap between setting a vision for implementation and achieving implementation success. The goal of this effort is to give CII members a method not only to inspire their organizations, but also to help them retain the motivation to bridge that gap. Having such a formal process provides the following benefits:

- Organizations can determine whether they are prepared to foster motivation throughout a new practice implementation.
- Organizations can better prepare to implement essential innovations and advances.
- Organizations can understand the key factors that drive successful implementations.

The main challenge to the vision to action process is that organizations are not monolithic entities, but rather groups of individual "colonies" that collaborate to achieve common goals. This practical understanding of their structure challenges the classic CII model of implementation, which designates a single individual—the Implementation Champion (IC)—as the transfer point in the implementation process. Indeed, it is becoming increasingly evident that this perspective no longer uniformly reflects how innovation and new practices actually enter EPC organizations. Rather, the vision to action process is heavily influenced by organizational norms, the level of autonomy that project managers have in an organization, and the geographic scope of the organization. This variability and the need to adapt vision to action processes to individual needs motivated the current research effort.

The findings of the CII Vision to Action research effort, the IMPACT tool, and the Vision to Action Hot List give organizations a step-by-step approach to encouraging greater efforts at moving from vision to implementation. However, these research products are only a piece of the overall implementation assistance that CII provides. They are designed to help individuals inspire their organizations to embrace CII practices before initiating the full implementation process. (See Figure 1.) The IS 31 materials provide the knowledge required to bridge the gap between the initial recognition of and excitement about the continuous improvement opportunities and the structured effort required for implementation success.

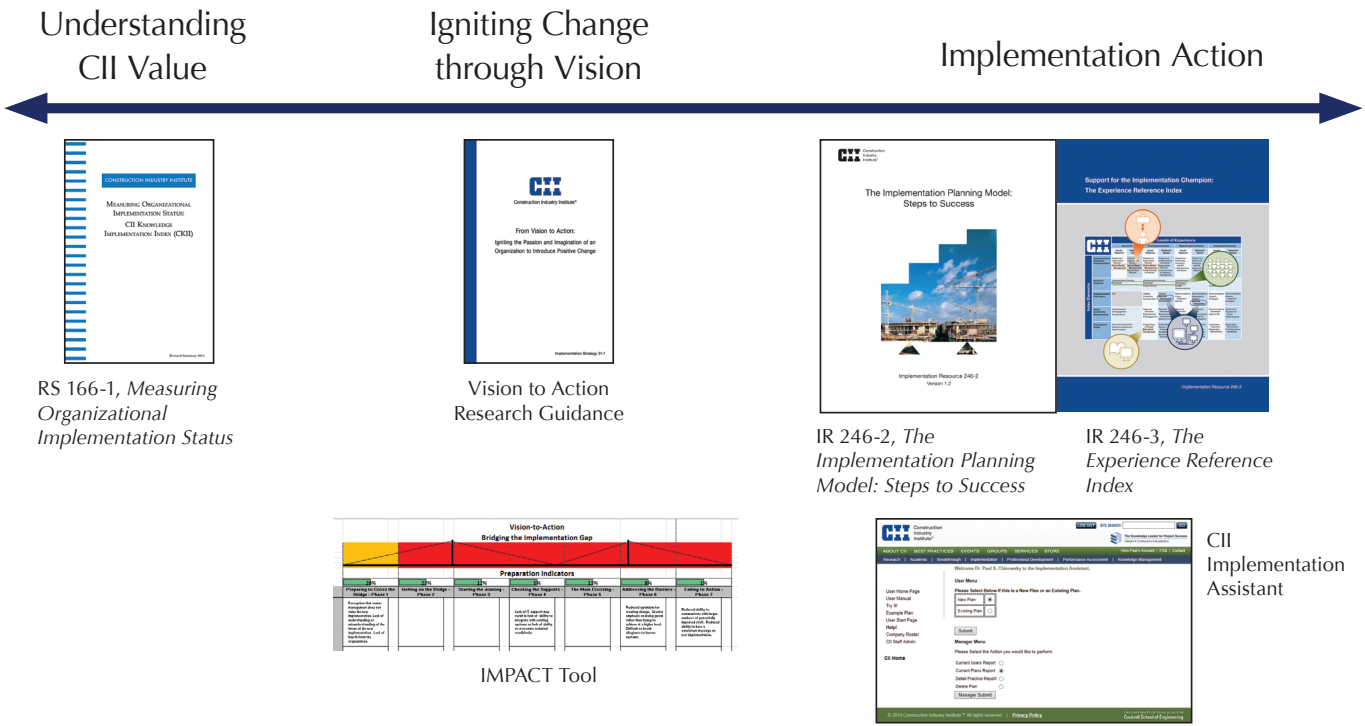

Figure 1. The Vision to Action research bridges the knowledge gap between establishing a vision of a new practice to actively implementing it.

