

RESEARCH FINDINGS AND PROCESS RECOMMENDATIONS

This report analyzes the current landscape of template and component creation, and it provides recommendations on how the CSC Operating Committee can oversee the governing templates and components by implementing a process and practice of defining and maintaining a library of patterns and standards upon which templates and components are based.

Fully realized, this concept of “design-pattern management” can reduce duplicated efforts, improve the use of data/research in the content publishing process, and help the organization as a whole focus more on the message more than the means of delivering that message.

Executive Summary

Design patterns are defined as the standards we set for ourselves on how we deliver certain types of content and experiences. At present there’s no organizational process defined to help interdepartmental groups (such as what the publishing process calls for) to interact or otherwise define these standards. As a result, these patterns often find themselves as the subject of a tug-of-war between platform and content groups. Additionally documentation of design patterns is often regulated to a side job, and is dispersed among the different teams and is maintained to the degree other priorities don’t crowd out its completion.

In the absence of such a process to manage design patterns, individuals use a number of rhetorical strategies to create influence and consolidate decision making in what is a multi-departmental collaborative effort. Understanding these strategies was key to crafting the recommendations contained in this report. Over time, without direct accountability to anyone, these design patterns weaken, causing a multiplicity of designs and custom work. They cycle restarts when the organization does a redesign and opts for a new content management system.

We recommend that CSC Operations Committee identify a steward who, as a key component of his or her “day job,” facilitates and maintains the design pattern process and resulting design pattern library on behalf of the Operating Committee.

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Introduction

A multi-faceted effort is underway to help the organization update its digital experience strategy. This includes both **platform updates** (such as the implementation of AEM as the Church's new content management system) and **content strategy updates** (including a new style guide for member-facing digital channels). Within their respective approaches, both efforts are looking to define standard interactions and layouts. These are commonly referred to as templates and components. Different initiatives with overlapping vested interests in the same set of deliverables can be problematic without the organization having a clear decision-making process.

This report explores the creation of a design pattern process: a method for defining the standards and conventions that templates and components will be based on based on the evolving needs of content strategy.

To facilitate consistent user experience, meet business needs, and reduce duplicated effort or unnecessarily custom effort, the CSC Operating Committee will have the oversight of these design patterns.

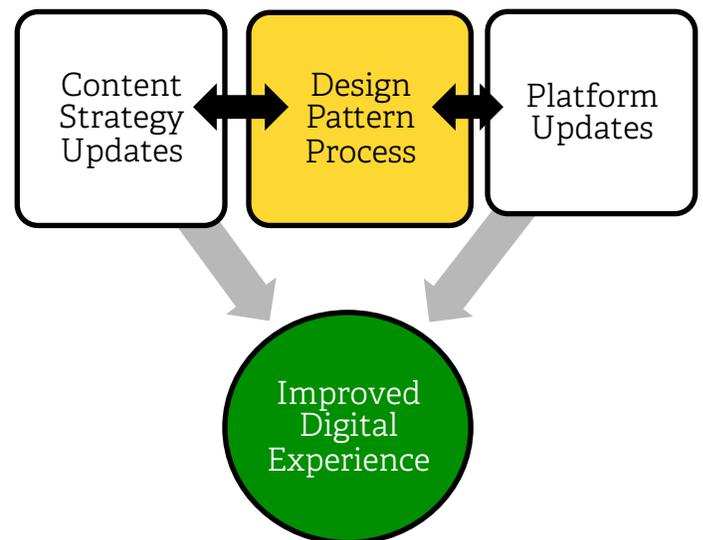
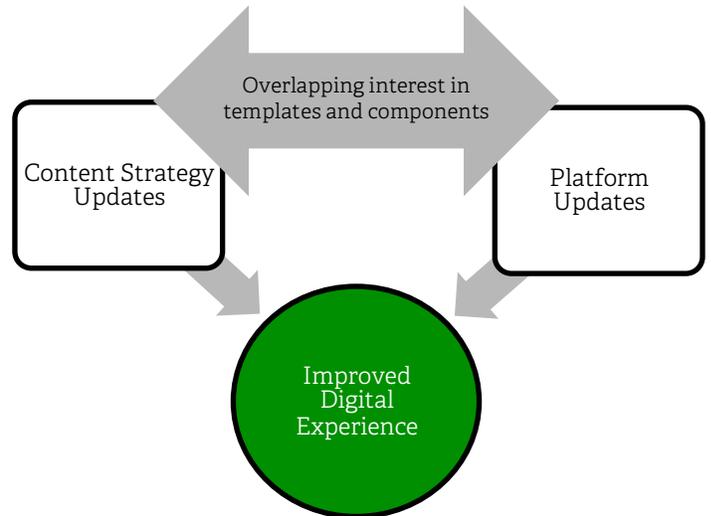
This research and recommendation report looks at establishing a common process that proposed design patterns undergo to become approved.

