Business Process Primer –
Core Concepts and Practical Techniques

Prepared and presented for ING Belgium by
Adept Events & Clariteq Systems Consulting Ltd.

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Developer/instructor background…
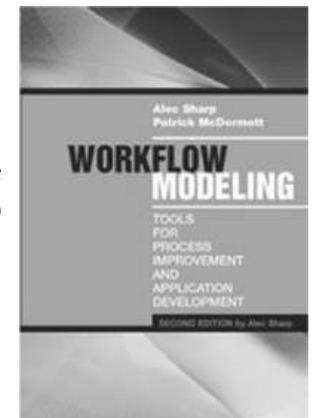
Alec Sharp, Clariteq Systems Consulting – *asharp@clariteq.com*

- 40+ years experience as an independent consultant:
  - *Business Process Change* – discover, model, analyse, and design/redesign processes
  - Concept Modelling (Business-friendly Data Modelling)
  - Application Requirements Specification +
  - Facilitation & Organisational Change
  - Project Recovery
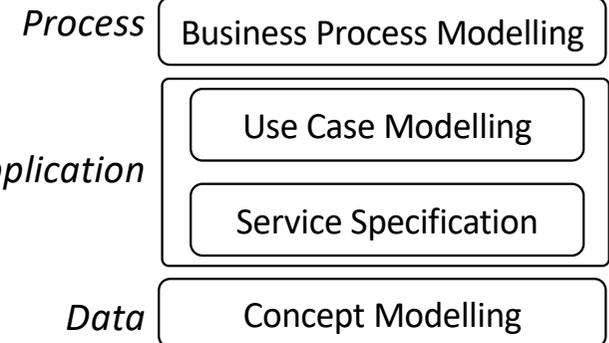
- Consulting, teaching, speaking globally

- Awarded DAMA's global Professional Achievement Award for contributions to "human-friendly" data modelling

- Author of "Workflow Modeling"
  - best-selling book on process modelling & improvement
  - second edition – 2009 (sole author, complete re-write)

Process | Business Process Modelling

Application | Use Case Modelling
Service Specification

Data | Concept Modelling

Check out the nice reviews on Amazon - http://amzn.to/dHun1o

Clariteq – small, husband & wife company, global clients

ABB (ASEA Brown Boveri)
Aflac
American Honda
AMP (Australia Mutual Provident)
BackOffice Associates
Bank of Finland
Bellrock
Booking.com
Brisbane City Council (Australia)
Canadian Natural Resources Ltd.
City of Seattle
Civica UK
Clearwater Paper
Corvias
Dell
DHL Express
Dutch National Bank
Ericsson
Essity
Eurojust (European Justice Comm.)
European Central Bank
Fortum
GoFore
Helse Vest - Norway
HM Land Registry - UK
Home Depot
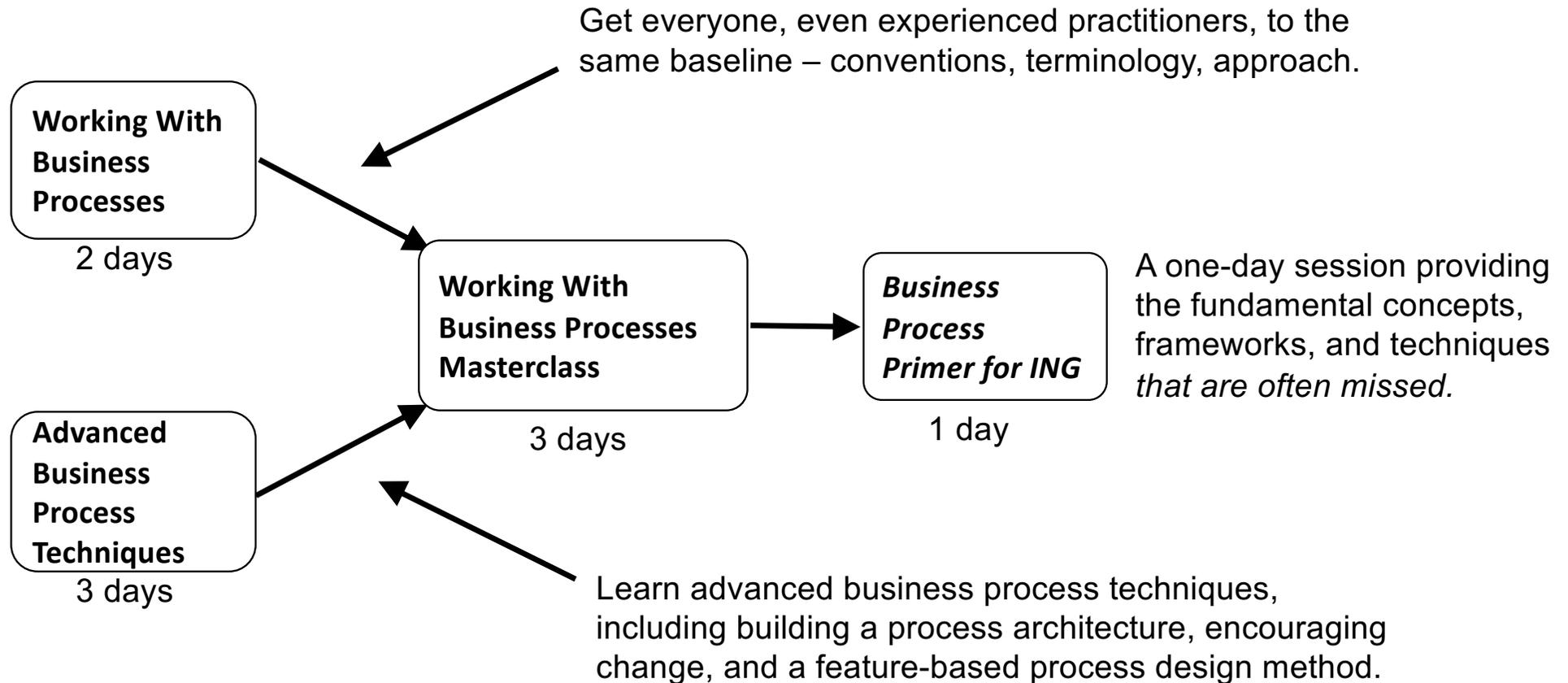Idaho Transportation Dept.
Intel
ISO New England
ING Bank

JP Morgan
Kal Tire
KONE
LGM Financial Services
Liberty Mutual
Livestock Improvement Corp.
MacDonald Dettwiler
Manitoba Public Insurance
Marathon Pipe Line
Microsoft
Ministry of Defence - UK
Ministry of Defence - NL
Ministry of the Interior - Slovakia
MTS Allstream
Nexen
Novo Nordisk
Nusenda Credit Union
OP Bank
Partner Reinsurance
Ritchie Brothers
Phillip Morris
Roche Diagnostics
Salt River Project
Saudi Aramco
Serco
Shell
Sparta Consulting
State Street Bank
SunGard
SVB (NL)

Synechron
Sysdoc
Talent Base
Teck
The MUSIC Group
The Seattle Times
UK Government
University Med Ctr Groningen
YIT(FI)
Washington Gas & Light

– *Higher Education* –
Carnegie Mellon University
Cornell University
Douglas College
Gonzaga University
Humboldt State University
The Jackson Laboratory
The Ohio State University
Portland State University
Salt Lake Community College
Southern NH University
University of Arkansas
University of British Columbia
University of the Fraser Valley
University of Maryland
University of Utah
University of Washington
Utah Valley University

CLARITEQ

www.clariteq.com

Background for this seminar

Get everyone, even experienced practitioners, to the same baseline – conventions, terminology, approach.

Working With Business Processes

2 days

Working With Business Processes Masterclass

3 days

Business Process Primer for ING

1 day

A one-day session providing the fundamental concepts, frameworks, and techniques *that are often missed.*

Advanced Business Process Techniques

3 days

Learn advanced business process techniques, including building a process architecture, encouraging change, and a feature-based process design method.

Notes:
- This is very compressed, but you will learn techniques that are *immediately useful*.
- If you are serious about the Business Process space, there will still be value in attending the February *Working With Business Processes Masterclass*

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Themes and overview...

Three main themes:

1. *Simple* techniques, *rigorously* applied, help us achieve *more* in *less time*.
2. *Communication with* and *engagement of* the people who *do* the work is essential.
3. A *holistic* not *technocratic* approach, including *human*, *social*, & *organisational* factors.

And finally… **YOU:**

- Name – how should I address you?
- Role / job title and organisation
- Brief description of your work
- A topic you are especially interested in?
- *Please keep your intro under 1 minute*

> **Section 1 – Fundamentals**

- Four things you *need* to know about *business process*es
- A proven, agile methodology for *Business Process Change*

> **Sections 2 to 4 – Techniques**

2. Identifying true, end-to-end, cross-functional *Business Processes*
3. Process modelling for *humans*
4. Overview of the transition from *as-is* analysis to *to-be* design

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1 – Four things you <u>need</u> to know about Business Processes

1. It's essential to have clarity on what a *business process* really is

2. Existing performance measures are often *functionally aligned* and work *against* business processes

3. Success with business processes depends on taking a *holistic view* in which six *enablers* are considered – *it's not a technocratic undertaking*

4. Business processes can't be great at everything – a single *differentiator* or *strategic discipline* should be chosen

1. Confusion – what **is** a "business process?"

1. It is essential to have clarity on what a *business process* really is

2. Performance measures may be *functionally aligned* - work *against* business processes

3. Success with business processes requires a *holistic view* in which *six enablers* are considered

4. A business process can't be great at everything – a single *differentiator* must be chosen

In the early 1990s, Michael Hammer popularised the focus on *business process*
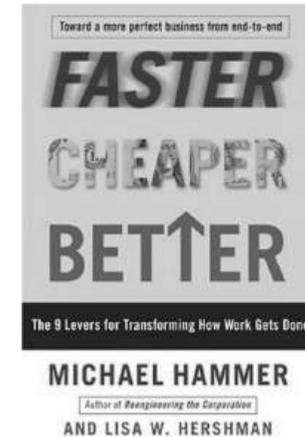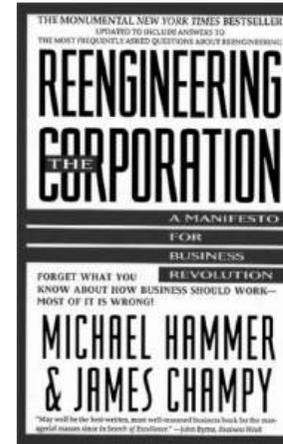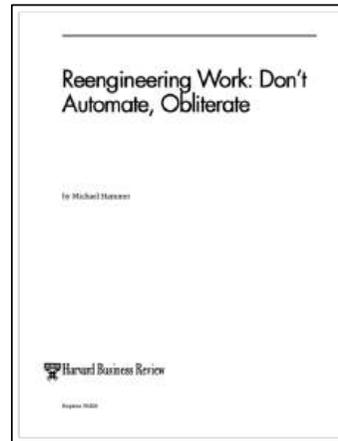
Introduced core terminology:

- end-to-end, cross-functional, functional silo, ...

- even *business process*

Still, people and organisations miss the point...

Lesson #1 – Never assume everyone agrees what a "process" is

We need some help with our *Product Lifecycle Management* <u>process</u>.