2

Literature Review

In contrast to the manufacturing industries that fabricate a large number of units (e.g., automobiles or personal computers), the engineering-construction industry is generally focused on the production of a single and unique end product. Completion of these unique projects is achieved through what is termed the "project format" (Halpin and Woodhead 1998). In this format, management focuses on the planning and control of resources within the framework of the project. While construction professionals give significant consideration to project management topics, they pay less attention to strategic management. (Strategic management addresses the challenges of operating an entire organization, as opposed to individual projects.) Because they often place more emphasis on project-based or short-term objectives than on long-term or strategic goals, this general lack of strategic management directly affects the successful implementation of new initiatives.

Just as strategic concepts do not usually develop spontaneously, the existence of a strategic management environment does not guarantee that organization members will focus on developing strategic concepts. To encourage this focus, numerous academic and business writers have proposed various strategic planning models (Thompson and Brooks 1997; Lemmon and Early 1996; Davis 1987; Mintzberg 1994; McCabe and Narayanan 1991). These strategic planning models provide instructions for approaching, executing, and evaluating the development of strategic concepts. Yet as with any topic that focuses on procedural processes, the number of strategic planning methods is increasing at a seemingly exponential rate. Research in this area can be divided along three lines: 1) implementation frameworks, 2) implementation guidance, and 3) metric development.

Implementation Frameworks

Arguably, the most prolific area of research and consulting guidance in the vision to action area is in the development of strategic or implementation frameworks. In both research and consulting efforts, the development of general, widely applicable models is a common goal. Creating frameworks that are both generic enough for any organization to adopt, yet specific enough to convey a focused message, is the central challenge of this work. To this end, researchers prefer to develop a graphical representation of the frameworks they propose. For example, Dwyer's Ease of Doing/Impact on Goal matrix provides four quadrants in which to group proposed efforts according to the difficulty of their implementation and their impact on long-term goals (Dwyer 2012). Gratton takes a similar approach in proposing a risk-based matrix to define strategic impact and alignment (Gratton 1996). Additional examples include the following: Whitlock's Strategic Structure Tree, which provides a hierarchical perspective on setting goals that are achievable through specific actions; and the Strategic Intent approach developed by Mezger and Violani, which focuses on putting practical meaning to a vision (Whitlock 2003; Mezger and Violani 2010).

Another example in this area, the Logical Framework Matrix by Schmidt, brings a set of structured queries on organizational assumptions into a graphical framework perspective (Schmidt 2008). This consulting-based approach is an extension of the original research introduced by Kaplan and Norton on the Balanced Scorecard (BSC), which developed a set of structured responses to the four areas of finance, customers, learning, and internal processes (Kaplan and Norton 1996). Although subsequent research investigated how the BSC can be used to focus strategic actions, extending this approach to simplified matrices can bring strategic focus to members of the broader business community.

Implementation Guidance

The area of implementation research that emphasizes implementation guidance focuses less on developing overall frameworks than on providing sets of questions that can be used to guide implementation

efforts. This work is also characterized by efforts in both the consulting and academic domains. An example of it in the academic domain is the Meaning-Making approach, which combines social psychology research with strategic management research, to develop relationships between objectives and actions in groups of employees (Sonenshein and Dholakia 2012). Management can rely on this approach since the underlying studies have demonstrated its effectiveness for strategic implementation.

As with the strategic frameworks, implementation guidance gains widespread acceptance when it moves from the purely academic domain to the implementation-focused domain of consulting. Numerous efforts have taken this perspective to give organizations general guidance on achieving strategic implementations. Examples of this work include studies by the Boston Consulting Group and Bain and Company (Plascke et al. 2011; Allen et al. 2013). Of note in this area is the significant body of work on Six Sigma approaches to process implementation and strategy. Since many manufacturing and engineering firms base their operations on quantitative and statistical methods, they value the quantitative rigor of the Six Sigma system. The underlying theme of these efforts is the need for organizations to balance objectively the difficulty of achieving strategic objectives against the impact of achieving implementation goals.

Metric Development

The third primary area of relevance for the current study is metric development. Research in this area focuses on the development of metrics to evaluate the implementation of strategic objectives. Researchers including Eccles, Barskey and Bremser, Kerzner, and Porter emphasize both the necessity and difficulty of developing metrics to create strategic initiatives for long-term competitive advantages (Eccles 1991; Barskey and Bremser 1999; Kerzner 2011; and Porter 2008). The researchers often describe this difficulty in terms of strategic versus transactional objectives and costs, arguing that the development of metrics for strategic objectives lacks the advantage of attributable rents or fees (Liebeskind 1996). Specifically, without the attributable fees associated

with a specific strategic objective, it is difficult to determine the success of implementation. Moreover, transaction costs do not adequately cover the breadth of strategic initiatives. Thus, an organization is left with the dilemma of attempting to elevate traditional transaction metrics to the level of strategic metrics, without the benefit of comparable foundations in transaction-based tasks.