WHAT IS A DESIGN PATTERN?

The detailed description of the standard approaches for the user to accomplish a specified intent on one of our digital channels; a template/component is a technical expression of a design pattern.

WHAT IS THE DESIGN-PATTERN PROCESS?

A research-based/data-driven method to ensure new or modified design patterns undergo sufficient due diligence before being established as a standard convention for use on Church digital channels.



Key Findings

First, some organizational communication pre-work:

Bureaucratic departments are created to define reporting structures and responsibilities as differentiated from another department. These different verticals are built for efficiency. However, new technology and new initiatives around digital experience management asks for more horizontal (cross-departmental) collaboration. When the decision-making criteria in cross-departmental settings are subjective or otherwise nebulous, it is difficult to maintain a set of standards or conventions. We observe that individuals can unduly influence the decision-making process beyond what an objective analysis would suggest. Further, it leaves room for exceptions. Without corrective action, the collaboration continues to break down until everyone agrees that a fresh start is needed.

Applied to creating a practice of design-pattern management, we observe:

- In the absence of an overt design-pattern strategy, individuals or groups employ a variety of different methods and means to influence the creation of templates and components (for more information, [see Appendix C](#)).
 - These rhetorical strategies aren't inherently wrong or deceptive, but can be problematic when they affect the ability of interdepartmental groups to collaborate. It can be particularly detrimental when they reduce the role of research and data in the content publishing process.
- There is no direct accountability for the creation, evaluation, and maintenance of a design-pattern library outside of their individual product or campaign.
 - We often rely on proactive individuals to prepare documentation of design patterns as they go; this documentation is helpful but hardly official. Because it is often done on the side, when other priorities crowd it out, it quickly gets out of date.
- Without direct accountability, previously established design patterns have a tendency to weaken over time. This contributes to the following scenarios:
 - Evolving content strategies result in a multiplicity of loosely confederated styles emerges on the same property, which leads the organization to opt for a redesign.
 - Platform maintenance efforts and costs increase as more and more custom work is requested; Resources become strained as patterns increase the amount of custom work needed. Architecture becomes fractured, requiring extensive retrofitting for new standards. This eventually results in the organization opting for a new platform.

The recommendations contained in this report focus on documenting the activities and tasks involved in successfully cultivating the practice and accountability for design-pattern management independent of content and platform accountabilities ([see "For Approval: Design Pattern Management Key Activities"](#)).