I spend all day writing business processes, like the <u>process</u> to *Revise Product Brochure Image.*

Not a single process – it's a *family* of multiple business processes (a *process area* or *process domain*)

A whole *spectrum* of interpretations of *process.*

Not an entire process – it's a *procedure* providing instructions for a single task (SWI – standard work instructions)

Seek balance – a "business process" lies between the extremes

Most people hear *process* and think *procedure!*

The key issues – granularity and orientation

A real life (and expensive!) example

As part of a massive system implementation, a global manufacturer identified the *business processes* that were expected to improve:
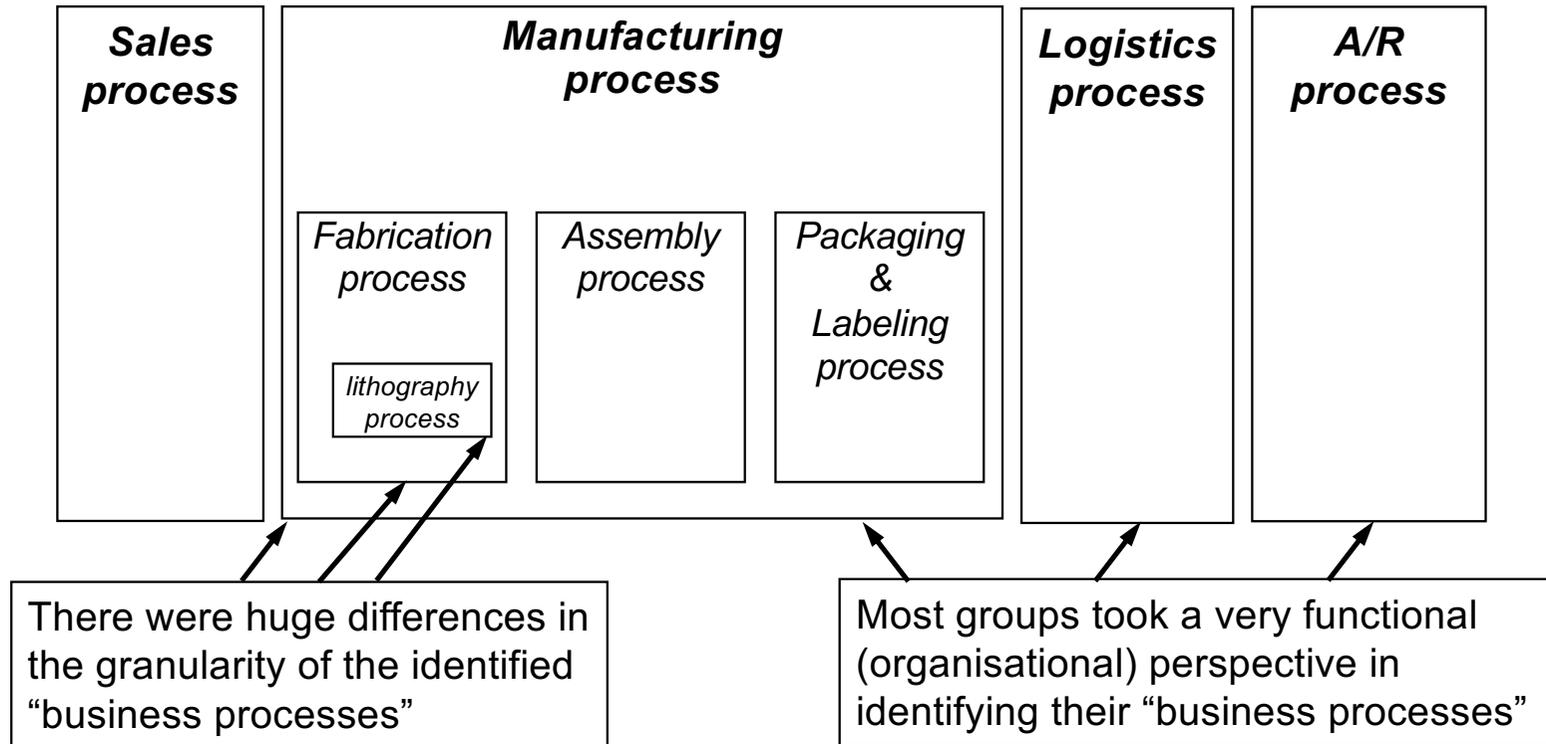
The problem? *These aren't processes – they're functions!*

The "real" business processes were missed

Everyone confused "process" and "function." None of the actual end-to-end processes were correctly identified.

Sales function	Manufacturing function		Logistics function	A/R function

Business process: *Fulfill Customer Order*
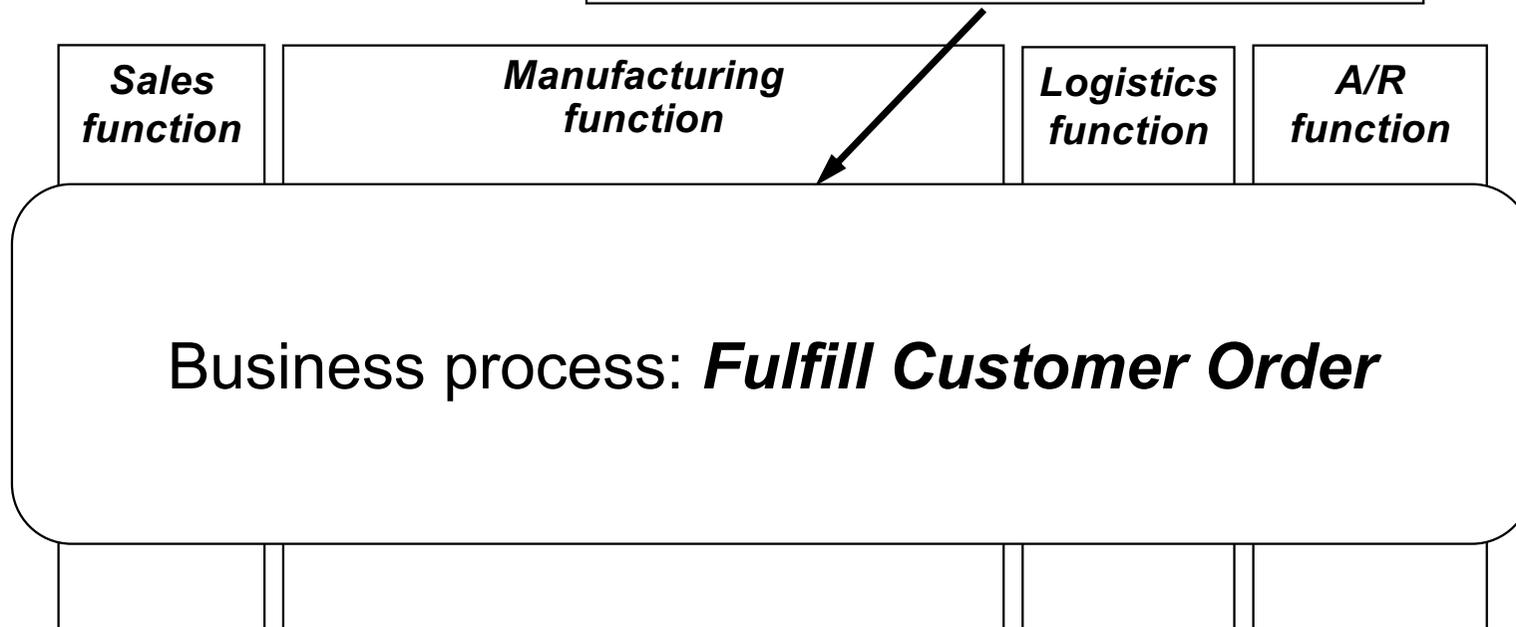
"Business Process" =
end-to-end, cross-functional, business process.
"Larger" than people think – from *initial* trigger to *final* results.

Discuss - what are the boundaries of the process?

e2e business process:
Fulfill Customer Order

Trigger

Result

What are the boundaries of the process?

e2e business process:
Fulfill Customer Order
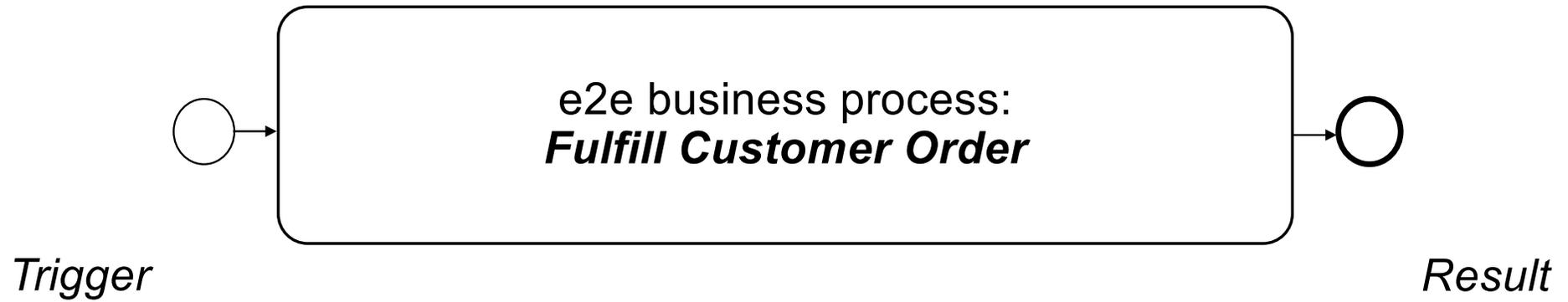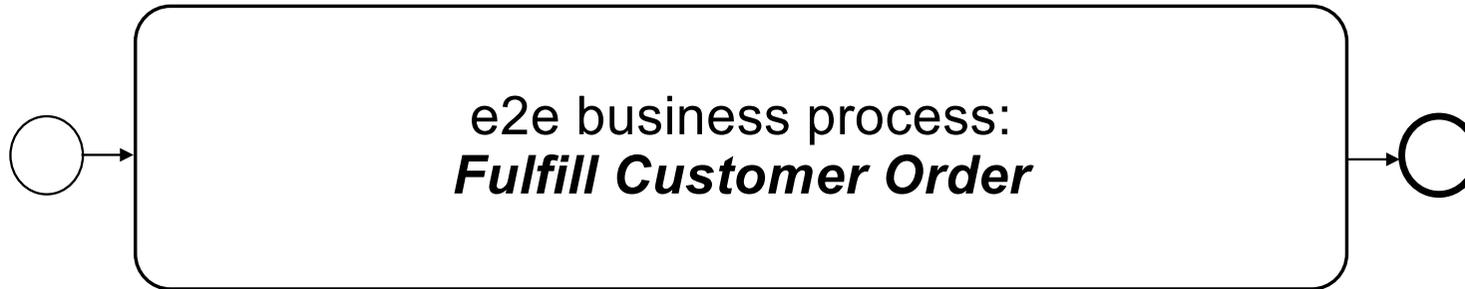
Trigger

Order received? *No.*

Before that…

- Contract is Finalised

- Price & Schedule are Negotiated

- Specifications are Confirmed

And before that…

- Demand is Signalled. *Yes.*

Result

Order is Shipped? *No.*

Order is Received? *No.*

Order is Received, Tested, and Accepted? *Yes.*

Any other results?
Yes, for other stakeholders.