Therefore, the question is how to move an organization toward strategic measurement and away from a transactional perspective when the issue is strategic implementation. The answer in part may be the concept of "whole goals," which challenges organizations to focus on a single goal that encompasses the actual objective they are trying to achieve (Casey et al 2008). Rather than multiple metrics that may obscure the objective, a single goal should be designed to keep an organization on track toward a single objective. Similar concepts are Big Hairy Audacious Goals (BHAGs) and the BSC discussed above (Collins and Porras 1996). Such examples suggest that organizations should focus on broader metrics that reflect individual pursuits.

Point of Departure

The existing studies in the management literature, as briefly addressed here, spotlight the broad range of topics within strategy and implementation research. However, when the focus turns to moving from strategic vision to implementation focus, the number of efforts becomes significantly smaller. There are no studies investigating a broad set of EPC organizations. The CII Vision to Action team addresses this research gap, to provide EPC organizations with a set of guidelines for moving from vision to action and stimulating the innovation process within an organization.

3

Methodology

The research team used a mixed-method, pyramid approach, with the following phases:

1. **Literature Review**: The research team examined the latest published research on how organizations develop implementation paths and put new practices into action.
2. **CII Membership Survey**: A survey of the 130 CII members on methods currently used for implementation. Of the 130 members surveyed, a total of 86 responses were received from 67 different organizations, representing a 52-percent response rate.
3. **Member Interviews**: Based on the survey results, the research team developed an interview protocol, which they used in 16 interviews with CII member organizations to obtain greater detail on implementation processes and approaches.
4. **Case Studies**: In parallel with the interviews, the team undertook a series of three case studies to analyze and understand the implementation processes and networks employed by CII member organizations. The analysis included both interview and Social Network Analysis (SNA) approaches to gain both quantitative and qualitative measurements of the individual organizations.
5. **"Hot List" Short-form Resource**: Building momentum for implementation success and organizational transformation requires individuals to provide clear guidance to the organization's personnel. To support this process, the team developed the Vision to Action Hot List, which list key steps for leaders to execute in the vision to action process.

6. **IMPACT Model Development**: The information from the surveys, interviews, and case studies provided the basis for an implementation action development model. This model provides a quantitative analysis of current preparedness for implementation, a qualitative analysis of potential weaknesses in the current action plan, and recommendations for the further steps in the implementation effort. The model is detailed in IS 31-2, *The Implementation Process Action Tool: Igniting the Passion and Imagination of an Organization to Introduce Positive Change*, and IS 31-3, *The Vision to Action Hot List*.
7. **Model Testing and Validation**: The final step in the methodology was to test the IMPACT model. Team members tested the tool within their respective organizations to validate the model results.

Table 1 lists the characteristics of the owner and contractor respondents for each research phase. As shown, owner organizations slightly outnumbered contractor organizations in the membership survey, but this discrepancy was reversed in the later phases. Overall, the two populations—while not randomly sampled—were representative of the CII membership, and were considered sufficiently representative for the team's research purposes. The fact that the results of this study are based on this convenience sample means that they cannot attain statistical significance that is generalizable across all groups. However, the results are indicative and reflective of CII members at the time the study was completed.

Table 1. Overall characteristics of the survey samples.

Research Phase	Owner Respondents	Contractor Respondents
Membership Survey	35	32
Membership Interviews	6	10
Case Studies	1	2
IMPACT Validation	4	6

The section below on the data analysis discusses the findings. At the conclusion of the research process, the research team used the following questions as guides to developing the model:

- What are the existing vision to action models in the EPC industry?
  - EPC organizations adopt a wide range of implementation models, ranging from advanced types that incorporate quantitative implementation models run by central groups to simpler project-based models dominated by traditional concepts of cost-benefit analysis.
- How do CII organizations evaluate research?
  - The evaluation of research by member organizations takes one of two approaches: 1) a project-based approach emphasizing cost-benefit analysis; or 2) a strategic approach emphasizing the work of centralized groups to determine how research might fit into overall strategic or long-term goals.
- What are the communication and dissemination patterns in these models for implementing specified visions?
  - Organizations predominantly use traditional communication mechanisms such as meetings supported by e-mail.
- What are the primary variables that affect the differences in these models?
  - The primary variable affecting implementation is the approach taken by senior management. When implementation is a strategic priority, organizations have a tendency to use broad evaluation criteria, as well as mandates to compel resources for implementation. In cases in which implementation is a project-based or discipline-based objective, cost-benefit is a greater priority.

- Do factors such as geographic context, project manager autonomy (PM), or average employee profile affect these dissemination patterns?
  - Dissemination patterns are affected by the manner in which organizational colonies are organized. In cases in which the colonies operate independently, geographic distance and PM autonomy play a significant role. However, if the colonies work in a collaborative manner, these physical and organizational differences are diminished.
- What can be learned from existing change management efforts and the implementation studies of other organizations?
  - The key learning from this field of study is that a coordinated plan is essential to undertaking any change effort. Specific models vary, but the underlying message remains constant: have a plan and a realistic timeline with dedicated resources.

4

Data Analysis

Following its pyramid methodology, the research team developed its survey of the CII membership from the literature review, and then identified appropriate interview subjects and case studies from the surveys. The following sections describe the results of the membership survey, the interviews, and the case studies.