Research Observations and Recommendations

OBSERVATION(S)	RECOMMENDATION	IMPLEMENTATION STRATEGY
<p><i>Design patterns get caught in the middle of a tug-of-war between content and platform governance groups: consistency suffers as a result.</i></p> <p><i>Organizations benefit from unbundling mixed business models so each entity can focus on a specified value discipline: customer impact, product innovation, and operational excellence (see Appendix B).</i></p>	<p>Customer Impact: Initiating Departments focus on developing a content strategy tuned to the needs of their respective audiences.</p> <p>Product innovation: the design-pattern process, under the direction of the CSC Operating Committee introduces new user-facing patterns departments can utilize in their content strategy.</p> <p>Operational excellence: platform management teams translate design patterns into high quality templates and components.</p>	<p>Documentation (with accompanying presentation) is produced to communicate the introduction of the design-pattern management process.</p>
<p><i>In the past, it has been no ones "day job" to document and manage design-pattern strategy. It's often done out of goodwill and in an individual's spare time. Such documentation is unofficial and can quickly become out of date when other priorities prevent its maintenance and upkeep.</i></p>	<p>The CSC Operating Committee identifies who will fulfill the necessary design-pattern process management activities that will allow the committee to effectively oversee design patterns.</p>	<p>Finalize the list of key activities an individual (or group hybrid) should fill (see "Design-Pattern Key Activities" for initial proposal).</p> <p>Compare role's time commitment with available resources to help determine where role will reside.</p> <p>Determine hiring needs accordingly.</p>
<p><i>No process currently exists to validate the business need for a new design pattern.</i></p>	<p>As part of the design-pattern request, initiating department product managers should specify a contingency plan for what he/she would have to use without this new design pattern. Iterative test results are compared against that contingency.</p>	<p>Appropriate PSD and ICS team members work to identify two to four possible solutions (one of which being the contingency plan)</p> <p>The Operating Committee establishes a threshold for success (i.e. an alternative design must outperform the contingency by 20 percent in order to be approved).</p>

OBSERVATION(S)	RECOMMENDATION	IMPLEMENTATION STRATEGY
<p>Template design is primarily a waterfall process. Interviewees reported the creation process focuses a great deal on accounting for personal preferences of those involved over data and research.</p>	<p>Design-pattern management employs a two-step approval process that emphasizes iterative user testing.</p> <p>Step one: pattern is approved for a specific amount of time for creation and iterative testing in a production environment.</p> <p>Step two: successfully tested patterns are approved for widespread use or otherwise retired.</p>	<p>Initiating departments through their Publishing Services Partner identify business need for additional functionality. The request includes timeline, messaging plan, and product lifecycle plans.</p> <p>The design-pattern process tests the business need. Patterns that fail to demonstrate ability to meet business needs are retired.</p>
<p>Collaboration on a new template is often rushed because the need to meet a specified deadline.</p>	<p>The initial “step-one approval” allows for a proposed design-pattern to get quickly to production, with the understanding that at the end of a specified time range, if the new design pattern can’t be validated (i.e. meet pre-determined success criteria), the pattern will be retired and the contingency approach will be put in place.</p>	<p>The time limit begins when the pattern is pushed to production.</p> <p>This provisioned time can be used in two ways:</p> <ul style="list-style-type: none"> • To provide time for iterative testing to help refine a design-pattern recommendation • To provide a method for campaign-specific design patterns to come and go—but gives the organization a clear path for that campaign to revert back to a “normal” state.
<p>Template and component backlogs quickly fill up based on the input of subject matter experts around mobile design, localization, social, SEO, analytics, and others.</p> <p>Ideally this input would be included in upfront requirements.</p>	<p>Design-pattern management establishes enterprise acceptance criteria by consulting with subject-matter experts.</p> <p>Design patterns being considered for final approval must meet both user and enterprise acceptance criteria.</p> <p>Final approvals are good for two years (and should be reevaluated or retired at that time).</p>	<p>The design-pattern manager converts product manager requests into user acceptance criteria</p> <p>The design-pattern manager involves subject-matter experts in the evaluation of new design patterns to ensure the pattern leverages best practices.</p> <p>The design-pattern manager maintains a list of enterprise standards that are automatically added to the acceptance criteria whether specified by the product manager or not.</p>

OBSERVATION(S)	RECOMMENDATION	IMPLEMENTATION STRATEGY
<p><i>Pattern documentation is currently a function of individual teams who interact with the pattern.</i></p>	<p>Design-pattern management runs a common library for all production and strategy teams to reference.</p>	<p>Audiences include: product management, designers, web publishers, analysts, developers, platform management.</p> <p>Documentation includes record of the data and research that influenced the creation of the respective pattern, as well as the rules and accepted uses for a given pattern.</p>

Design-Pattern Management within the Content Publishing Process

For design-pattern management to be successful, it should exist within the content publishing ecosystem. As initiating department product managers work with their respective service department counterparts to generate ideas and define a product (i.e. establish content strategy with key performance indicators), gaps may emerge where the current offering of design patterns isn't sufficient for accomplishing the purposes of the product.

