Designing Outcomes for Multifaceted Organizational Planning and Assessment: A Case Study of the Logic Model Framework for the UC San Diego Library Organizational Renewal

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Abstract
Purpose: In 2019, the UC San Diego Library engaged in an organizational renewal activity that included parallel efforts to renew our strategic priorities, recruit new senior leadership, revise leadership portfolios, and evaluate the impact of previous organizational changes for adjustments. To engage in these initiatives in a cohesive way, we needed a framework to connect these planning activities to the intended service outcomes of our organization. This paper describes our use of the logic model planning and assessment framework to define service outcomes – that align Library priorities to campus goals, professional trends, and long-term impact areas – and to set up an assessment for future organizational development.

Approach: Logic models are visual planning and assessment diagrams that depict the connections between an organization’s work and the intended results. They are like concept maps that depict an if-then relationship between resources, activities, outputs, and outcomes/impact, i.e., if we have the resources, then we expect to conduct the activities; if we conduct the activities, then we expect to produce the outputs; if the outputs are delivered, then we may realize specific outcomes/impact. Outcomes may be divided by different types of change in our users – specifically in their learning, actions, and conditions. Additionally, outcomes may be differentiated by time range as short, intermediate, or long term. The logic model framework has been used by governmental, philanthropic, academic, and library organizations. It may be especially useful for aligning the current activities of the organization towards new or revitalized long-term service outcomes and developing assessment methods to inform this change.

Findings: We describe how the logic model approach contributed to a unified framework for coordinating strategic, leadership, and organizational planning during our multifaceted organizational renewal. We focus on three beneficial features of the logic model: a framework centered on clear outcomes around user change, connecting work activities to organizational impact, and gathering holistic perspectives in a manageable and structured manner. These features contributed to strategic planning by framing priorities in a resonant way to users and external stakeholders, providing a roadmap for implementation and assessment, and facilitating shared understanding and decision-making. In terms of leadership planning, the logic model approach was instrumental to aligning conversations around mission and strategic priorities,
ensuring clear paths between leadership and organizational structures, and providing methods to align leadership with organizational work and operations. Finally, logic models contributed to organizational planning by ensuring that organizational structures support service priorities and users’ needs, prioritizing work based on outcomes and resources, and facilitating assessment at an operational and organizational level.

Value: The value of logic models for multifaceted organizational planning falls along four themes: (1) operational- and activity-centered strategic planning, (2) mission- and outcome-aligned organizational planning, (3) user impact-focused communication, and (4) contextual and additive assessment to coordinate planning. The underlying common element to these positives is the clearly articulated organizational outcome framed around user change and broader campus goals. Such outcomes lay the groundwork for evaluation, continuous improvement, and future organizational development. They also serve as indicators of progress and help identify course corrections in a changing environment. And by anchoring outcomes to long-term campus goals, we have the latitude to adjust our organization to suit changing needs and trends. This paper may help the reader engage in multifaceted Library planning through the design of organizational outcomes for planning and assessment.
1. Introduction
In 2019, the UC San Diego Library engaged in an organizational renewal activity motivated by several Library changes. A new University Librarian had joined, and the Library’s previous strategic plan (2015-2018) was up for renewal. In parallel, the retirement of three Associate University Librarians occurred between June 2019 and January 2020. Finally, the Library had been working under an adjusted organizational structure for approximately five years, and there was internal interest for an evaluation of this reorganization.

In this situation, our organizational renewal included parallel efforts to renew our strategic priorities, recruit new senior leadership, revise leadership portfolios, and evaluate the impact of previous organizational changes for adjustments. These activities were interconnected and needed to be timed to leadership changeover. For instance, we needed to assess and adjust the existing leadership structure before recruiting new senior leaders. Simultaneously, our strategic priorities needed renewal to inform leadership recruitment priorities with the recognition that the Library will likely engage in further strategic planning following the senior leadership recruitments.

We sought frameworks to create an organizational renewal plan grounded in the following planning and assessment objectives.