Always trace to the *earliest* trigger,
and to the *final* results for *each* stakeholder.

Process Scope Model – "what" first, "who and how" later

I build a
Process Scope Model & a
Process Summary Chart on
~100% of *Project Recovery*
assignments -

Trigger:
Demand is signaled

Customer | **Sales** | **Manufacturing** | **Logistics** | **Finance**

Cases:

Fulfill Customer Order

New

Standing

Replenishment

Negotiate Order Terms | Finalise & Book Order | Develop Order Build Plan | Stage Order Material | Fabricate Order | Assemble & Test Order | Package & Label Order | Deliver Order | Collect Order Payment

Move Order Work in Process (WIP)
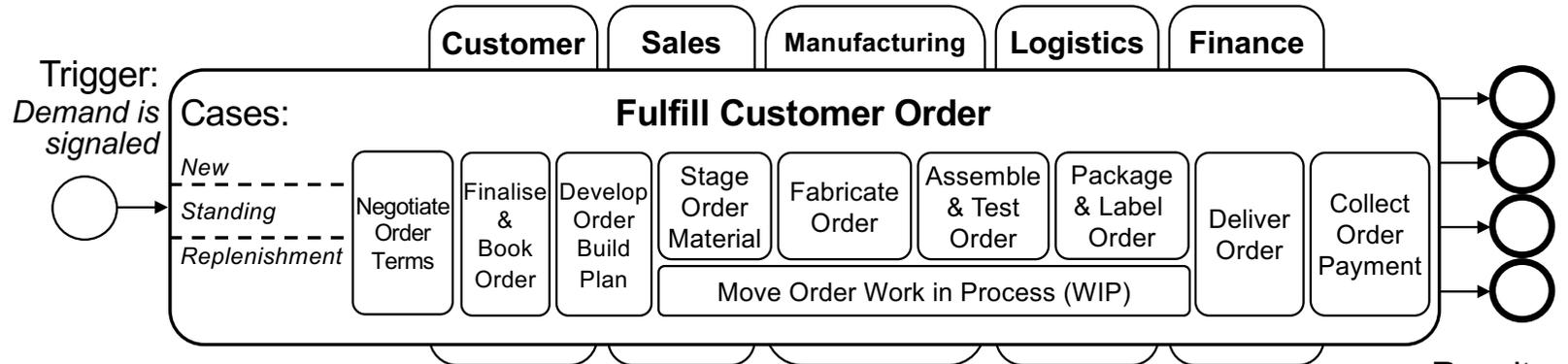
"TRAC" –

1 – **T**riggering event or events

2 – **R**esults: final outputs
- result(s) received by the process' primary customer
- result(s) for other stakeholders
  (performers, owner, supplier, regulator, …)

3 – **A**ctivities: 7 +/- 2 phases, milestones, or sub-processes
- a phase achieves a significant intermediate result
- simply ask the participants for ~5 to 7 milestones within the process

4 – **C**ases
- main variations, e.g. "*new* order" vs. "*standing* order"
- verb – *qualifier* – noun

5 – Functions or Organisation Units

6 – Actors and responsibilities

7 – Systems, data sources, other mechanisms

essence of the process (**"what"**)

as-is elements of the process,
for clarification (**"who and how"**)
(6 and 7 not shown)

Results:

Customer:
Goods received,
tested, & accepted

Owner:
Payment received

Performer:
Commission credited

Industry Association:
Order stats reported

Always construct a
Process Scope Model & a
Process Summary Chart before
diving into Workflow Modelling /
Swimlane Diagramming

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Resolving the situation

SAP was implemented without clarity on "process" –

Sales "process"	Manufacturing "process"	Logistics "process"	A/R "process"
Sales module	Manuf'g module	Logistics module	Accounts Receivable module
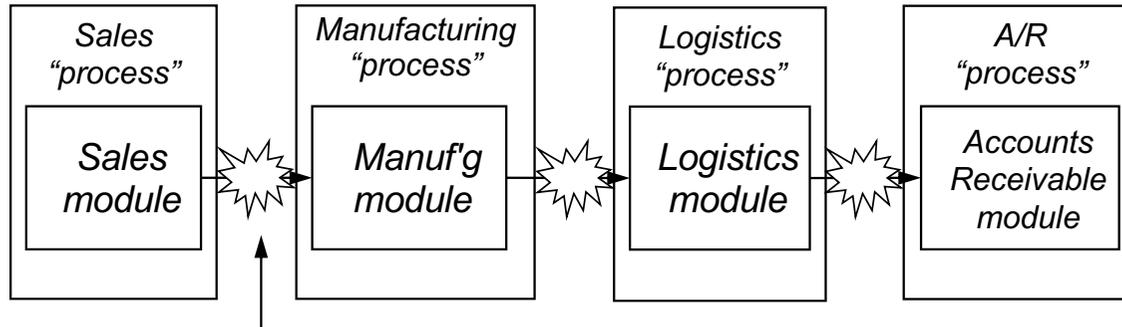
Poor performance

Conflicts: timing, coding, terminology, data formats, *performance targets*, …

SAP re-implemented in a process-driven configuration –

Sales function	Manufacturing function	Logistics function	A/R function

end-to-end process: **Fulfill Customer Order**

Sales module → Manuf'g module → Logistics module → A/R module
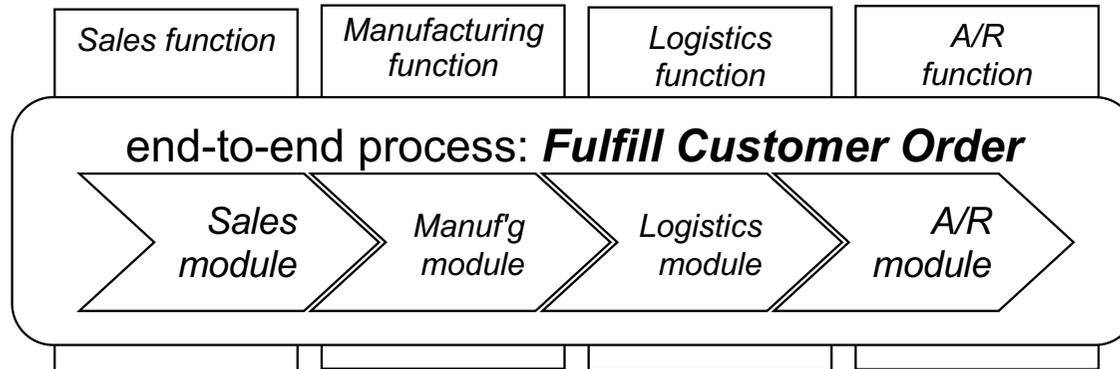
Great performance

Same software, radically different outcomes

The essential framework

Business Process:
- a sequence (or set) of *activities* (steps and decisions,)
- initiated in response to a *triggering event*,
- that achieves a defined *result* for each process stakeholder

~~Input – Process – Output~~

Triggering Event → **A business process –** a sequence (or set) of activities (steps and decisions) → Final Results

End… …to end.
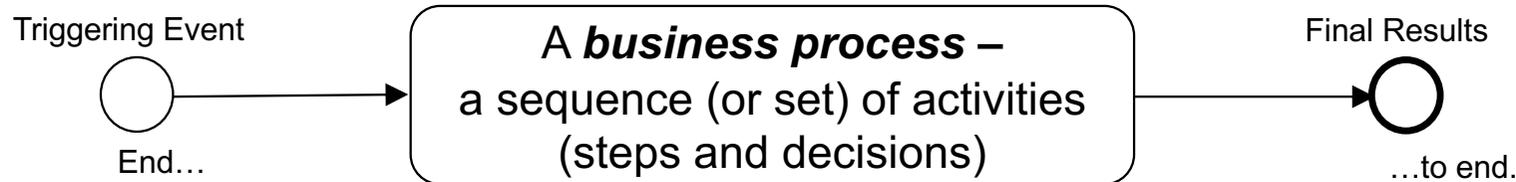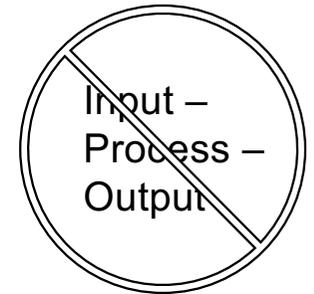
- Three types of events:
  - Decision-based (action)
  - Time-based (temporal)
  - Data-based (conditional)
- The *earliest* triggering event

- Important processes are virtually always cross-functional and involve multiple actors / roles
- May be a defined *sequence*, or a more ad hoc *set* of activities
- First, identify *"what"* it includes – Trigger, Results, Activities, Cases ("TRAC")
- Later, we add *"who and how,"* then map the process flow, if there is one

- Three types of results:
  - A service
  - A good
  - Information
- The *final* result

"What" before diving into the "who and how"

Naming conventions will make life easier

1. The process name **must** indicate the expected result
   - Name potential process in "active verb – noun" format
   - Restate that name as a result ("noun is verbed")
   - Ensure this is the intended result of the process: *discrete*, so results are *identifiable* & *countable*

   - **No mushy verbs:** manage, monitor, administer, handle, track, support, maintain, etc.
   - **Active verbs only:** *Evaluate* Prospect, *Acquire* Customer, *Fill* Customer Order, *Resolve* Customer Issue, …

   - Applies to business processes, phases (subprocesses,) activities, steps, …

2. Name process from customer's perspective (what do they want from the process?)

3. Name process in the singular

Acquire Customer

A (single) Customer is Acquired

~~*Manage Renewals*~~

Renewals are Managed

Renew Policy

A Policy is Renewed (what the Policyholder and the company want)

~~*Handle Application*~~

Issue Permit

~~*Staff Organisation*~~

Assign Worker
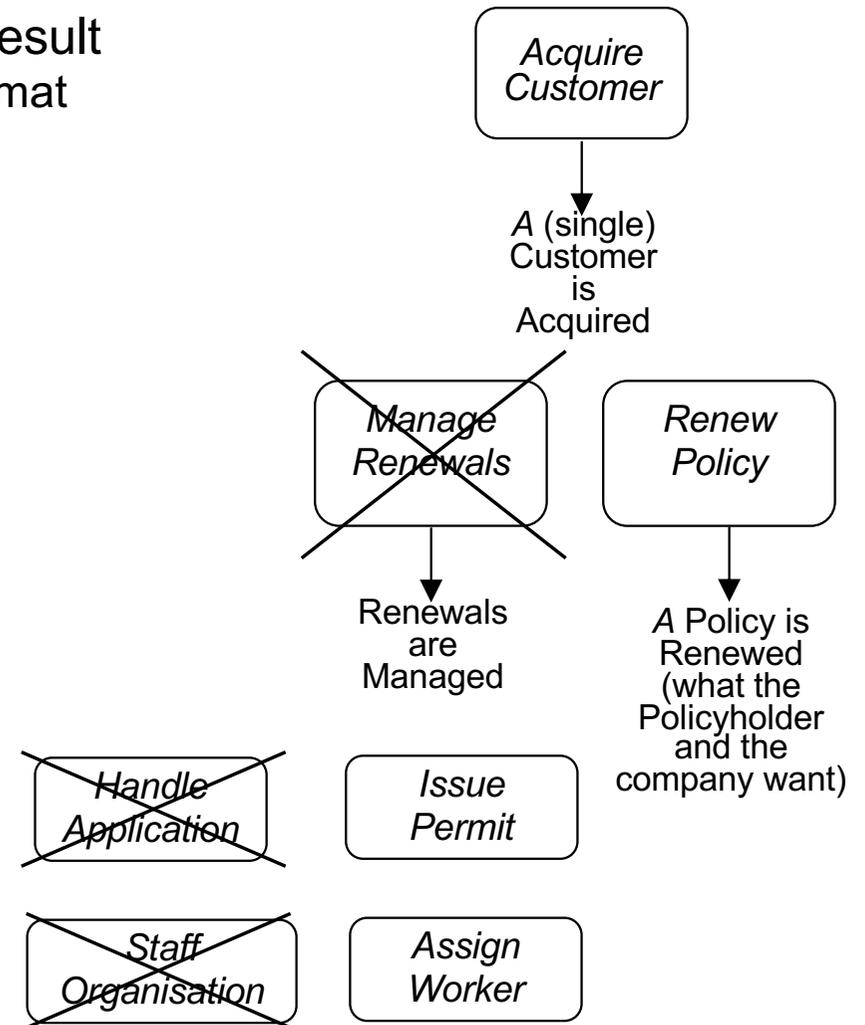
If there's time, an example from higher education