Membership Survey

The membership survey was divided into six topic areas: 1) Direction and Oversight, 2) Focus on Application, 3) Barriers and Bridges, 4) Evaluation and Prioritization, 5) Leadership, and 6) Communication. This research summary discusses areas 1, 2, 4, and 5, with extensive focus on the original research questions.

Direction and Oversight

An organization's senior leadership must be deeply involved in envisioning and overseeing the first steps of a new practice implementation. Indeed, the findings strongly suggest that senior management is the group primarily responsible for setting the vision for new practice implementation. (See Figure 2.) However, once the vision is set, the responsibility for carrying out implementation shifts from senior management to the discipline team or a central practice group. Figures 2 and 3 show a distinct handover between these two phases, with the organizations relying on the discipline and practice teams to implement the visions developed by senior management.

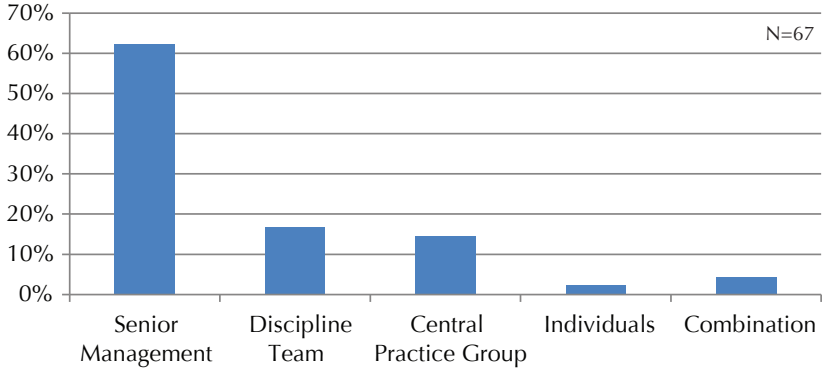

Figure 2. The membership survey indicated that **responsibility for envisioning a new practice** is more likely held by senior management.

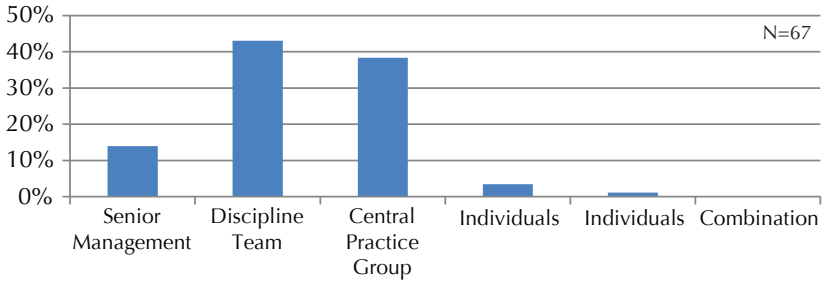

Figure 3. The membership survey indicated that **responsibility for implementing a new practice** is more likely held by discipline teams or central practice groups.

Focus on Application

Designating an area or group as the recipient of a new practice is a significant decision in the ultimate success of the implementation effort. Specifically, the scope of the implementation effort directly affects the likelihood of success. The results of the membership survey indicate five organization levels at which a new practice can be placed. Table 2 shows the success rate for each level. As shown, the rate of implementation success increases as the level in the organization decreases. For example,

high success implementations are achieved lower in the organization at the project and team levels. In contrast, the implementations with neutral or lower success rates are more prevalent at the corporate and division levels. Once again, strategic necessity plays a role. For practices intended to address a wide constituency, a greater need must be defined, since it must ignite action among a greater number of people.

Table 2. Levels of the organization at which implementation may focus and the associated success rates indicated on the membership survey.

	High Success	Moderate Success	Neutral Success	Less Success	Low Success
Corporate Level	20%	41%	19%	16%	4%
Division Level	25%	39%	23%	11%	2%
Group Level	21%	58%	16%	5%	0%
Project Level	46%	35%	11%	7%	1%
Team Level	47%	35%	11%	5%	2%

Evaluation and Prioritization

Organizations evaluate and prioritize potential new practices for implementation efforts using a variety of methodologies. Traditionally, the primary tools for evaluation have been cost-benefit and business groups. (See Figure 4.) However, 16 percent of the survey respondents reported that they try to tie potential new practices to strategic goals. This group is following a path favored by business strategists who emphasize the need to link tactical practices to strategic goals. Another 13 percent of the respondents indicated that they have no process to evaluate and prioritize potential new practices, and instead make decisions on a case-by-case basis. This approach directly contrasts to the aspirational goals most organizations have of invigorating their operations with new practices and innovations. Although organizations may declare such idealistic goals, in practice, they often follow up on these declarations with restrictive evaluation policies.