The Publishing Services Partner and/or Creative Director work with the design-pattern management individual/group to articulate a request to the CSC Operating Committee to explore a new or modified design-pattern. This "step-one approval" request includes relevant details such as audience, expected reach, timeline and messaging plan (i.e. planned assets or messages), as well as a contingency plan (what will be used if the new design pattern is not approved).

With step-one approval, portfolio resources, design-pattern management, and platform management work together to create and iteratively test for an allotted amount of time specified by the CSC Operating Committee. Once the new design pattern is validated (proven to meet the desired objectives), the pattern returns to the CSC Operating Committee to receive step-two approval. At this point it is documented and published as part of the design-pattern library for all Church properties to use. If it fails to meet the acceptance criteria, it can request an extended timeframe or it will be retired.

FOR APPROVAL

Design-Pattern Management Key Activities

The following tasks have been identified as the activities that would support the goals of the CSC Operating Committee to institute design-pattern management as a practice.

KEY ACTIVITIES

1. Implement and facilitate a data-driven process for maintaining a consistent user experience standards across Church digital properties.
2. Consult with product managers, publishing service partners, and creative directors to leverage the organization's existing design-pattern library to support a product's content strategy and accompanying business objectives. Work with creative directors and design resources to ensure design patterns are sufficiently defined and used properly.
3. Work with service department teams to articulate requests for new design patterns based on previously unsupported business needs/user intents; present requests to the CSC Operating Committee for step-one approval.
4. Track the progress of step-one design patterns as they go through the iterative testing process; prepare sufficient documentation for the CSC Operating Committee for step-two approval.
5. Involve the appropriate subject-matter experts to establish acceptance criteria for design patterns.
6. Create and maintain a single-source repository for the documentation pertaining to the design-pattern library, including requirements, usage guidelines, acceptance criteria, and other technical specifications for the various service groups who might reference the design-pattern library.
7. Coordinate closely with platform management to identify how the various platforms and services work together to address applicable user stories and business cases in a way that delivers the right patterns for a consistent user experience.

ADDITIONAL ASSIGNMENTS MIGHT INCLUDE:

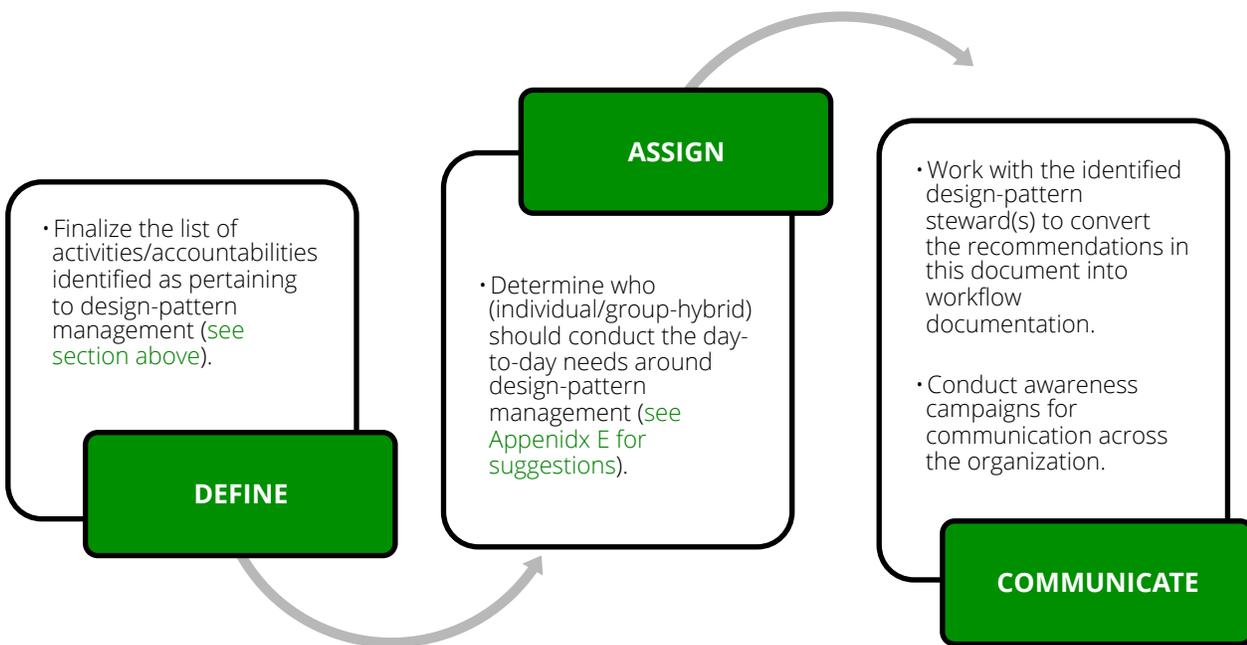
- Champion the adoption of enterprise standard platforms and practices.
- Evaluate/audit the adoption of design-patterns; work with platform teams to retire instances where design-patterns are being misused.
- Maintain the relevant training materials that help initiating departments effectively engage the design-pattern management process.
- Participate in the evaluation process for new tools, services, or platforms that impact the user experience.

SUMMARY OF THE DESIGN-PATTERN PROCESS

1. Establish content strategy/key indicators as part of product plan.
2. Define missing functionality as well as contingency plan based on existing design-pattern library.
3. Work with design-pattern management to request **step-one approval**.
4. Create and iteratively test provisioned design pattern.
5. Submit design-pattern for **step-two approval** once acceptance criteria are met.
6. Upon approval, design pattern is documented as part of the design-pattern library; otherwise, it is retired.

Conclusion: Next Steps

The key activities pertaining to design-pattern management identified in the previous section are not clearly accounted for by defined job roles in OCS, PSD, or ICS. The following steps are suggested:



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Appendix A | Research Process Overview

PROCESS STEPS	DESCRIPTION
1. Stakeholder Interviews	<ul style="list-style-type: none">• Conducted twenty-four interviews with participants from seven departments. Roles ranged from creative, production, product management, and other strategic roles.• Questions invited interviewee to consider what does an effective template-component process look like, who is involved, and how do we best evaluate success. Responses included reflections on both where we've been and what would be considered ideal.• Distilled common themes, unique observations, and ideas for improvement
2. Meeting Observations	<ul style="list-style-type: none">• Attended meetings such as the CSC design sub-committee, AEM governance group, LUX team meetings, AEM-Axis41 meetings, and client meetings held by the template-component lead.
3. Data-Mining and Analysis	<ul style="list-style-type: none">• Contrasted interview notes and meeting observations against organizational communication theory and practices to find new insights on our organizational communication needs.• Consulted industry resources, such as <i>Business Model Generation</i>, Osterwalder and Pigneur. John Wiley and Sons. 2010. <i>Organizational Communication in an Age of Globalization: Issues, Reflections, Practices</i>. Cheney, Christensen, Zorn, Ganesh. Waveland Press. 2011.• Developed recommendations accordingly.

Appendix B | Themes Gathered from Stakeholder Interviews

Does specialness expire? How can we give the ability to articulate a message in a special way but not be married to it forever? When a given piece of content has passed its prime, should it revert back to some normalized experience?

Product management focuses on articulating business need and objective: New design patterns should be established on the basis of accomplishing a specific business objective. Product managers should plan to articulate the need for a new design pattern in terms of business objective.

Multiple designs are produced based on the identified problem: In response to a business problem, the design group should plan to generate multiple approaches to solving the business problem.