As part of a strategic initiative to address falling graduation rates, a university took a process-based approach to determine why they were failing to admit the most promising candidates…

The "processes" that were initially identified…

Recruiting

Admissions

Financial Aid

Orientation

Student Employment

Registration

Housing

Assessment
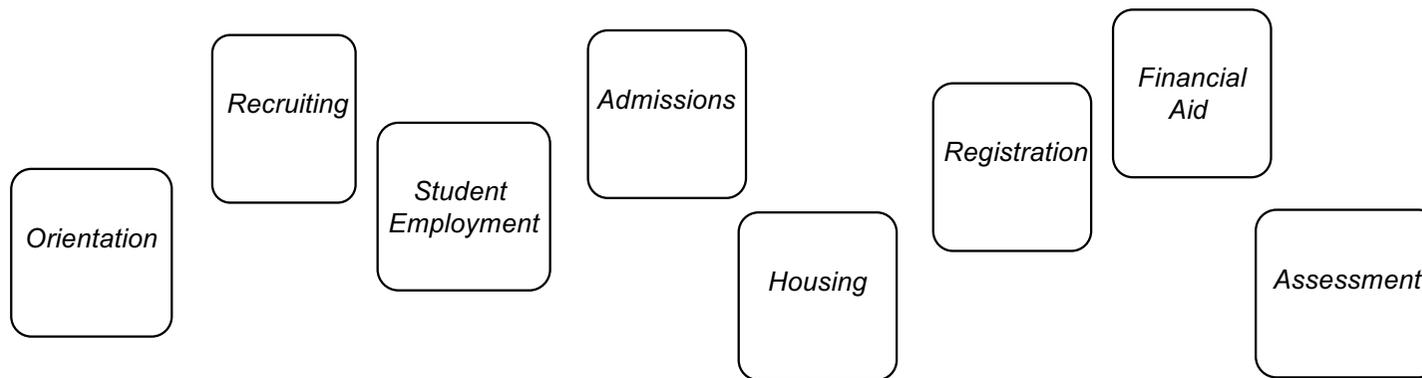
Are these good business processes? *NO!!!*
- not named with an "active verb and noun"
- each of these is a department or function.

We convened a facilitated session to determine the "real" process

Rename, reduce, refine, and sequence

Orientation

Recruiting

Admissions

Recruit Prospect

Complete Application

Admit Student

Housing

Registration

Financial Aid

Student Employment

Award Student Financial Aid (and Employment)

Assessment

Register Student in Classes

Complete Pre-Enrollment Requirements

Grant Student Housing

Assess Applicant

Sequenced:

Admit and Onboard a Student

| Recruit Prospect | Complete Application | Assess Applicant | Admit Student | Award Student Financial Aid | Grant Student Housing | Complete Pre-Enrollment Requirements | Register Student in Classes |

Token: A student,
from prospect to registered

From the session – "Is it a single X-functional process?"

Triggers   The process   major Activities   Results
                                       (or phases, milestones,
                                       subprocesses…)
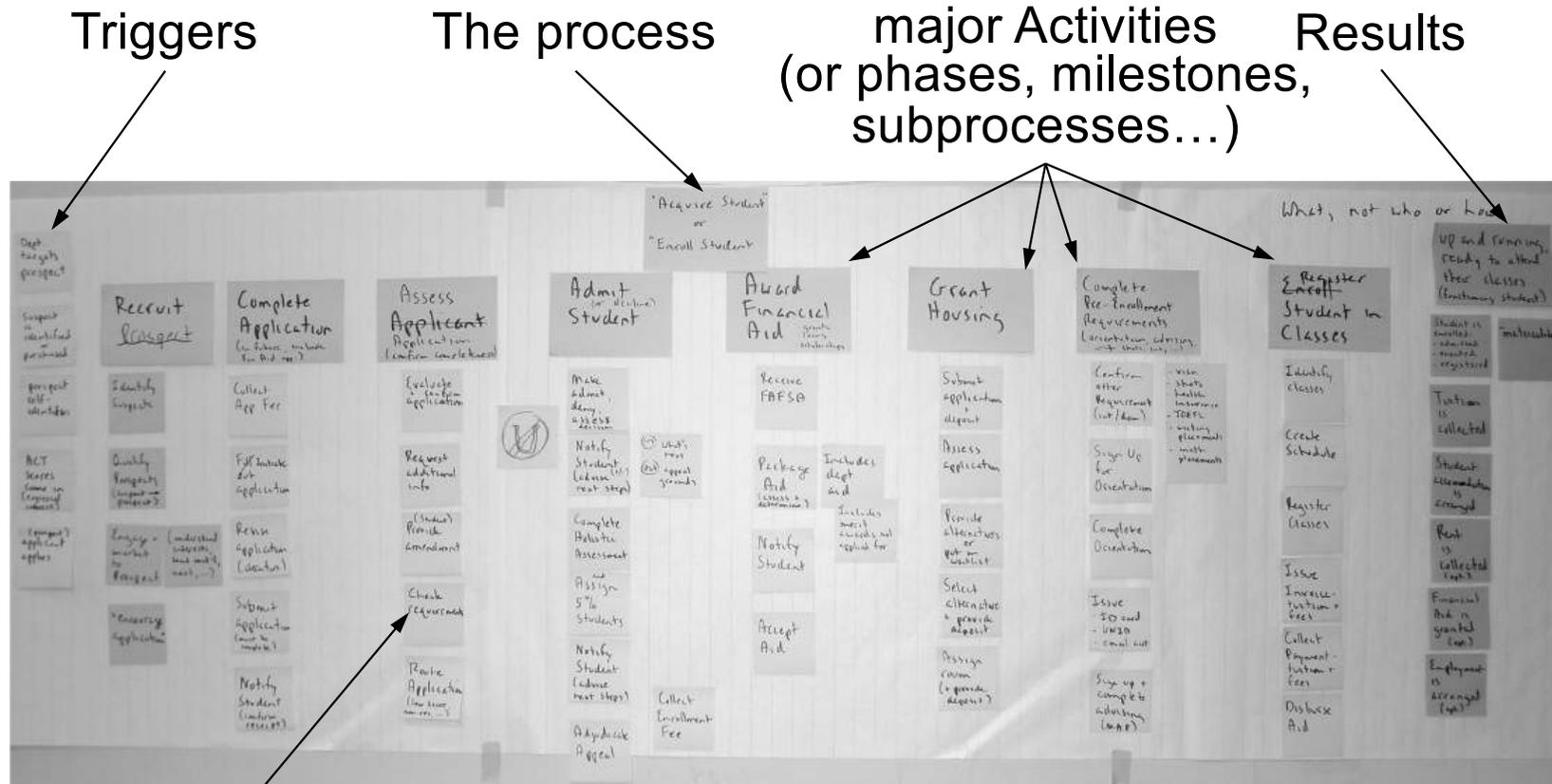
More detailed
activities

Focus is on "what, not who or how."

Note the high-tech tools.

Very iterative, but only 90 minutes!

The cleaned-up "Process Scope Model"

Recruit, Admit, and Onboard Student

| Recruit Prospect | Complete Application | Assess Applicant | Admit Student | Award Financial Aid | Grant Housing | Complete Pre-Enrollment Requirements | Register Student in Classes |
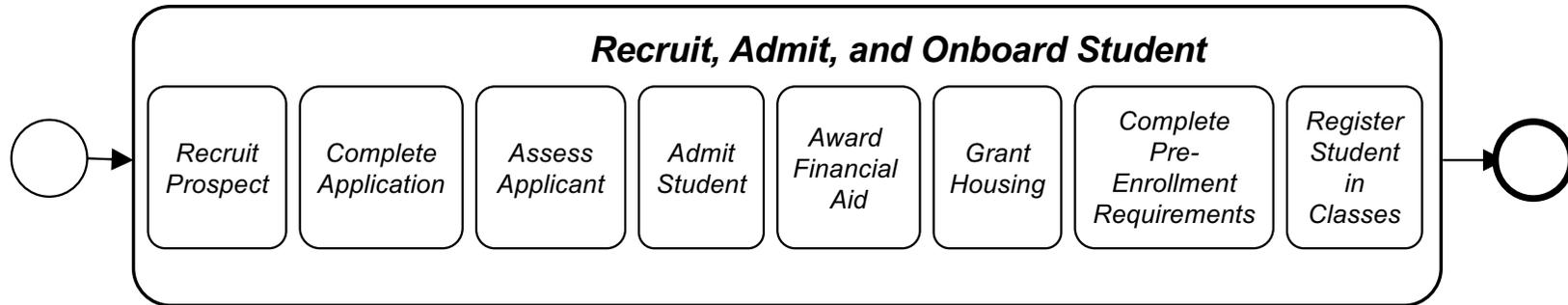
Triggering Events:
- Dept. targets prospect
- Suspect is identified or purchased
- Prospect self-identifies
- ACT scores come in
- Prospect applies
- …

Cases:
- In-state undergrad
- Out-of-state undergrad
- …

Final Results:

"Up and running," ready to attend classes:
- Student is:
  - admitted
  - oriented
  - registered
- Tuition is collected
- Student accommodation is arranged
- Financial aid is granted
- Employment is arranged
- …

TRAC –

- Trigger
- Results
- Activities (~5-7 phases or milestones)
- Cases (major Variants)

The cleaned-up "Augmented Scope Model"

Recruit, Admit, and Onboard a Student

Recruit Prospect	Complete Application	Assess Applicant	Admit Student	Award Financial Aid	Grant Housing	Complete Pre-Enrollment Requirements	Register Student in Classes

Recruit Prospect
- Identify Suspects
- Qualify Prospects
- Engage Prospect
- etc.

Complete Application
- Collect App Fee
- Initiate Application
- Submit Application
- etc.

Assess Applicant
- Confirm Application
- Evaluate Application
- Verify Req'ts
- etc.