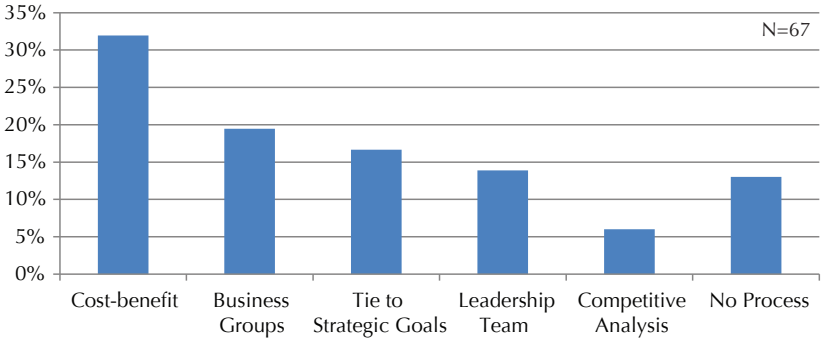

Figure 4. The membership survey indicated that a **broad range of evaluation and prioritization methods are adopted**; it showed that 13 percent of respondents have no current evaluation process.

Leadership

The respondents in the current study clearly expressed their perspectives on the critical roles of senior leadership. Specifically, they ranked visible upper-management support, resource allocation, vision-setting, and effective communication as the key implementation roles for senior leadership. However, the survey results also suggest the importance of senior management's role in all areas, with the lowest-ranking category—Selecting a Test Case—still ranked as extremely or very important by a third of the respondents. (See Table 3.)

Membership Interviews

The second part of the data collection process was to use the results of the membership survey to develop a series of structured interviews with CII member organizations. The interviews followed the same pattern as the member surveys, incorporating the same overall issues. However, to gain insight into the surveys more general responses, the team elicited detailed statements from the interviewees. The results from the sixteen interviews reinforce much of what was found in the membership survey data, specifically the idea that putting a vision into place requires strong and visible leadership. In some areas, though, the interviews provided additional insights that expanded the team's understanding of the issues. The following sections provide interview highlights on the key focus areas.

Table 3. The importance of specific senior leadership actions during the implementation process, as indicated by the membership survey.

	Extremely Important 5	Very Important 4	Important 3	Moderately Important 2	Not a Factor 1	Total Points
Visible Support	55	23	6	1	0	387
Resource Allocation	48	26	11	1	0	379
Setting the Vision	45	29	9	2	1	373
Communications	35	40	7	2	1	361
Active Engagement	26	35	18	3	3	333
Alignment	19	36	24	5	2	323
Detailing Necessity	22	29	22	9	2	312
Selecting a Test Case	6	22	26	25	5	251

Successful and Unsuccessful Implementation Areas

While the survey data indicated the organizational levels at which implementation efforts have the greatest likelihood of success, the interview phase shed light on the reasons for the varying amounts of success. Interview responses regarding where and why implementation efforts were successful include the following:

- *Our most successful efforts have been in standardizing practices across the company, rather than focusing on a single person or group.*
- *We have been successful when we focus on specific issues that provide standardization as we grow as a company.*
- *Our success has been in areas where the implementation scope has a well-defined expectation and format for reporting.*

As these interview results suggest, successful efforts focused on specific issues. The level of the implementation remained important, but what became evident was the importance of the specificity of the practice. The ability to define and communicate the new practice took precedence. In contrast, when asked about less successful implementation efforts, some of the the respondents replied as follows:

- *Less successful efforts are ones that require the largest cultural change, such as risk management; these require a change in behavior.*
- *We were unsuccessful when there was no dedicated full-time implementation team.*
- *We run a higher risk of failure when the implementation leaders are not business- or commercial-savvy.*
- *Implementation success fails to occur when the breadth of people required for success is not included in the process.*

These responses emphasize the challenge of implementing practices that are general in nature or that challenge existing organizational culture. Additionally, when the leadership team is focused more on projects or technical issues than business issues, it becomes difficult to effect change in the organization.

When asked about the most significant barriers to implementation, the respondents gave answers that supported the findings from the literature review. Notable responses to the question about the primary barrier they each face are as follows:

- *fear of the unknown*
- *cultural barriers*
- *the lack of top-to-bottom leader support*
- *getting the right people to implement*
- *people/users are not seeing the benefits or value in a new idea or benefit in making a change*
- *lack of leadership commitment to getting things done*
- *territorial politics over ownership*
- *lack of communication*
- *lack of commitment of resources and time.*

As these responses show, the barriers to implementation are varied and incorporate each of the areas queried in the membership survey. However, the responses on these areas highlight the importance of strategic issues in guiding implementation. Where tactical project thinking is dominant, issues such as lack of commitment—because of resource constraints and other factors—serve as barriers to successful implementation.

