## Metrics and the Process Hierarchy

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June 2020



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#### **INTRO**

Metrics can increase an organization's understanding of their business performance, help them meet their objectives and enhance their strategic and informed decision-making.

How can metrics do all this you ask?

It starts with figuring out what to measure. Process Maturity is a key part in this.

We will start our journey with reviewing the UC Berkeley's Process Maturity Pathway. This will give you a sense of how the relationship between metrics and process changes as process maturity evolves over time.

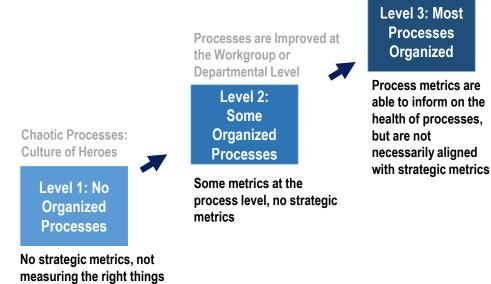
Lastly, we'll introduce you to what a logic model is and how that interacts with metrics and outcomes to measure what really matters.

# Metrics & the Process Maturity Pathway

01

#### **METRICS & THE PROCESS MATURITY PATHWAY**

UC Berkeley is at Level 2, moving toward Level 3 in the pathway, and it is imperative we make the transition across the gap.





## Process Level Architecture Tree

02

#### PROCESS LEVEL ARCHITECTURE TREE STRUCTURE

The four-level process level architecture structure on the right is an end-to-end process hierarchy, which is a sequence of functional processes which create a value chain delivering outcome(s) defined and expected by a customer.

Process hierarchy helps structure, measure and manage performance, including the higher level KPIs, from a specific internal or external customer's perspective.

### Level 0 Enterprise Process (Core Business Area) (e.g. Research Administration, Human Resources, Procurement) Level 1 **Macro Process** (e.g. Propose to Close {P2C}: Proposal Development, Award Set-up, Award Management, Closeout) **Detailed Process** (i.e. The Daily Value Chains of Level 1's – The Research

Administration Swim lanes)

Level 3

**Sub-Process** 

## Berkeley Business Process Management Office

#### EXAMPLE OF PROCESS LEVEL ARCHITECTURE TREE

Measuring activities happen at Level 1 are considered as Process KPIs which capture the overall health of the process stream. Measuring activities happen at Level 2 or Level 3 are considered as Process Health Metrics.



#### Research Administration - Propose to Close (P2C)



**L**2

A1
<b>Proposal</b>
Development

#### A2 Award Set-up

#### A3 Award Management



Locate Funding/RFP/Opportunities
Exceptional PI Status
Budget Development & Admin Sections
Subaward Commitment
UCB as a Subawardee
Late Submission
Conflict of Interest (COI)
Human & Animal Subjects
Phoebe Submission to SPO

Institutional Review & Approval

Proposal Submission to Sponsor

Fund Advance
Negotiation
Revisions & Just in Time
Acceptance of Award/PAS
Budget Setup
Subaward Request & Setup

HR Appointments (H2T)
Procurement (P2P)
Build and Maintain Financial Projections
Financial Reporting and Record Retentions
Monitor & Approve Expenditures, Recharges
Subaward Monitoring & PO Management
Summer Salary
Funding Changes: EDC, PET, Journals
Award Modification & Amendments
Effort Reporting & Certification

Invoicing & Reporting

Final Invoicing & PO Closeout
Process Adjustment Journals
Submit Closeout in BFS
Final Financial & Technical Reporting
Invention & IP Disclosure
Deficit Clearing

# Logic Model

03



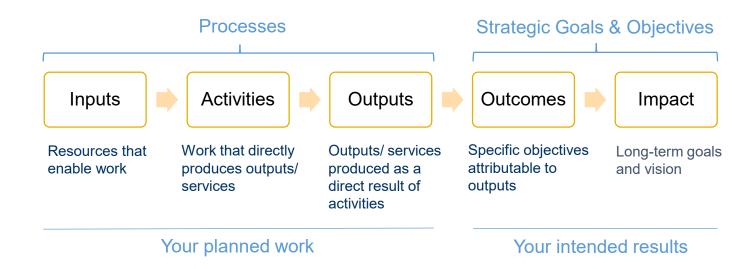
#### WHAT IS A LOGIC MODEL

#### Logic models articulate what an organization is doing to achieve its intended goals.

It's a pipeline framework commonly used in the program evaluation field to highlight any disconnects between what a department is actually doing versus what it is trying to achieve.

We use the logic model with our workgroups to help them articulate and agree as a group on what it is that each department does to achieve its goals.

It also help us to organize the parts of the organization we might measure.



Inputs are the resources that let us do our work. For example, staff, info systems, institutional knowledge.

These are all things that are required to do our business, they are our inputs.

Activities are the work that produces our outputs or services, it is our business processes, the things our staff do everyday: submit reports, complete transactions,

answer phone calls.

Outputs are produced as a direct result of our activities and services, examples are completed transactions, a service provided, or a report that has been submitted.

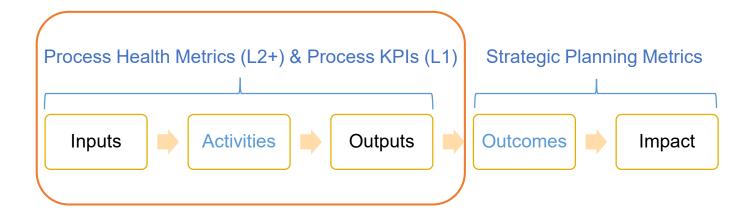
Our outcomes are our specific objectives that we are aiming to achieve and can be directly attributed to the outputs or services

we produce. Some outcomes are accurate financial reports submitted on-time, service tickets responded to with in service level agreements.

The **impact** is our long-term goals that our outcomes rollup to are often vision or mission statements.



#### HOW LOGIC MODELS HELP TO MEASURE WHAT MATTERS



Once we mapped out the department's measurable parts, we're able to see what types of metrics relate to each part of the department's logic model.

First we have **Process Metrics** (aka operation or efficiency metrics). This type of metrics measure how well the steps of a process are completed.

They can be useful for monitoring processes. The Process Metrics can be broken down to **Process Health Metrics** and **Process KPIs**. An example of a Process Health Metrics is number of transactions completed. An example of a Process KPI is average turnaround time of an end to end process.

Then we have **Outcome Metrics**, which measure how well actions achieve their intended strategic objectives.

They are useful for results-based management. An example of an Outcome Metrics is decrease average turnaround time of a transaction by 10% in 6 months.

The difference between the Process Metrics and Outcome Metrics is that with outcome metrics we are looking at a targeted goal, not merely an observed measurement.