Admit Student
- Make admit / deny / assess decision
- Notify Student
- Complete Integrated Assessment
- etc.

Award Financial Aid
- Receive FAFSA
- Assess Need
- Determine Aid
- etc.

Grant Housing
- Provide Housing Req'ts
- Assess Application
- Provide Alternatives
- etc.

Complete Pre-Enrollment Requirements
- Confirm Other Requirements (visa, shots, insurance, writing, …)
- Register Orientation
- Complete Orientation
- etc.

Register Student in Classes
- Identify Courses
- Create Class Schedule
- Register Classes
- etc.

Who:	Registration Assistant
What:	Register Classes
How:	via Workday SRS

Typically, 5 – 7 activities identified within each major activity.
Initially just "what" (verb – noun) – later, add "who and how,"
e.g., Registration Assistant (who) Register Classes (what) via Workday SRS (how)

Identifying the functional area responsible for each activity revealed the process was massively cross-functional…

Process Summary Chart shows an astonishingly cross-functional process

Recruiting	Admissions	Financial Aid	Registrar	Orientation	Housing	Athletics	Medicine (Ac.)	Equity and Diversity	Student Affairs	Research	Marketing and Comms	Income Accounting	Accounts Payables	Academic Affairs	Departments	University College	Information Systems	Ancillary Services

Recruit, Admit, and Onboard a Student

Recruit Prospect	Complete Application	Assess Applicant	Admit Student	Award Financial Aid	Grant Housing	Complete Pre-Enrollment Requirements	Register Student in Classes

Without explicitly addressing the end-to-end process:
- almost no chance the student experience is positive
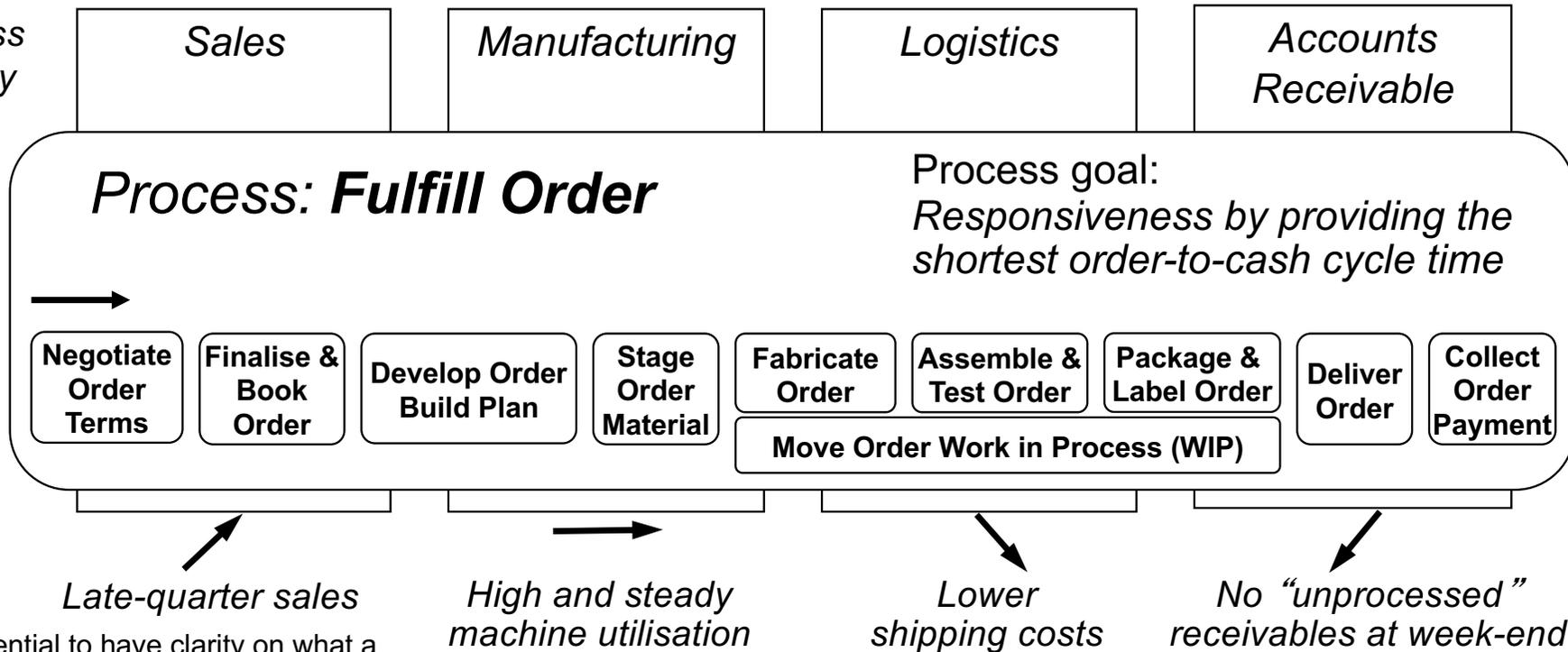- very frustrating for the people doing the work
- almost no chance the university is going to meet its goals

Two key points:
1. *Functions are doing their best to optimise their activities*
2. *A multitude of dis-integrated systems and data sources are being used*

The point – the execs said "Get on with it! There's no need to burn up $50,000 on a business case."

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2. A common obstacle – misaligned performance measures

A Process Summary Chart

Sales	Manufacturing	Logistics	Accounts Receivable

Process: Fulfill Order

Process goal:
Responsiveness by providing the shortest order-to-cash cycle time

| **Negotiate Order Terms** | **Finalise & Book Order** | **Develop Order Build Plan** | **Stage Order Material** | **Fabricate Order** | **Assemble & Test Order** | **Package & Label Order** | **Deliver Order** | **Collect Order Payment** |

Move Order Work in Process (WIP)

Late-quarter sales   *High and steady machine utilisation*   *Lower shipping costs*   *No "unprocessed" receivables at week-end*

1. It is essential to have clarity on what a *business process* really is
2. Performance measures may be *functionally aligned* and work *against* business processes
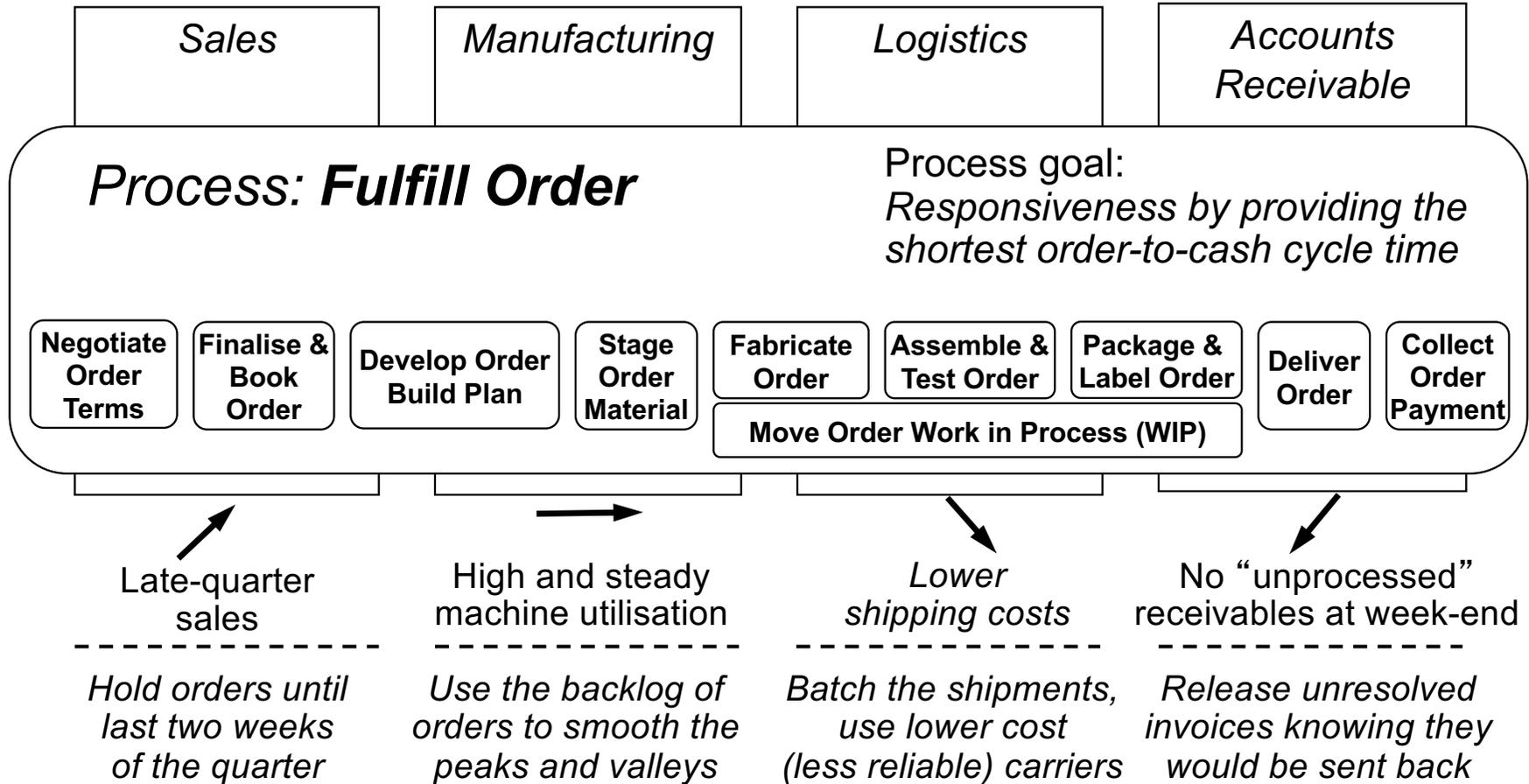3. Success with business processes requires a *holistic view* in which six *enablers* are considered
4. A business process can't be great at everything – a single *differentiator* must be chosen