Leadership

Since leadership is an integral component of strategic thinking, the team structured the interviews to focus on issues of leadership and leadership support, particularly with respect to the strategic issues surrounding the challenges of implementation. Significant interviewee statements on the role of senior leadership in the implementation process include the following:

- *Buy-in from leadership is important, [since leaders] need to provide the resources and vision for successful implementation.*
- *[Leaders need] to sponsor the implementation effort. They need to have the communication voice and establish the need for change.*
- *[Leaders need] to serve as partners in the implementation process.*
- *Leadership is required from top to bottom.*
- *Executive management support is required for each initiative. [Executives] need to have [an] understanding and commitment to the effort.*
- *The support of executive leadership is instrumental to a successful implementation effort.*

Metrics

Evaluation and prioritization metrics are complementary to the role of leadership in the implementation process and, thus, deserve more attention from EPC organizations. Specifically, lack of metrics or the lack of metrics that are tied to strategic goals is an issue that repeatedly emerged in the interviews:

- *Project metrics are used for time and budget.*
- *We need to take a holistic view of metrics.*
- *Metrics are both quantitative and qualitative, and are included in the gating process and align with the core initiatives.*

- *We don't close the loop to see if the results actually delivered the cost/benefit, because it's too hard to do.*
- *We measure safety and quality results, [and] cost and schedule goals.*

In summary, the team's interviews of CII member representatives reinforce the positive and negative findings from the survey phase. The interviews highlight the fact that some organizations are emphasizing strategic approaches to implementation and are incorporating new communication methods to advance implementation efforts. However, the interview results also indicate that many of the organizations are struggling with cultural and personnel issues associated with implementation. The interviews illustrate that personnel are frustrated when senior management does not provide the visible backing required to complete an implementation. Conversely, the interviews also reveal the frustration of senior management when organizations resist innovation and new practice implementation.

Case Studies

The interview results generated a desire to understand both how organizations have successfully motivated change as well as how they might develop networks to enhance implementation efforts. IS 31-11, *Vision to Action Research: Igniting the Passion and Imagination of an Organization to Introduce Positive Change*, provides the complete overview of these case studies. The case study results are summarized here as a background for the development of the *Vision to Action Hot List* and the IMPACT implementation evaluation tool.

The goal of the case study effort was to understand how motivation and interest in new practices occur within a distributed organization. Drawing on previous implementation research, the research team understood that organizations cannot be viewed as monolithic entities that can guarantee the success of implementation simply because they have central support structures in place. Rather, the team recognized that organizations are complex entities with conflicting objectives and interdependencies that influence the success of any implementation initiative.

Given this recognition of complexity, the case study effort examined how the participants successfully negotiated the vision to action gap. Three international organizations—two contractors and an owner—participated in the in-depth case study phase of the research. The underlying message from each participant was very clear: successful implementation requires a network of individuals who will cooperate to achieve the broad objective of implementation success. Figure 5 shows one participant's implementation network, which stretches across five office locations. Within the diagram, each shape represents a single individual within the implementation network. The different colors and shapes indicate the various physical locations of individuals within the organization. Finally, the size of the shapes indicates the relative number of times that an individual discussed implementation issues with others, with larger shapes designating wider communication.

The illustration is an example of what is found in many scenarios ranging from the business world to the natural environment. Individual groups within an overall group form smaller "colonies." These colonies act both independently to develop solutions, as well as collaboratively as parts of the larger group. The challenge for any organization is to balance the needs of the individual colonies with overall organizational objectives. Specifically, the organization needs to encourage cross-colony communications while ensuring that each individual colony can achieve its individual strategic goals. The organization featured in Figure 5 considers itself successful in developing collaboration between locations B, D, and E. However, due to cultural, geographic, and organizational factors, location C, though achieving internal success, has not been integrated into the larger organization. As a result, implementation efforts are more difficult to advance in this location. Similar to the barriers discussed earlier, the challenges of personnel are amplified when cultural and strategic objectives differ across the larger organization.

