

COLLABORATION INSIGHTS

Structured vs. Emergent Collaboration

Part 2

Summary

This brief presents guidelines for when to use structured and emergent collaboration styles. It also makes the case that these styles are not mutually exclusive and that, in many instances, elements of both should be designed into the collaboration experience, including any supporting technology used.



Larry Hawes
Dow Brook Advisory Services

Structured and Emergent Collaboration – Part 2

Structured and Emergent Collaboration – Part 1 presented definitions and brief examples of structured and emergent collaboration styles. It concluded by contrasting several important characteristics of those styles in their extreme forms.

This brief presents guidelines for when to use each collaboration style. It also makes the case that these styles are not mutually exclusive and that, in many instances, elements of both should be designed into the collaboration experience, including any supporting technology used.

Structured and emergent collaboration are not mutually exclusive. In many instances, elements of both should be designed into the collaboration experience.

Guidelines for When to Use a Particular Collaboration Style

Table 1 presents an overview of the elements of collaboration design and the related characteristic of each extreme collaboration style. A more-detailed explanation follows the table.

Element	Structured	Emergent
Strategic importance	High	Low
Time to outcome	Long	Short
Key stakeholders identified	Necessary	Unnecessary
Subject matter experts identified	Necessary	Unnecessary
Potential team size	Large	Small
Co-location of collaborators	Together	Scattered
Availability of collaborators to work synchronously	Always	Never
Routine nature of situation	Routine	Novel
Serial nature of work process	High	Low
Availability of supporting technologies	Few	Many

Table 1 – Opposing Characteristics of Structured and Emergent Collaboration Elements

Structured collaboration is most appropriate in situations in which one or more of the following collaboration characteristics are present (the more of these that are applicable, the stronger the case for structuring collaboration).

- The success of the collaboration in reaching the desired outcome is of strategic importance to the organization.
- The time available to reach a satisfactory outcome from the collaboration is relatively long and can be measured in weeks, months or years.
- Key stakeholders in the outcome have been identified and, perhaps, promised active participation or representation in the collaboration.
- Subject matter experts from knowledge domains relevant to the collaboration have been identified and are expected to participate at least part-time in the effort.
- The team or group of potential collaborators is relatively large.
- Identified potential collaborators are always or frequently co-located.
- Identified potential collaborators are always or may be frequently available to work together in real-time.
- The collaboration will follow a standardized or frequently used work process to accomplish related tasks.
- Tasks must be completed sequentially due to dependencies between them.
- The set of supporting collaboration and communication technologies deployed by the organization and available to the potential collaborators is limited.

Structured collaboration is most appropriate when the collaboration will follow a standardized or frequently used work process to accomplish related tasks.

Emergent collaboration is a good choice when collaboration characteristics are the opposite of those requiring structured efforts. Again, the more of the following characteristics that apply, the stronger the case for allowing collaboration to emerge.

- The success of the collaboration in reaching the desired outcome is of tactical, but not strategic, importance to the organization.
- The time available to reach a satisfactory outcome from the collaboration is relatively short or immediate. It can be measured in hours or days.
- Key stakeholders in the outcome are unknown, but may be identified as the collaboration progresses toward an outcome.

- Subject matter experts from knowledge domains relevant to the collaboration have not been identified prior to its beginning or they are weakly tied to the initiator.
- The team or group of potential collaborators is likely to include few people.
- Identified potential collaborators are never or rarely co-located.
- Identified potential collaborators never or rarely work together in real-time until compelled to do so by circumstances.
- Work processes used to accomplish related tasks are entirely ad-hoc or highly variable.
- Work tasks have few dependencies between them or may be done in parallel.
- Many supporting collaboration and communication technologies have been deployed by the organization and are available to the potential collaborators, who may also have access to shadow IT alternatives.

Emergent collaboration is most appropriate when the time to reach a satisfactory outcome can be measured in hours or days.

Blended Collaboration

As noted in Part 1 of this brief, structured and emergent collaboration are extreme styles in their purest forms. Viewing them as endpoints on a continuum of collaboration design (see Figure 1) makes it clear that most business situations will call for a mix of the characteristics that define and contrast structured and emergent collaboration.



Figure 1 – Collaboration Design Continuum

Emergent collaboration is placed on the left side of the continuum, because it has no advance requirements. Structured collaboration appears on the right side, because its requirements must be considered before actual collaboration begins.ⁱ Thus, this continuum reflects a growing level of complexity of collaboration, moving from left to right. Collaboration designers must understand the characteristics of each collaboration element for their business situation and should complete a prioritized inventory of collaboration requirements related to those elements.