Open communication on how decisions were made to increase trust in the process: Design patterns should be delivered with an explanation of how that design pattern was arrived at. What alternatives were explored and what data is there to support this new pattern?

We take too long to plan which in turn, pinches production: Unclear business objectives draws out the creative/development process, resulting in reduced ability to ensure quality and/or ideas.

A department representative can collect the needs of a given department's product managers: Multiple groups envisioned someone from their department playing a role as one who aggregates/prioritizes requests from within that department and engages the approval process accordingly.

Design patterns should be accompanied by rules: Design patterns should be accompanied by documentation outlining their intended use. This will assist in the review process in identifying whether a current design pattern can or should be leveraged in a new way or whether new functionality is needed.

Design-pattern needs may vary by audience: The least common denominator for sorting design patterns is target audience and objective (i.e. VIO "macro/channel" audience segments opposed to product-specific audiences). There are a variety of opinions on how these are to be shared across different properties. One suggestion was a hierarchy, loosely based on the fair assumption that 'what works for non-members will work for members, but maybe not the other way around.' This could be fully researched as the design-pattern process is implemented.

Appendix C | Influencing The Process in the Absence of Process: How do individuals inter-departmental efforts operate in the absence of a defined decision-making process when collaboration stalls?

Observation #1: Individuals operating in interdepartmental settings often struggle recognize/reconcile the role/power of those from a different department; the natural reaction is to revert back to the department structure they came from (typically, through some form of escalation).

Ideally, when an interdepartmental team is formed, that group can come together to clearly articulate the problem they are there to solve, agree on what criteria constitutes a good decision, and then proceed to identify possible solutions, applying the previously agreed on criteria to come to a recommended solution. This often stalls when members of the group withhold information or are unable to see eye-to-eye on what the problem is, resulting in competing solutions to competing interpretations of the problem.

PROCESS CONSIDERATIONS

- Design-pattern process is an interdepartmental process; therefore, to reduce the chance for miscommunication the communication plan for this process should include clear articulation of what the inputs and deliverables are for initiating departments and service departments respectively.
- Design-pattern modification requests should be articulated first in terms of business objective and second what that modification might look like.
- Departments value open communication around why a decision was reached. Design-pattern decisions should be accompanied by sufficient documentation of the initial requirements, the alternatives considered, and the research involved in their creation. In the event of escalation, this documentation can be taken back to department leadership for review.

Observation #2: In the absence of a formal design-pattern process, individuals use department ambiguities to consolidate decision-making power in interdepartmental settings.

The organization is structured to emphasize top-down reporting structures, but new innovations (i.e. internet, mobile, social) have created organizational priorities that emphasize horizontal (cross-departmental) collaboration. In the absence of a formal process for design-pattern governance in this space where horizontal initiatives meets vertical reporting structures, the following practices are used by individuals to consolidate decision-making power or influence.

These practices aren't inherently deceptive but do introduce challenges when 1) they influence the decision-making process in a way that limits the contributions of other group members, 2) result in

minimizing the amount of data gathering, user testing, or research best practices, or 3) insert preference and bias beyond what an objective analysis would suggest.

Each practice is briefly described below with an example statement meant to represent what might be said by an individual employing the described concept (and is not intended to reflect any specific situation or instance). A table is provided at the end of the section with ideas on how this might be accounted for as it pertains to this process.

TABLE A-1 | How do individuals create influence in the absence of a clearly defined process?