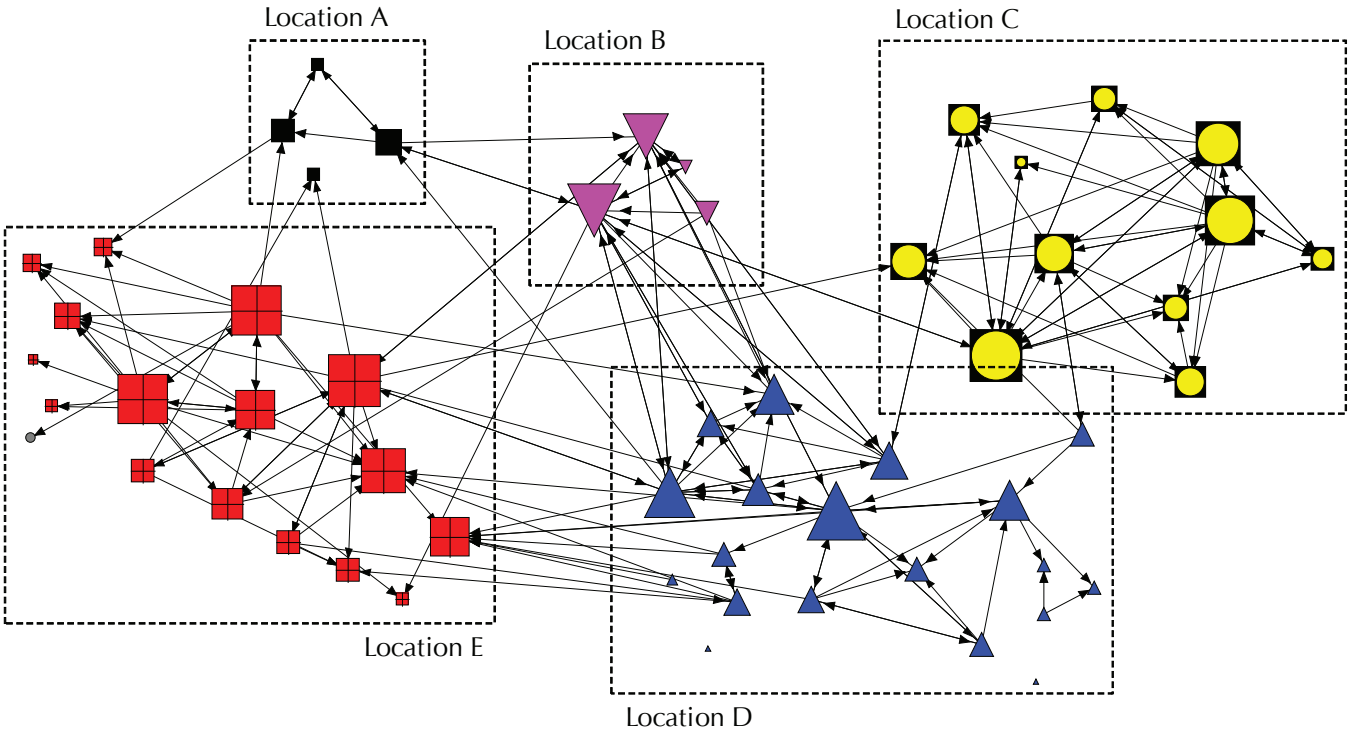

Figure 5. An organization's implementation network can be visualized as a set of interdependent colonies that must communicate effectively for successful implementations.

With respect to this research, this case study provides a basis for advocating greater awareness prior to undertaking an implementation effort. When an organization finds itself divided into individual colonies with little coordinating communications, that organization correspondingly reduces the opportunity to undertake a successful implementation initiative. Therefore, it is essential to ensure that a coordinated network is in place to foster change and to support a common message.

5

The "Hot List" for Innovation Champions

The progression from vision to action requires individuals to translate an individual interest or passion into a strategic necessity that then motivates a team and an organization. For many individuals, this difficulty is compounded by the process for providing the resources and commitment for implementation that teams need to succeed. IS 31-2, *The Implementation Process Action Tool: Igniting the Passion and Imagination of an Organization to Introduce Positive Change*, provides a repeatable and quantitative perspective on this process. As a complement to this tool, the team also developed the short-form IS 31-3, *The Vision to Action Hot List*, to guide innovation champions. This hot list is a succinct compilation of the knowledge gathered throughout this and previous efforts, to ensure that innovative ideas can result in implementation success within any organization. Following are the 10 hot list items:

1. **Make It a Priority** – Put innovation at the top of the list of the organization's priorities and back it up with appropriate resources.
2. **Strategize Strategic Success** – Have an idea of where this vision can take the organization and how it coincides with strategic goals.
3. **Communicate a New Reality** – New practices and change will mean a new reality. Start defining what the reality may look like within the organization.
4. **Inspire the Team** – Be a leader and be the inspiration for the organization to move from vision to action.
5. **Embrace the Vision** – The vision needs to be supported and nurtured. Make sure it becomes part of the discussion at all levels of the organization.

6. **Be Loud and Proud** – Speak about innovative practices whenever and wherever possible and demonstrate the commitment to these strategic moves.
7. **Spread the Word** – Communicate the vision and reinforce the communications at every opportunity.
8. **Own It and Live It** – Personally promote a new innovation or practice at every opportunity and demonstrate usage wherever possible.
9. **Drive the Train; Don't Watch the Parade** – Personally get involved with setting goals. Don't just assign the responsibility to other individuals on the staff.
10. **Grow the Fire, Not Just the Flames** – Once the passion for innovation and new practices is ignited, focus on growing that fire throughout the organization.

6

Impact Assessment Tool

The Implementation Process Action Tool (IMPACT) synthesizes the Vision to Action study results. The IMPACT tool is an Excel-based resource designed to give organizations three essential review elements for generating and implementing ideas:

1. A quantitative assessment of the preparedness of an individual organization to move from vision to action.
2. A qualitative indicator of the potential weaknesses that could hinder this transition.
3. A recommendation report that focuses on the key weaknesses in the organization and the actions that should be taken to support a new practice.

The IMPACT tool divides the vision to action process into a series of phases that mirror a bridge-crossing of the gap between vision and action. (See Figure 6.) It gives users a quantitative evaluation of each of these elements to help the implementation team determine the organization's level of preparedness for the crossing. Additionally, the tool presents potential weaknesses in each of the phases, based on the responses to its survey questions. Finally, it provides recommendations for each phase to offset these weaknesses.