- **Objective 1:** Align the Library's strategic plan and organizational activities to support the university's goals
- **Objective 2:** Define Library service outcomes for assessment
- **Objective 3:** Establish a supportive mechanism for assessment and organizational development

We embraced the logic model planning and assessment framework to bring these objectives together. This model offers practical features for defining service outcomes, aligning outcomes with external campus goals, laying a foundation for assessment, and fostering an open, holistic perspective in organizational development.

This paper introduces the logic model for academic library planning and assessment. Specifically, it describes our use of the logic model to (1) define Library service outcomes aligned to campus goals, professional trends, and long-term impact areas and (2) establish an assessment framework for future organizational development. We document the logic model's role in strategic, leadership, and organizational planning contexts and describe its strengths and drawbacks.

2. Logic models
2.1. Logic model design
Logic models are visual diagrams that depict an organization’s work and intended results. By connecting Library activities to outcomes, the model helps facilitate strategic planning and
assessments. It is especially useful for defining organizational outcomes and developing assessment methods to study the Library’s impact on the broader community. Government agencies, philanthropic organizations, universities, and libraries have adopted the logic model approach.1-3

**Logic model components**
The logic model is composed of three elements, as illustrated in Figure 1. The first element is the work of an organization, which consists of resources and activities. **Resources** are needed to do the work, and **activities** are what is done with the resources to implement the program.

The second element is the intended results of the work, which include outputs and outcomes. **Outputs** are the products and services that arise from work activities. **Outcomes** are the changes that occur due to the program work. We define outcomes in terms of three types of changes: user learning, user action, and user condition changes. A condition is the community’s fundamental functioning, including environmental, social, economic, or civic well-being. User changes are interrelated: if users experience positive learning and action changes, the community may improve their condition. Additionally, we can differentiate program outcomes by time: short, intermediate, or long term.

The final logic model element is the relationships between the organizational work and the intended results. To connect the building blocks of Library resources, activities, outputs, and outcomes, we can use an if-then chain of reasoning to draw relationships as follows:

- If we have the requisite resources, then we expect to accomplish the planned activities.
- If we achieve the activities, then we hope to produce the intended outputs.
- If we deliver the outputs, then we may realize positive outcomes in user learning and action.
- If users benefit, then the community may improve their condition.

Through the if-then logical chain, we may explain how an organization’s work builds impact through positive learning, action, and condition changes. In this way, the logic model is a template for impact story-telling and helps explain Library contributions to broader campus and user outcomes.
Logic model customization

Logic models vary in design. Structurally flexible, they come in different sizes and formats to suit various organizational parameters, needs, and contexts. Logic models can be detailed or simple and scoped at the project or organizational level. With this freedom, logic models are customizable for organizational relevance. In an example of a logic model customization, Figure 2 is a generic model for Library outreach services and defines specific outcomes for program impact assessment.
Benefits of logic models
Logic models are appealing for their explicit, systematic, and user-centered approach. Both the articulated program outcomes and the relationships among program elements are beneficial to organizational strategy and focus. The model's clear visual also communicates organizational strategy and contributes to a shared understanding of program goals and work. Furthermore, the defined outcomes support assessment, serving as indicators of positive change. Lastly, the user focus and the holistic exploration of different stakeholder perspectives are beneficial for library assessment.

Limitations of logic models
Logic models linearly represent reality. The if-then chain of reasoning between program work and results can be overly reductive, especially for intricate work that provides intangible benefits. We could identify the dynamic relationships among logic model elements and expand our perspective to a broad range of stakeholders, activities, and user contexts to address this shortcoming. Secondly, a logic model focuses on expected outcomes, with risks of optimistic bias and unrealistic expectations. We need to investigate our organizational assumptions and examine for unintended and unexpected outcomes, plus negative and neutral changes, to address these tendencies. Thirdly, a logic model represents a moment in time, but the educational context is in flux. As programs, methods, and academic communities change, the logic model requires updating. Subsequently, we need to tie organizational outcomes to our users to help the Library move in step with academic change.

2.2. Logic model development
The W.K. Kellogg Foundation’s guide to logic models gives procedures for model development. This guide was instrumental to our adoption of the logic model approach in our organizational renewal and strategic planning efforts. The logic model resources and online course by the University of Wisconsin-Madison Division of Extension are helpful for supplemental training.