Example – Communities of Practice at CCC

An example will demonstrate how collaboration planners and participants may use existing or anticipated requirements to determine the optimal mix of structured and emergent collaboration style elements for either an organization-wide or highly-targeted initiative. This example highlights a business situation that requires a blended collaboration style that favors structure.ⁱⁱ

Consolidated Contractors Company (CCC) is a 160,000-employee organization that performs a variety of contract-based civil and mechanical construction projects. Project teams include from 2,000 to 30,000 employees and are scattered across the globe, working on both land and sea. CCC's top-level management realized that the document management system deployed as the organization's knowledge management (KM) system was not keeping up with the rapid growth and decentralization of the company. A KM department was formed, and it quickly recommended the use of a wiki platform as the primary vehicle to support collaboration and knowledge sharing. Initially, about 700 employees were organized into 10 communities of practice (CoP), each of which had its own domain of expertise and unique space on the wiki platform.

The design of CCC's wiki-based collaboration environment suggests that CCC's senior management and KM department members thought carefully about business conditions, collaboration team makeup, and how and where that team would work together before launching the wiki. That assumed analysis of these collaboration elements yielded a set of individual, yet related, requirements for the design of the collaboration. CCC's apparent collaboration requirements and their relative priority are summarized in the following table. ⁱⁱⁱ

Element	Requirement	Relative Priority
Strategic importance	4	1
Time to outcome	3	4
Key stakeholders identified	5	3
Subject matter experts identified	5	2
Potential team size	4	10
Co-location of collaborators	2	8
Availability of collaborators to work synchronously	2	7
Routine nature of situation	3	5
Serial nature of work process	3	6
Availability of supporting technologies	1	9

Table 2 – Completed Collaboration Requirements Identification and Prioritization Framework for Communities of Practice at Consolidated Contractors Company

The fact that CCC’s collaboration initiative started at the senior-management level indicates that its overall strategic importance is very high and could be scored a 5. However, on a day-to-day basis, collaboration will be concerned with operational problem-solving, not strategic issues, so the requirement score for this element was lowered to 4 (moderately high). In terms of relative priority, the Strategic Importance element ranks highest in comparison to the others. It was assigned top priority because the collaboration mandate came from the highest management level at CCC.

All other collaboration elements considered at CCC may be assigned a requirement score and relative priority ranking in the same manner as was the Strategic Importance element. A weighted score may be calculated for each of the individual requirements; from these an average weighted score may be calculated. As shown in Figure 2, the average weighted score of CCC’s collaboration requirements is 3.98, indicating that their requirements call for a collaboration design that features a mix of structure and emergence, with a fairly strong bias toward structure.



Figure 2 – Weighted Average Score of CCC Requirements on Collaboration Design Continuum

Further analysis of the case study information used to generate the data in Table 2 suggests that CCC’s high-level collaboration design should apply structure to the composition of relatively large teams and the relationships of their members, as well as to access control levels applied to content objects in the supporting wiki technology, as follows:

- Highly experienced employees in various operational knowledge domains and key stakeholders should be identified and invited to actively participate in one or more of the CoPs before they are launched.
- Due to concerns about information security and quality tied to the strategic importance of the collaboration initiative, the pre-selected individuals should be assigned important community roles, including community managers and wiki-article contributors, reviewers and editors. All other employees will be able join the CoPs, but should only participate as readers/commenters; they should not be able to submit original content or edit existing articles.
- Information quality concerns also merit the use of a content-review process that must be successfully completed before a new article is added to the wiki or edits to existing articles are accepted.

The case-study information behind the requirements data in Table 2 also suggests that CCC's high-level collaboration design should support emergence in the areas of work process, mode and observability as follows:

- Employees facing operational issues should be able to find assistance in many forms, including discovery of useful content and location of relevant subject matter experts within a CoP.
- Employees should be able to connect opportunistically and on-demand to quickly solve operational problems as they arise.
- All employees should be able to view and comment on the activity of any CoP, increasing their overall levels of situational awareness.

Supporting Technologies

In spite of the previous example, in which management decided to use a wiki platform as the primary vehicle to support CoP collaboration without rigorously investigating alternatives, the varying requirements of blended collaboration suggest the need for a wide mix of available supporting technologies, especially when collaboration is conducted virtually and requirements are skewed toward the emergent collaboration style. An appropriate set of technologies would include both the design construct of a common workplace associated with structured collaboration and a variety of communication channels and social tools to support emergent collaboration.