Complementing this output are two additional output pages. The first of these provides users with an overview of the vision to action process, along with charts that show progress achieved in each phase. Finally, on a separate tab, the IMPACT tool uses the survey responses to generate a list of the five highest-priority recommendations for the organization.

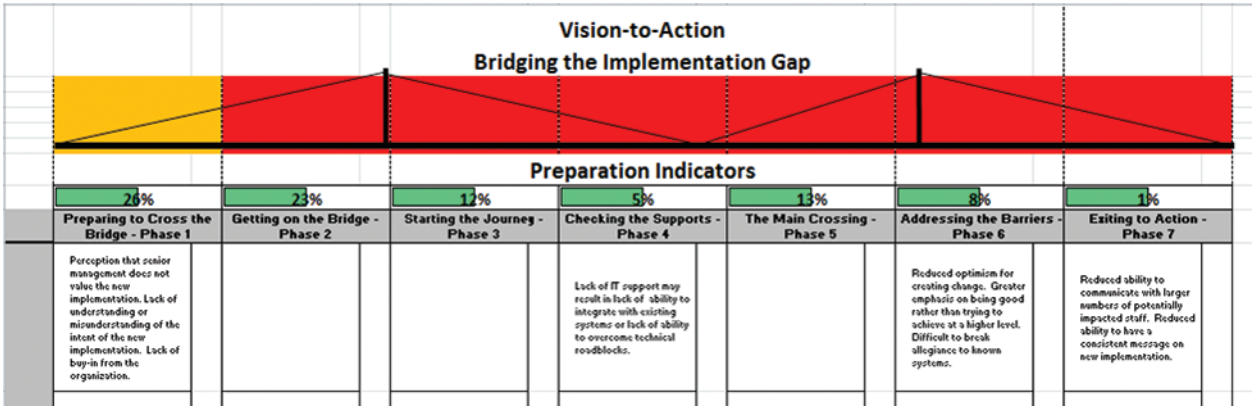

Figure 6. The overall results from the IMPACT tool show the progress achieved in each of the seven vision to action phases.

7

Conclusion and Recommendations

Responding to the Vision to Action survey and interview questions, participating CII members reported that their organizations approach the process of moving from a vision of implementation to its successful implementation in various ways. Whereas some organizations address implementation as a strategic necessity to support long-term goals, an equal or greater number think of implementation as a project-specific exercise that must meet specific cost-benefit metrics. Still others view implementation as an *ad hoc* exercise that is developed according to the needs of the specific practice to be addressed.

This variation—in organizational as well as process-oriented terms—increases the potential for great visions and inspirations to fall short of implementation. Indeed, an industry-wide understanding of the implementation process would mean that all organizations would recognize that new ideas or practices require that dedicated management support, resources, and strategic priority. Of particular importance is the need to bring necessity to bear on new innovations. This crossing from vision to action encompasses a number of phases and support actions. This research answers the following questions about implementation for CII organizations:

- What are the general vision to action models that exist in the EPC industry?
  - EPC organizations adopt a wide range of vision to action models, the most advanced of which are seen in the product-driven owner organizations. At the other end of the spectrum are smaller engineering service organizations that adopt a project management approach to implementation. In the middle are the organizations that want to move from a project-based approach to a strategic approach.

- How do CII organizations conduct evaluation of project management/construction research?
  - The evaluation of research by member organizations falls into two broad categories: project-based or strategy-based. The project-based approach bases cost-benefit analysis on project returns. In contrast, the strategy-based approach uses centralized groups to determine how research might fit into overall strategic or long-term goals.
- What are the communication and dissemination patterns that exist in these models for implementing specified visions?
  - Communication remains one of the challenges for member organizations of all types. Organizations are predominantly using traditional communication mechanisms such as meetings supported by e-mail. Few organizations are taking advantage of new methods such as video, to convey strategic visions for new practices.
- What are the primary variables that affect the differences in these models?
  - Based on this research and previous ISC research efforts, the primary variable that appears to determine an organization's approach to implementation is the stance taken by senior management. In cases in which implementation is a strategic priority, organizations have a greater tendency to have broad evaluative criteria, along with mandates to provide resources for implementation. In cases in which implementation is a project-based or discipline-based objective, cost-benefit analysis appears to be a stronger force, and resources are often placed in competition with project requirements.
- Do factors such as geographic context, project manager autonomy, or average employee profile affect these dissemination patterns?
  - Dissemination is affected by many variables. The effects of these variables are compounded when individual colonies are geographically or organizationally separated.

- What can be learned from existing change management efforts and implementation studies by other organizations?
  - The literature in change management is extensive, reflecting a mature area of study. As documented in the literature review, this literature presents multiple models and frameworks for change management and new process implementation. The key concept organizations can learn from this field of study is that a coordinated plan must be put in place prior to undertaking any change effort. For successful implementation of new processes and practices, the passion for excellence must be accompanied by leadership.

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