Relying on the Kellogg guide, we developed our logic model for the UC San Diego Library organizational renewal (Table 1). There are several modifications to the standard logic model. We adopted a high-level orientation focused on core Library roles, rather than specific services and activities, to capture the whole organization. We also consolidated several model elements to focus on essential activities and services. For instance, we summarized inputs, activities, and outputs into the second column. We omitted user learning and action outcomes in another simplification tactic and presented user condition changes instead. To communicate to a broad range of stakeholders – including staff, users, and campus administrators – the logic model relies on text narrative for straightforward explanation and includes the UC San Diego goals to demonstrate Library support of campus priorities.
Table 1. UC San Diego Library strategic priorities and assessment logic model (2019-20)

<table>
<thead>
<tr>
<th>Strategic frames for annual goal setting</th>
<th>FY 2020 focus (inputs, activities, outputs)</th>
<th>Long-term outcomes</th>
<th>UC San Diego strategic goals</th>
</tr>
</thead>
</table>
| **Support student and faculty success** through instruction, information services and outreach to help them discover, critically evaluate, manage and disseminate information | • Engage in continuous improvement to support online and in-person instruction with the goal of engaging every student in their first year  
• Expand our efforts in emerging research topics instruction including software carpentry, data management and GIS  
• Engage in instructional design and assessment to continuously improve offerings  
• Engage in outreach and outreach management to better support UC San Diego community members | • Students are supported in learning with information and critical thinking tools from their first year  
• Students and faculty experience equity and inclusion in terms of information resources, tools, instruction and research/learning support | • Student Experience  
• Interdisciplinary Research  
• Diversity and Access  
• Supportive Infrastructure |
| **Support research and learning** by securing and/or providing access to academically-focused information resources | • Focus on open access through Project Transform  
• Engage in targeted collection building and processing to enhance distinctiveness  
• Assess our digital and physical collection strategy for the next five years  
• Improve access to born-digital content through VRRs, licensing and access improvements | • UC San Diego's distinctive collections support new research and sustain learning  
• UC San Diego scholarship is broadly available and accessible to students, researchers and the world | • Student Experience  
• Interdisciplinary Research  
• Diversity and Access  
• Supportive Infrastructure |
| **Be a place for community and scholarship** by providing students with diverse, inclusive, accessible, safe and resource-rich physical and digital spaces that are centered on supporting the academic experience. | • Serve as a place for community for students through space and community-building collaborations with PATHS, APIMEDA and Student Retention and Success  
• Plan for (Fall 2020) and launch (Summer 2020) the next phase of Geisel renovation (main entry floor) | • Students experience agency and engagement with UC San Diego through Library spaces and events  
• Community members gain learning, understanding and cultural appreciation through Library events | • Student Experience  
• Diversity and Access  
• Community Enrichment  
• Supportive Infrastructure |
| **Extend the impact of research** at UC San Diego by being a leader in the preservation and dissemination of research output | • Evaluate, shift and renew our investments in data publishing  
• Engage with faculty and administration to better understand how the Library can best support the dissemination of research | • Faculty, staff and students will see a broadened impact of their research through transformational publishing initiatives  
• UC San Diego partners can incorporate information services and tools of the Library to their instructional and research efforts | • Interdisciplinary Research  
• Supportive Infrastructure |
| **Build institutional excellence** through financial stewardship, staff development, organizational planning and assessment | • Engage in a leadership renewal process including new roles and training  
• Implement SILS and a new public service model for service efficiency | • Library staff influence organizational improvement on an ongoing basis  
• Library staff see career growth and opportunities  
• The Library adapts to changing pedagogical, technological, and publishing models | • Supportive Infrastructure |
Table 1’s modified logic model provides a high-level view of our Library’s priorities in a given period and details their alignment to long-term strategic priorities. On an annual basis, the focus areas may change as the Library meets its goals. Adjustments to the logic model will be necessary, and they indicate the Library’s strategic progress.