But… performance measures were established *functionally, before* awareness of the *end-to-end process*
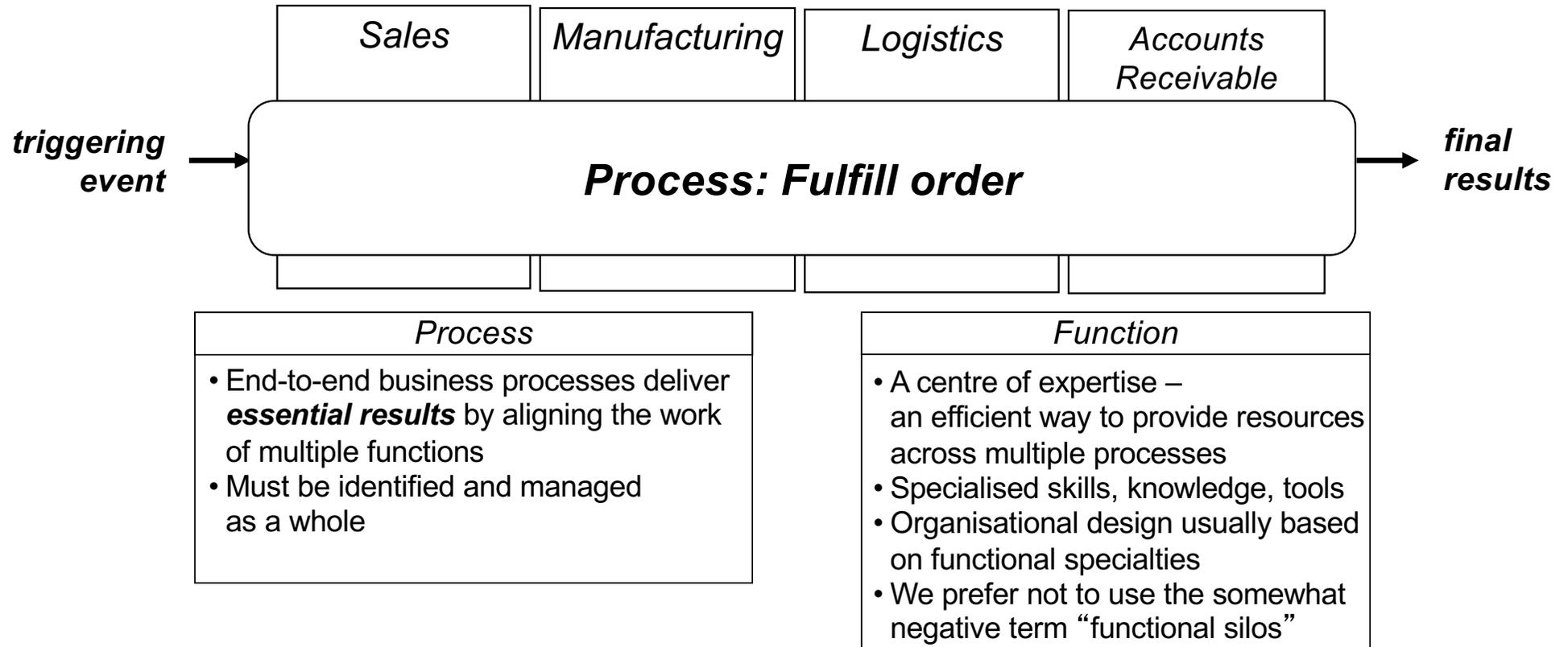
Discuss –
What are the likely impacts of these performance goals?
What will the different functions do to meet the targets?

Misaligned performance measures

Sales	Manufacturing	Logistics	Accounts Receivable

Process: Fulfill Order

Process goal:
Responsiveness by providing the shortest order-to-cash cycle time

Negotiate Order Terms | **Finalise & Book Order** | **Develop Order Build Plan** | **Stage Order Material** | **Fabricate Order** | **Assemble & Test Order** | **Package & Label Order** | **Deliver Order** | **Collect Order Payment**

Move Order Work in Process (WIP)

Late-quarter sales

High and steady machine utilisation

Lower shipping costs

No "unprocessed" receivables at week-end

– – – – – – – – – – – – – –

Hold orders until last two weeks of the quarter

Use the backlog of orders to smooth the peaks and valleys

Batch the shipments, use lower cost (less reliable) carriers

Release unresolved invoices knowing they would be sent back

Poor performance because each function was
working hard to meet *uncoordinated, functional targets*

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This <u>doesn't</u> mean functions are bad!

Sales	Manufacturing	Logistics	Accounts Receivable

triggering event →

Process: Fulfill order

→ **final results**

Process
• End-to-end business processes deliver **essential results** by aligning the work of multiple functions • Must be identified and managed as a whole

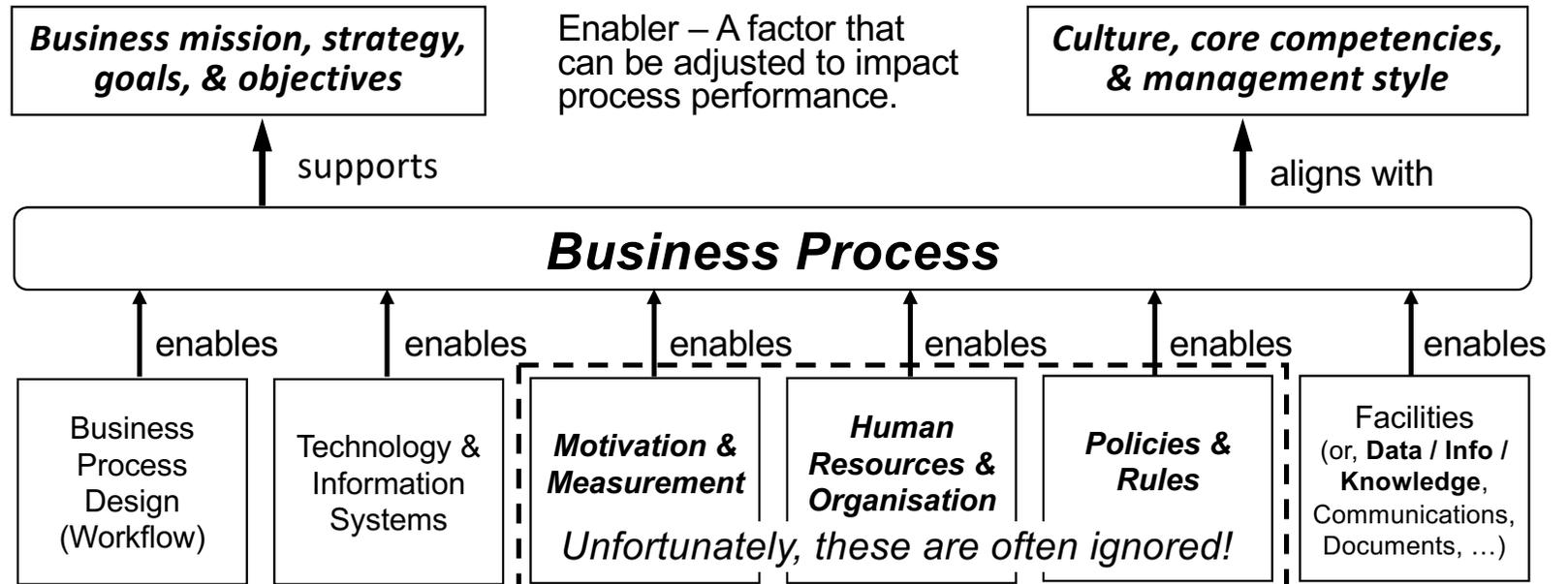| Function |
|---|
| • A centre of expertise – an efficient way to provide resources across multiple processes
• Specialised skills, knowledge, tools
• Organisational design usually based on functional specialties
• We prefer not to use the somewhat negative term "functional silos" |

Ultimately, business processes are all about alignment

3. A holistic view for process analysis and design

1. It is essential to have clarity on what a *business process* really is

2. Performance measures may be *functionally aligned* - work *against* business processes

3. Success with business processes requires a *holistic view* in which six *enablers* are considered

4. A business process can't be great at everything – a single *differentiator* must be chosen
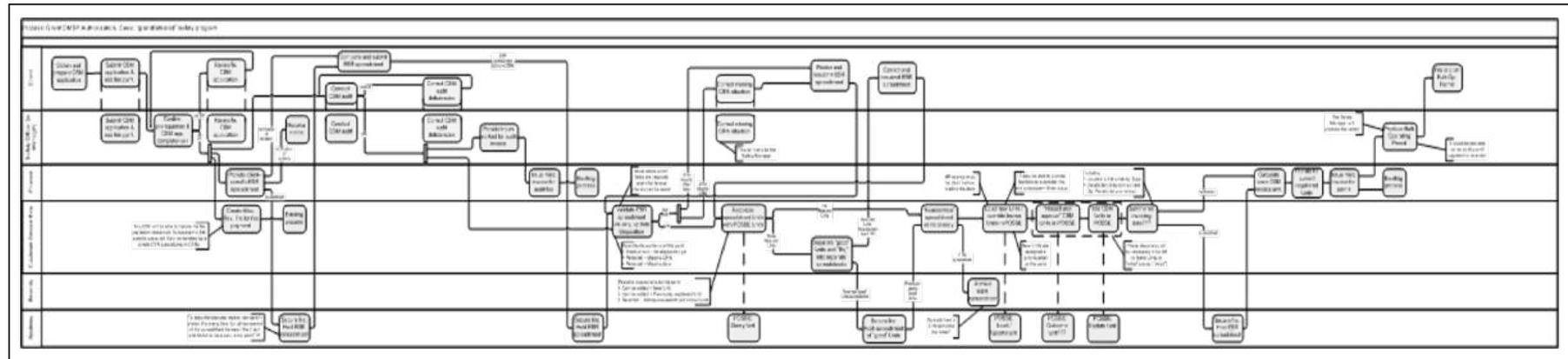
Business mission, strategy, goals, & objectives

Enabler – A factor that can be adjusted to impact process performance.

Culture, core competencies, & management style

supports

aligns with

Business Process

enables   enables   enables   enables   enables   enables

Business Process Design (Workflow)	Technology & Information Systems	*Motivation & Measurement*	*Human Resources & Organisation*	*Policies & Rules*	Facilities (or, **Data / Info / Knowledge**, Communications, Documents, …)

Unfortunately, these are often ignored!

- Roles
- Steps & decisions
- Flow - sequence and handoffs
- *Who does what when*

The usual suspects!

- Applications
- Data
- Information
- Integration
- Devices and platforms

- Assessment and incentives
- "Reward and punishment"
- Implicit and explicit
- Process KPIs vs. Function KPIs

- Recruitment & selection
- Skills
- Role design
- Organisation design
- Assignment of roles in processes

- Constraining or enforced by the process
- External (laws / regs) or internal (real / "anecdotal")

- Workplace layout
- The 40% office
- Remote hubs
- Equipment
- Fixtures and furnishings

Assess the process by *each* enabler – *one at a time* – after as-is modelling.