PRACTICE AND DESCRIPTION	PROCESS CONSIDERATIONS
<p>ILLUSION OF PRECEDENCE</p> <p>Individuals frame their proposed action in terms of something that’s already been approved or otherwise done.</p>	<ul style="list-style-type: none"> • There’s a lot of production work that is done under the name of maintenance because it doesn’t require involvement by development. • New/modifications to the design-pattern library should require research/testing to be considered. • Design patterns should have clear instructions on their intended use. Uses outside that intent should go through a testing process before the rule is changed.
<p>THE PINCH EFFECT</p> <p>A shortened timeline strains the collaboration process and the contributions of others.</p>	<ul style="list-style-type: none"> • Allow for quick delivery to meet immediate need by deploying a new design pattern as a beta experience; long-term approval will still be required and will be based on sufficient due diligence being conducted within a given timeframe, else the design pattern will be retired.
<p>THE DARIUS DILEMMA</p> <p>An individual creates requirements for other group members based on what they suggest to leadership without the knowledge of that leadership.</p>	<ul style="list-style-type: none"> • Design-pattern requests focus on articulating a business need, content strategy, and timeline. • Departments will need to specify what is their alternative plan if the new design pattern isn’t available. (This becomes the “default” experience that a new design pattern will be tested against.) • Design patterns are well documented with details of the initial request, what alternatives were considered and what research was conducted to narrow the final decision.
<p>PRE-CONCEIVED FIDELITY</p> <p>Individuals create requirements around prototypes created for concept approval become because they’ve been shown to executive leadership.</p>	<ul style="list-style-type: none"> • Design-pattern requests focus on articulating a business need, content strategy, and timeline; acceptance criteria are established based on those inputs. • Departments help identify as part of the approval process whether that acceptance criteria was met or not. • Initiating departments may have approval requirements for how design patterns are assembled to meet their messaging needs, but departments do not directly approve individual design patterns. • If there is a concern with a specific design pattern, the department can redefine the business objective or goal being addressed.

Appendix D | Unbundling Digital Experience Management

More and more, corporations are “unbundling” mixed business models to avoid undesired tradeoffs between objectives. Different entities focus on different objectives to improve the overall delivery.

John Hagel and Marc Singer coined the term “unbundled corporation” (“Unbundling the Corporation” *Harvard Business Review* March-April 1999). They argue that large organizations, like ours, are comprised of three different business types with different economic, competitive, and cultural imperatives: **infrastructure management, product innovation, and customer relationship management**. To avoid unnecessary tradeoffs between these types, it benefits the organization to separate the various business types into different entities.

Similarly, Michael Treacy and Fred Wiersema (“*The Discipline of Market Leaders: Choose Your Customers, Narrow Your Focus, Dominate Your Market*” Treacy, Michael, Wiersema, Fred.1995) argue that a company should focus on one of three value disciplines: **operational excellence, product leadership, or customer intimacy**.

These business types and value disciplines can be paired and correspond with areas of stewardship: platform, pattern, and content. For our purposes, unbundling can be accomplished in part by ensuring each business-type/value-discipline pair has a different governing body to which it answers:

TABLE B-1 | Unbundling Digital Experience Management

BUSINESS TYPE/VALUE DISCIPLINE PAIRING	GOVERNING BODY	STEWARD	STEWARDSHIP
Infrastructure management/operational excellence	PBO (via PSD Technology Council)	AEM Governance/Solution Management	Platform
Product innovation/product leadership	CSC (via the CSC Operating Committee)	Design-Pattern Management (TBD)	Pattern
Customer relationship/customer intimacy	Quorum of the Twelve (via initiating department EDMs)	Product Managers (Coordinating efforts via OCS for member-facing channels)	Content

Appendix E | Design Pattern Management Models (Proposals)

CONSIDERATIONS

- The role of design-pattern management is to facilitate between business, design, and platform counterparts with the ability to enforce/encourage compliance with the established standards.
- This report recommends that some (if not all) the design-pattern process activities (see page 7) should be part of an individual's "day job" to ensure key activities like documentation and sufficient testing are a reality.

POSSIBLE CONFIGURATIONS

- Product Manager
- Advisor
- Business Manager/Functional Analyst that supports Creative Director Group
- Project Manager/ UX Lead

OTHER SUPPORTING CONVENTIONS

- Design-pattern working group chaired by the design-pattern steward that reports to the operating committee
- This individual would participate as a "voting" member of the AEM Governance Team headed by Ben Steckler.