The data collection, analysis, and validation of our logic model occurred through our Library’s organization renewal process, which followed three phases built sequentially from each other. In phase 1, we conducted a leadership, advisory, and program structure analysis that employed a Library and university-wide input process to identify our organization’s strategic and assessment needs. In phase 2, we completed leadership renewal planning and strategic priority setting. This work was a collaborative effort among Library managers and staff. We defined a new leadership and advisory structure for organizational decision-making, leadership training, communication, and collaboration. In phase 3, we implemented the organizational renewal plan and recruited new senior leaders for the re-envisioned administrative portfolios. This phase implemented the Library’s new strategic priorities, including aligning priorities to university priorities, developing a leadership structure to support priority areas, and modifying program structures to support the new strategic vision. After the Library completes this third phase, we will define procedures for regular assessment, strategic priority setting, and multi-year planning.

2.3. Application
Organizational review processes can be detail-focused and complex. When coupled with strategic planning and organizational change implementation, it can be challenging to track and assess the impact of the organizational changes. In our experience, the logic model served as a unifying framework for planning and assessment throughout our organizational review process. It allowed us to frame organizational changes in the context of our strategic priorities and intended outcomes. The model served as a map for focusing on user-centered outcomes and the broad organizational structure. Additionally, the logic model was a structured and holistic framework for managing Library-wide and program-specific assessments. In the next section, we describe how the logic model benefitted strategic, leadership, and organizational planning during the UC San Diego Library's organizational renewal.

3. Findings
The logic model's principal contribution to our organizational renewal process was in providing a unified way to manage and assess our complex, multi-phased, and interconnected planning activities. Table 2 summarizes three essential features of logic models and describes their contributions to our Library's strategic, leadership, and organizational planning.
Table 2. Logic model contributions to strategic, leadership, and organizational planning at the UC San Diego Library

<table>
<thead>
<tr>
<th>Logic model features</th>
<th>Strategic planning contributions</th>
<th>Leadership planning contributions</th>
<th>Organizational planning contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focuses on user change outcomes</td>
<td>Frames strategic priorities in a manner that resonates with users and external stakeholders</td>
<td>Aligns leadership conversations around the mission and strategic priorities</td>
<td>Facilitates the design of organizational structures to support strategic priorities and users’ needs</td>
</tr>
<tr>
<td>Connects Library activities to broader organizational impact</td>
<td>Provides a built-in implementation and assessment roadmap for strategic planning</td>
<td>Ensures clear pathways among leadership, management, and matrixed advisory structures</td>
<td>Provides a roadmap for prioritizing work based on outcomes and resources</td>
</tr>
<tr>
<td>Provides a holistic, structured planning process</td>
<td>Serves as a guiding document to build shared understanding and support decision-making</td>
<td>Contextualizes leadership roles around organizational activities and priorities; Provides assessment methods for leadership roles</td>
<td>Facilitates operations-level evaluation activities that support a broader assessment of Library outcomes</td>
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</table>

3.1. Strategic planning contributions
Strategic plans are simultaneously roadmaps for action, marketing documents, and tools for aligning with stakeholders, users, and the broader organization. Planning processes typically aim to resonate with users’ interests and employ a multi-stage input process and comprehensive validation. Additionally, many strategic plans define procedures and assessment mechanisms to implement the vision. Over time, strategic plans serve essential communication and coordination roles that align the organization with its users and stakeholders.

The logic model framework helps balance a strategic plan’s multiple roles as an action roadmap, marketing document, and alignment tool. First, by using user-change-focused outcomes as the primary impact frame, the logic model frames priorities in a way that connects with users and stakeholder communities. With outcomes defined at a high level, the validation processes can be highly inclusive, contributing to sustained buy-in and understanding.

Second, the logic model’s resources, activities, outputs, and outcomes framework can structure strategic plans with detailed implementation and assessment procedures. Furthermore, the framework defines different assessment areas, making it possible for projects and programs to select assessment methods that make sense for them.
Finally, the logic model serves as a relatively simple, transparent information tool. It supports communications with users by exploring user outcomes, and it supports communications with organizational programs and partners by exploring work activities and outputs. In serving as a bridge between the high-level intended outcomes of an organization and the more detailed daily work needed to achieve those results, the logic model provides a way to balance the call to action with less risk of overwhelming detail. Together, these features contribute to a shared understanding across the organization and its stakeholders and support decision-making across organization levels.