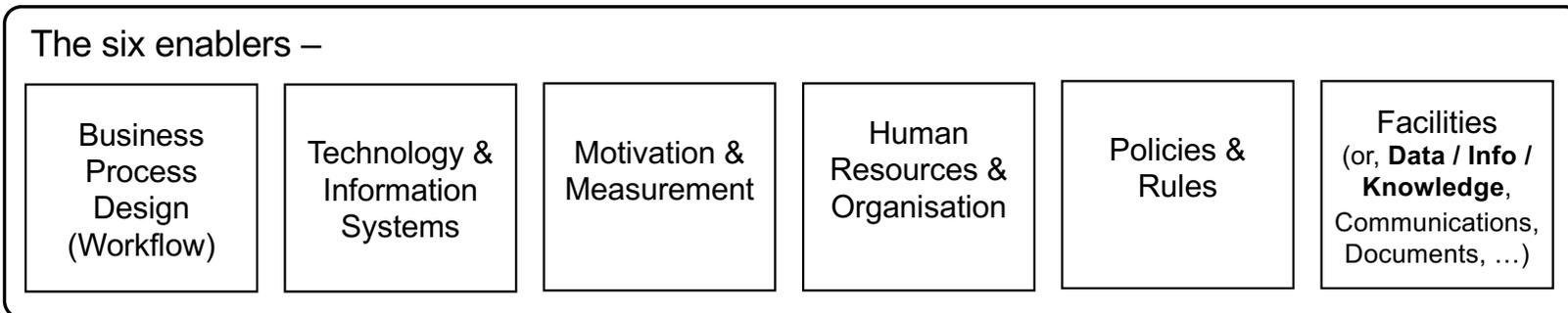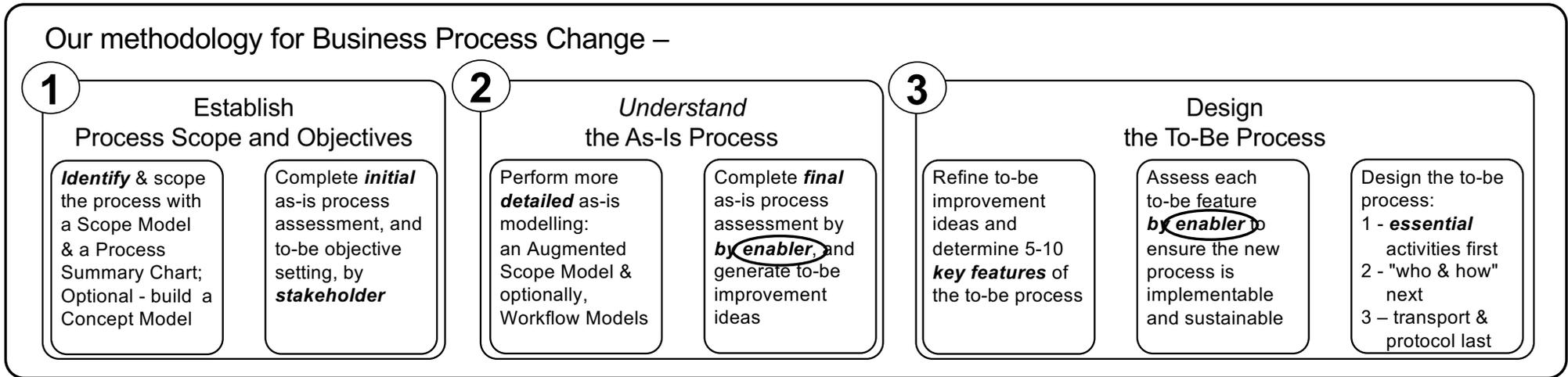# We model the as-is process to support assessment by enabler

As-is modelling maps *reality – who*, does *what*, *when*.

This supports a *fact-based* assessment of the *as-is* process by enabler.

Process Workflow Design:	**Information Systems & Technology:**	**Motivation & Measurement:**	**Human Resources & Organisation:**	**Policies & Rules:**	**Facilities (or other):**
Is each step adding value, placed at the right point in the process, sequential or parallel as appropriate, performed by the best role, etc.?	Are the process, the steps, and the actors supported by the right systems and technology?	How is the performance of the steps, the actors, the participating functions, and the process measured, and what are the consequences?	Are roles suitably broad, are organisations designed properly, and are roles & skills deployed well into the process?	What policies or rules , whether internal or external, constrain or are enforced by the process, and what is their impact?	Are the layout & furnishings optimal or do they impede the process? (Many clients instead use this enabler to consider data, info, and knowledge.)

Enablers play a key role in phases 2 & 3

Our methodology for Business Process Change –

1   Establish
Process Scope and Objectives

- **Identify** & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model
- Complete **initial** as-is process assessment, and to-be objective setting, by **stakeholder**

2   *Understand* the As-Is Process

- Perform more **detailed** as-is modelling: an Augmented Scope Model & optionally, Workflow Models
- Complete **final** as-is process assessment by **by enabler**, and generate to-be improvement ideas

3   Design the To-Be Process

- Refine to-be improvement ideas and determine 5-10 **key features** of the to-be process
- Assess each to-be feature **by enabler** to ensure the new process is implementable and sustainable
- Design the to-be process:
  1 - **essential** activities first
  2 - "who & how" next
  3 – transport & protocol last

The six enablers –

Business Process Design (Workflow)	Technology & Information Systems	Motivation & Measurement	Human Resources & Organisation	Policies & Rules	Facilities (or, **Data / Info / Knowledge**, Communications, Documents, …)

- Focusing on the six enablers provides a holistic view – that is the key feature of our methodology (along with simplicity)
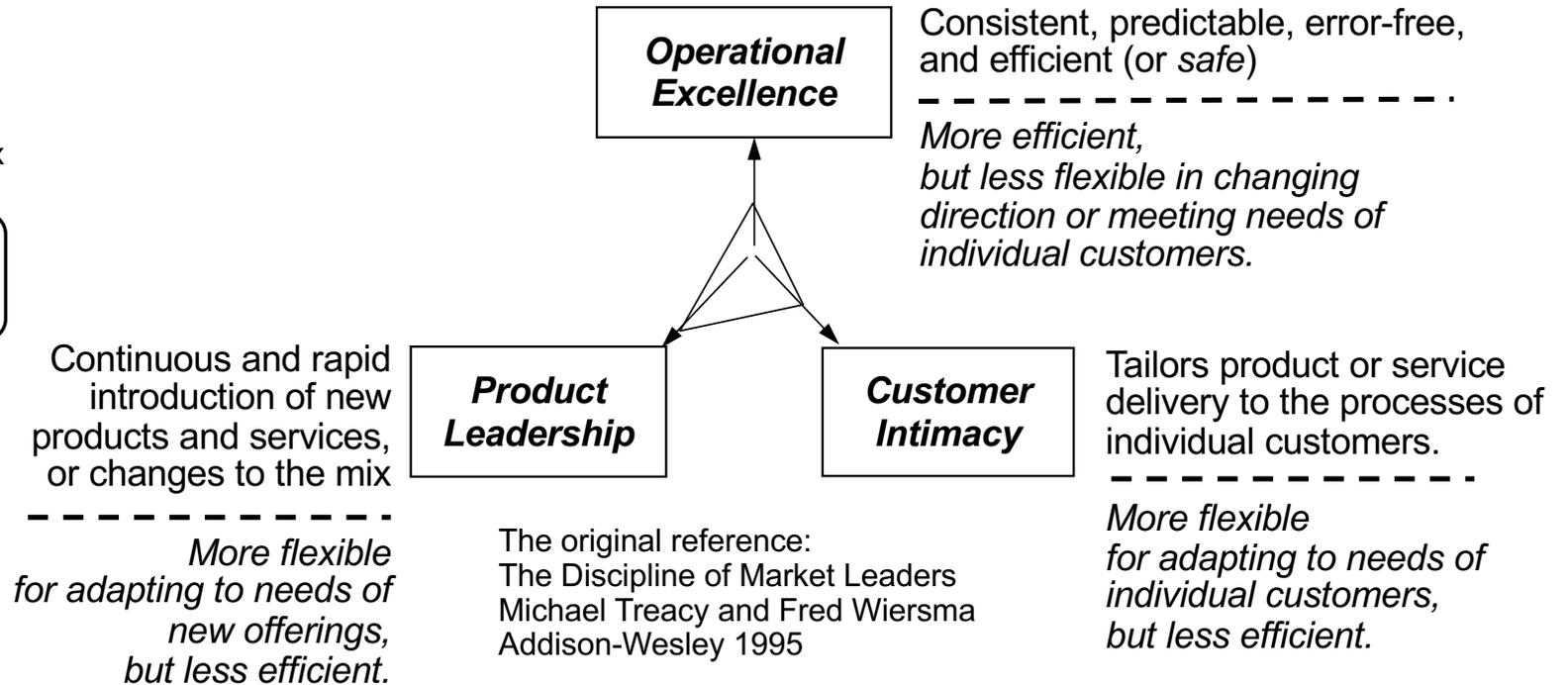- The enablers help us make the *as-is* to *to-be* transition

4. *Process goals: know your "differentiator"*

1. It is essential to have clarity on what a *business process* really is
2. Performance measures may be *functionally aligned* - work *against* business processes
3. Success with business processes requires a *holistic view* in which six *enablers* are considered
4. A business process can't be great at everything – a single *differentiator* must be chosen

As noted, this is one of the things I do on ~100% of *Project Recovery* assignments -

1. Build *Process Scope Model* & *Process Summary Chart*
2. Develop *Case for Action* – an *As-Is Assessment by Stakeholder*
3. Establish the *Differentiator*
4. *(Optionally conduct an As-Is Assessment by Enabler)*

Great processes don't try to be all things to all people – strive to be **great** at one differentiator, and **good** at the other two…

Operational Excellence

Consistent, predictable, error-free, and efficient (or *safe*)

- - - - - - - - - - - - - -

More efficient, but less flexible in changing direction or meeting needs of individual customers.

Continuous and rapid introduction of new products and services, or changes to the mix

Product Leadership

Customer Intimacy

Tailors product or service delivery to the processes of individual customers.

- - - - - - - - - - - -

More flexible for adapting to needs of new offerings, but less efficient.

The original reference:
The Discipline of Market Leaders
Michael Treacy and Fred Wiersma
Addison-Wesley 1995

More flexible for adapting to needs of individual customers, but less efficient.
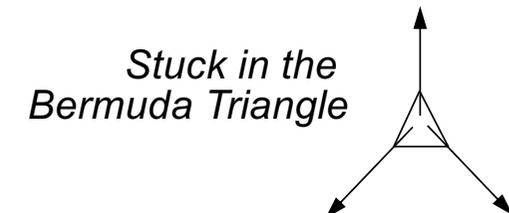
1. Concept developed for the entire enterprise, but great for individual process areas – a "signpost" for decisions on process changes.
2. Processes in an enterprise do not all have the same differentiator.
3. The Process Differentiator can change over time – *slowly!*
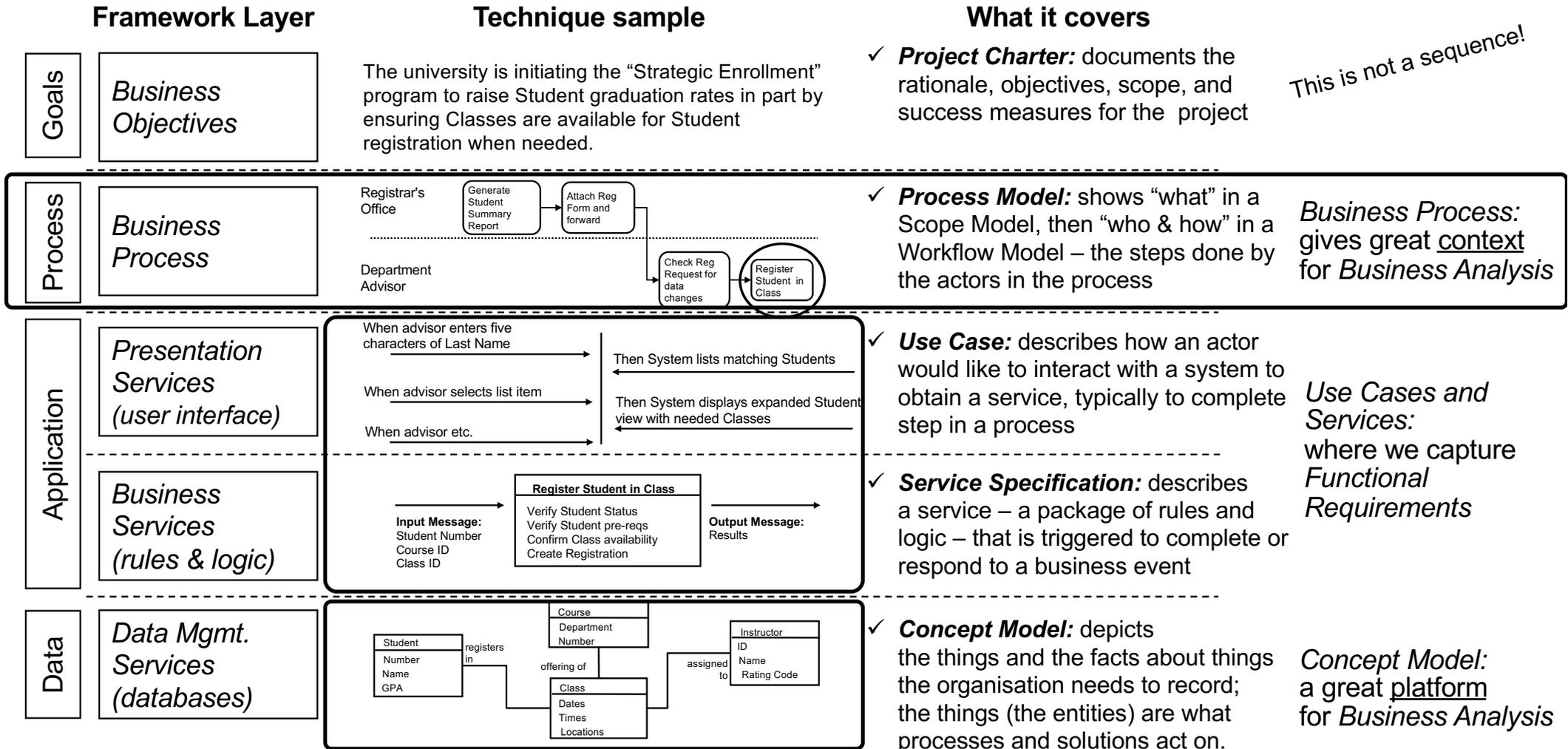
Common differentiator problems