A platform intended to support blended collaboration should include (or provide standards-based API integration with) as many as possible of the following components:

- profiles directory
- presence indication
- common file repository with object-level access control
- threaded discussion forums
- shared calendar
- shared bookmarks
- web-conferencing (including video and VoIP audio capabilities)
- microsharing (microblogging + activity streams)
- instant messaging
- tagging of any system object
- search
- information filters (preferably both automatic and manually applied)
- notifications (in activity stream and/or email)
- lightweight task and activity management
- idea management
- goal management

Conclusions

Structured collaboration is most appropriate in situations of relatively high strategic importance, in which an immediate or quick outcome is not necessary. Structure is also desirable when large numbers of potential collaborators, and their roles and relationships, may be identified before collaboration begins. Structured collaboration works best when work processes are known, standardized and sequential in nature. Finally, structure should be imposed when the set of supporting collaboration and communication technologies deployed by the organization and available to the potential collaborators is limited.

Emergent collaboration is a good choice when the collaboration design characteristics are the opposite of those requiring structured efforts or unknown. Strategic importance is low, but the collaboration must be completed in hours or days. There will be relatively few collaborators involved and their roles will be dynamic, if any are assumed or acknowledged. How and where (including both virtual places and communication channels) the people involved work together will be determined as they proceed.

Most business situations will call for a mix of the characteristics that define and contrast structured and emergent collaboration. Therefore, collaboration designers should decide the right mix of stylistic characteristics for their business situation by completing a prioritized inventory of collaboration requirements.

The varying requirements of blended collaboration suggest the need for a wide mix of available supporting technologies, especially when most collaboration is conducted virtually and requirements are skewed toward the emergent-collaboration style. An appropriate set of technologies would include both the design construct of a common workplace associated with structured collaboration and a variety of communication channels and social tools to support emergent collaboration.

ⁱ Note that even emergent collaboration is designed; much of it is merely done on-the-fly instead of pre-planned.

ⁱⁱ Osama Mansour, Mustafa Abusalah, and Linda Askenäs, *Wiki-based Community Collaboration in Organizations*. Linnaeus University, Kalmar and Växjö, Sweden, 2011. The organizational and project information used in the following example is extracted from this research publication. Requirements scoring and prioritization were done by the author of the current article, without input from the research authors or Consolidated Contractors Company.

ⁱⁱⁱ Note that this table reuses the collaboration elements from Table 1. Table 2 expresses each element of the collaboration design as a requirement, which is scored on a scale of 1-5, where 1 = Low and 5 = High. The value expressed in this numerical ranking is a contextual judgement (a 4 assigned to Potential Team Size means that the team of collaborators will be larger than average, while a 2 assigned to Colocation of Collaborators indicates that there is a relatively weak requirement for the people involved to be in the same physical space. Note also that the requirement value of a single element intentionally corresponds to the increments shown on the collaboration design continuum in Figure 1.) Next, a rank order relative priority is assigned to each requirement, with 1 being the most important and X (determined by the exact number of requirements listed) the least critical. Whereas requirement scores are assigned in the context of an individual element, relative priority ranking involves comparing the importance of each element to the others.

About Dow Brook Advisory Services

Dow Brook Advisory Services delivers Insight On-Demand to its clients. We provide the critical insight that key executives at enterprise software providers need, when they need it, so they can make better strategic and tactical decisions related to their companies' business models, product and service offering roadmaps, and marketing and sales functions. Contrast our advisory services delivery model with that of the traditional analyst firms; we think you will agree that Dow Brook provides higher value at a lower cost. For more information, visit Dow Brook at www.dowbrook.com.

About Central Desktop

Central Desktop delivers a cloud-based social collaboration platform that transforms how people connect, communicate and share information to drive profitable business results. Businesses of all sizes use Central Desktop's complete online collaboration solution to manage projects and documents in the cloud with colleagues, customers and partners. With 500,000 users, Central Desktop serves 40% of the Fortune 1000 as well as organizations in marketing and communications, media, technology, professional services, architecture and design, manufacturing and other industries. Key Central Desktop customers include CBS, Resource Interactive, SicolaMartin, M80, BlueGlass, Avid, Netflix, WD-40 and Workday. Founded in 2005, Central Desktop is a privately-held company with headquarters in Pasadena, California. For more information, visit www.centraldesktop.com.