3.2. Leadership planning contributions
Logic models provide a framework for leadership decision-making around reporting lines (direct, indirect, or matrixed), shared governance, and organizational advisory roles. At the UC San Diego Library, leadership planning occurred in the context of multiple leadership vacancies. Additionally, findings in a preliminary organizational assessment indicated that select programs were under-resourced and that there were opportunities to improve the Library’s broad decision-making and internal communication approach.

The logic model was a useful tool for keeping strategic priorities and organizational contexts in mind during leadership planning, with the following benefits:

- Provides ways for staff at all organizational levels to understand and discuss how their work connects to leadership decisions and actions
- Ensures leadership structure, communication, and management methods align with the Library’s work and operations
- Clarifies where work may need to be conducted across the organization, as opposed to within a specific program
- Provides a logic-based tool to support delegated decision-making

In the UC San Diego Library’s organizational renewal, the logic model framework provided a straightforward way to define senior leadership roles and focus areas. For example, it was easier to explore the implications of direct, indirect, and matrix reporting roles when long-term outcomes and strategic priority areas are clearly defined. An unexpected result of this process is that it pivoted leadership portfolio planning from a resource or input-based focus to a strategic priority focus. Subsequently, this shift supported clearer framing of senior leadership positions around priorities and long-term outcomes.

In summary, the logic model was instrumental in aligning conversations around the Library’s mission, strategic priorities, and operational context. It supported the definition of clear pathways between leadership, management, matrixed advisory structures, and program staff. Defining these connections will serve future assessment of the impact of leadership roles.

3.3. Organizational planning contributions
Organizations often identify changes to their internal structure and operations to support a strategic plan, leading to subsequent organizational planning. However, to make changes at the operational level, leadership needs a clear understanding of intended strategic outcomes, which may not always surface in strategic planning processes. In the context of UC San Diego, the Library had undertaken a significant restructuring approximately 5 to 7 years before this strategic
planning process. We needed to assess these changes' impact to ensure that the Library has adapted to the previous restructuring and is responsive to new directions. Several guiding principles stood out for us in this assessment:

1. Gather input from across the campus organization to study our Library as a whole and gain a fuller understanding of the changes' broader impact.
2. Clarify our approach to direct and matrix-based management and decision-making, especially when our Library required organization-wide resources to support an essential activity or output.
3. Incorporate and align the Library's priorities and activities to the campus's critical goals, including student success; diversity, equity, and inclusion; and supportive infrastructure.

The logic model provided a useful lens for viewing proposed organizational changes in three key ways. First, the model diagrams a path from a strategic priority to resources, activities, and outcomes. Making this connection supports decision-making and resource allocation that center on user support and long-term outcomes. Second, just as in the case of leadership planning, where outcomes-aligned planning resulted in greater trust and delegation among staff, the logic model framework supports the definition of specific projects and roles in organizational planning. Third, the logic model supports nuanced assessment across multiple organizational levels. For example, the model identifies areas for measurement (resources, activities, outputs) and links them to an outcome, helping determine Library impact. Additionally, the logic model clarifies assessment targets and goals, such as the quality of work activity and the achievement of long-term goals.

4. Value and implications

4.1. Value of logic models to organizational renewal
As discussed in the findings, the logic model provides several benefits to strategic, leadership, and organizational planning. In this section, we explore the broader value of this tool.

*Anchor daily operational activities to broad, long-term impact*
By centering strategic planning on operations and activities and aligning organizational planning to long-term outcomes, logic models provide a valuable perspective on the Library’s role and work. As service organizations who work in the context of larger university missions, it is essential for libraries to have clearly articulated organizational outcomes around user change and broader campus goals. Similarly, the Library needs to monitor and adapt in step with campus changes. And by anchoring Library outcomes to long-term campus goals, we can support the right priorities while also exercising latitude to meet changing needs and trends within our profession and organization.

*Coordinate planning with contextual and additive assessment mechanisms*
Using logic models as a planning framework, we found that the defined organizational outcomes laid the groundwork for evaluation, continuous improvement, and future organizational development. Additionally, the outcomes serve as indicators of progress and help identify course corrections in a changing environment. Through a qualitative lens, the Library’s logic model also
speaks to our general support of campus goals without detailed quantitative assessment. In other words, the logic model helps answer the “so what” question at a macro level.

The logic model also provides a way to connect Library activities to institutionally-valued metrics – such as time to degree and student engagement, while remaining focused on the work and assessment indicators appropriate for the Library. There is no precise quantitative measure in most institutions that connects Library instruction, research assistance, information resource access, or events to campus metrics. Libraries can relate to these metrics by defining their services, programs, and resources in the context of these broader goals and assessing the delivery and impact of its outputs and services on how well the Library supports general campus outcomes.

Facilitate communication of our organizational work
Logic models are a highly-distilled yet easily expanded strategic planning framework. By taking the step of grounding the logic model to campus-defined priorities and outcomes, libraries can create a direct link between their goals, work, and internal results with user and campus outcomes. Additionally, the fact that the logic model is user impact-focused means that communicating this perspective is more resonant with all stakeholders. One final challenge that libraries face in strategic planning is that we are large complex organizations, difficult to unify under a single set of priorities. For libraries, the logic model serves as a unified framework that focuses on long-term outcomes. The very different programs and projects within a library can see the connection of daily operational work to long-term outcomes.

4.2. Limitations and resolution
While we found the logic model useful for our strategic, leadership, and organizational planning, there are a few drawbacks and disadvantages. First, logic models invite a high-level perspective that may overlook daily operational details around resources and outputs. However, folding every Library activity to the logic model can work against its legibility and utility as a communication tool and cohesive strategic document. To counteract this risk, libraries could keep the framework defined at a high level and rely on the underlying program management to support detailed planning. Additionally, the UC San Diego Library employed different logic model frameworks to fit distinct needs and contexts, varying between Library-wide and specific project perspectives.

Second, logic models can become obsolete if the context changes or if priorities shift over time. We mitigated this risk by keeping the Library-wide model intended for high-level, multi-year planning and creating a framework that allows focus areas for individual years.

Finally, as in all strategic planning exercises, gathering a broad range of perspectives and building consensus around priorities and intended outcomes can be challenging. Additionally, making decisions about which priorities to include or which outcome areas to focus on requires an engaging and meaningful process. While the logic model provides a construct to support more detailed organizational planning, it lacks a significant structure for determining priorities. To address this shortcoming, we could rely on broader organizational goals, employ prioritization frameworks, or engage in consensus-building activities.
4.3. Adoption by academic libraries
In the UC San Diego Library context, the logic model framework emerged as a guiding structure in the middle of our planning process, precisely as we defined new strategic priorities. The logic model supported the definition of renewed priorities, leading to logical and practical strategies for leadership and organizational planning.

Logic models have advantages for academic libraries over other strategic planning frameworks, addressing some of our unique challenges. For example, as service-focused, activity-centered organizations, libraries often assess a specific activity's success but not its broader impact on a user community. The logic model addresses this issue by building in the assessment during the planning process and forcing the alignment of activities and outputs to broader outcomes. In another challenge, academic libraries are often acting within the context of larger campus priorities and often only show indirect relationships between library investments and general campus goals. By grounding library resources, activities, and outputs to campus outcomes, logic models are a bridge for libraries to show broader impact.

5. Conclusion
Our organizational renewal case study documents the findings and recommended practices for multi-faceted library planning using logic models. We found that the logic model provided a framework to unify strategic, leadership, and organizational planning. The key benefit of this framework is the alignment of daily library activities with long-term outcomes and campus strategic goals. Additionally, the logic model was a useful communication tool about our priorities and specific efforts throughout the planning and stakeholder engagement process. Our process also found that we needed to avoid overloading the logic model with extraneous details and update it regularly to reflect current priorities and activity areas.

Our review of other libraries and non-profits who have used logic models in strategic planning identified a wide range of approaches, indicating the tool is flexible and requires adaptation to be meaningful. This case study presented some techniques to support logic model adoption, including (a) focusing on high-level priorities over specific services and activities; (b) summarizing inputs, activities, and outputs to optimize the level of detail shared in a plan; and (c) focusing on user condition changes in the initial planning.
Endnotes


Bibliography