1. Focus on the wrong differentiator

   ▪ Insurance company recruits CEO from high tech industry

   ▪ New CEO decides "innovation is everything" –
   $100M spent on
   process redesign and system development
   in support of "innovative car insurance products" –
   Product Leadership

   ▪ Total failure – customers wanted affordable,
   easy to understand, easy to buy insurance –
   Operational Excellence (Op Ex)
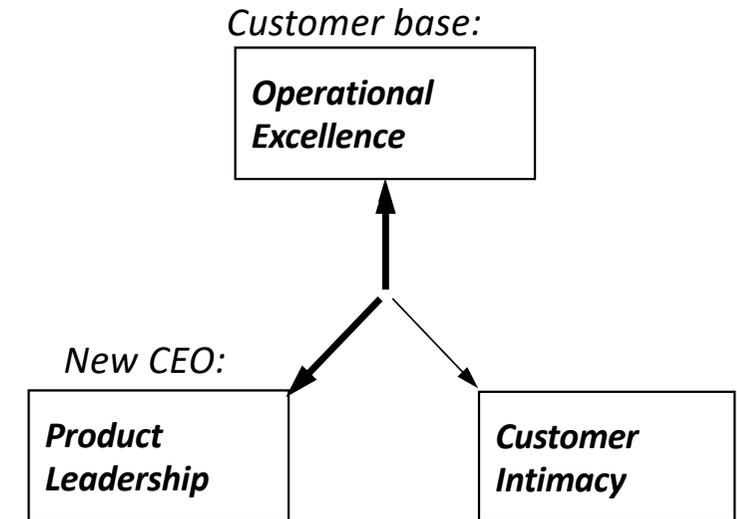
2. No differentiator or trying to excel at *multiple* differentiators –
   stressed workforce and *lower performance*
   Operational Excellence – "We must be the low-cost provider!"
   Customer Intimacy – "We must do what it takes for each client!

3. Conflicting differentiators within functions of a process –
   lower performance

Customer base:

Operational Excellence

New CEO:

Product Leadership   **Customer Intimacy**

Stuck in the Bermuda Triangle

Business Process – part of the Clariteq Framework for Business Analysis

Framework Layer	Technique sample	What it covers

Goals

Business Objectives

The university is initiating the "Strategic Enrollment" program to raise Student graduation rates in part by ensuring Classes are available for Student registration when needed.

✓ **Project Charter:** documents the rationale, objectives, scope, and success measures for the project

This is not a sequence!

Process

Business Process

Registrar's Office → Generate Student Summary Report → Attach Reg Form and forward

Department Advisor → Check Reg Request for data changes → Register Student in Class

✓ **Process Model:** shows "what" in a Scope Model, then "who & how" in a Workflow Model – the steps done by the actors in the process

Business Process: gives great context for Business Analysis

Application

Presentation Services (user interface)

When advisor enters five characters of Last Name → Then System lists matching Students

When advisor selects list item → Then System displays expanded Student view with needed Classes

When advisor etc. →

✓ **Use Case:** describes how an actor would like to interact with a system to obtain a service, typically to complete step in a process

Use Cases and Services: where we capture Functional Requirements

Business Services (rules & logic)

Register Student in Class

Input Message: Student Number, Course ID, Class ID → Verify Student Status, Verify Student pre-reqs, Confirm Class availability, Create Registration → Output Message: Results

✓ **Service Specification:** describes a service – a package of rules and logic – that is triggered to complete or respond to a business event

Data

Data Mgmt. Services (databases)

Student: Number, Name, GPA — registers in — Course: Department Number — offering of — Class: Dates, Times, Locations — assigned to — Instructor: ID, Name, Rating Code

✓ **Concept Model:** depicts the things and the facts about things the organisation needs to record; the things (the entities) are what processes and solutions act on.

Concept Model: a great platform for Business Analysis

Only four types of models vs. 14 in the UML! (Unified Modelling Language)

Key point! Everything relies on the concept model

Goals

| Business Objectives |

The university is initiating the "Strategic Enrollment" program to raise Student graduation rates in part by ensuring Classes are available for Student registration when needed.

<u>All</u> use the language and constraints of the Concept Model (the "thing model") – the ultimate "what"

2 **Process**

| Business Process |

Registrar's Office

Generate Student Summary Report → Attach Reg Request and forward

Department Advisor

Check Reg Request for data changes → Register Student in Class
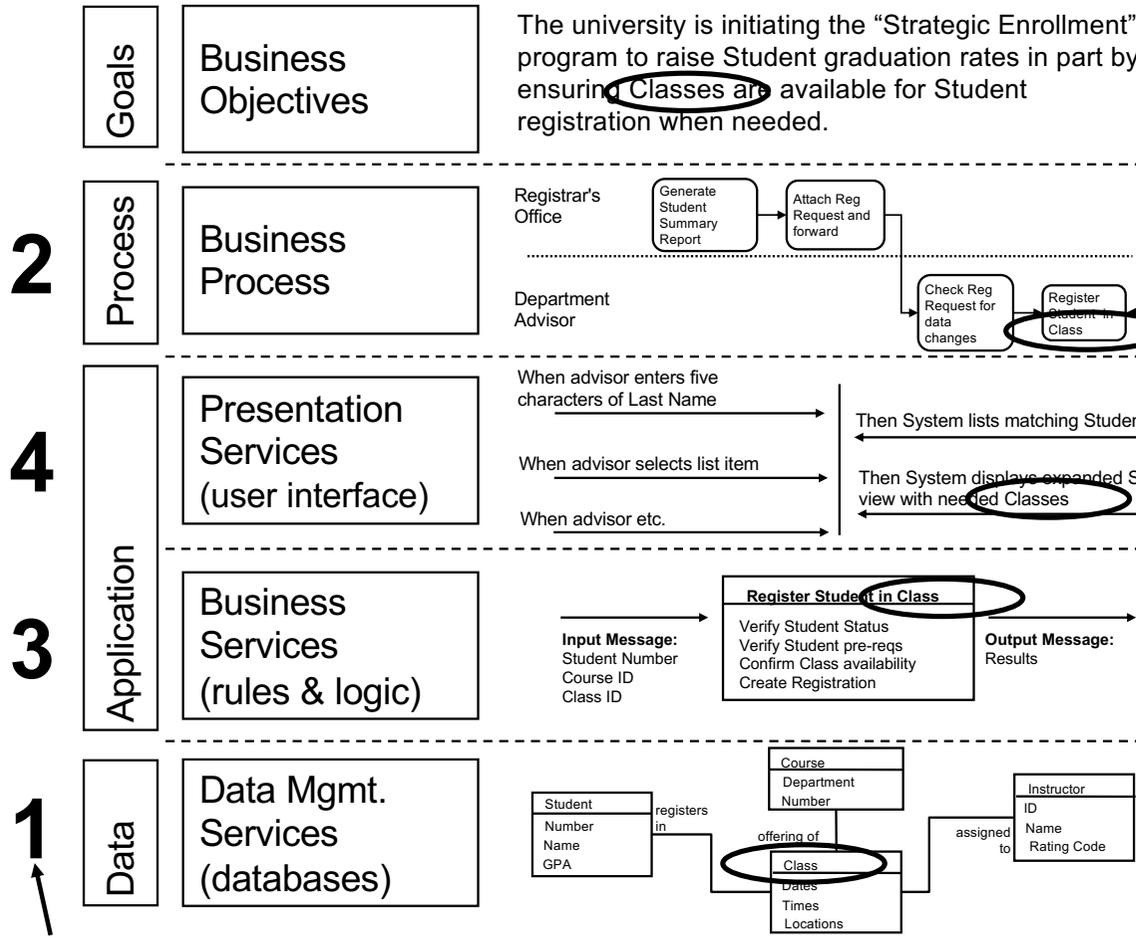
Use Cases/User Stories:
- Who (Actors) needs access to the Services, and how (Platform)?

4 **Application**

| Presentation Services (user interface) |

When advisor enters five characters of Last Name → Then System lists matching Students

When advisor selects list item → Then System displays expanded Student view with needed Classes

When advisor etc.

Use Case

actor + service + platform:
Advisor *Register Student in Class* via SRS

Verb-Noun pairs:
- The *Services* (event-handlers) that are at the heart of a *Service Oriented Architecture.*
- *Also* "building blocks" of Business Processes

3

| Business Services (rules & logic) |

Input Message:
Student Number
Course ID
Class ID

Register Student in Class
Verify Student Status
Verify Student pre-reqs
Confirm Class availability
Create Registration

Output Message:
Results

Service

verb + noun (+ noun):
Register Student in Class

1 **Data**

| Data Mgmt. Services (databases) |

Student
Number
Name
GPA
— registers in —

Course
Department
Number
offering of

Class
Dates
Times
Locations

— assigned to —

Instructor
ID
Name
Rating Code

Entity ("thing")

noun:
Class

The core *Nouns* in your enterprise. Also known as *Business Objects.*

My usual sequence

Bonus – great starting point to discover your Events/Services and Use Cases/User Stories

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Another key point! Different levels of detail for different purposes

Different models and levels of detail for different audiences and purposes.

Also applies to Use Cases, Services, and Data Models

Scope – for Planning	Concept – for Understanding	Detail – for Specification

Process Landscape (optional):

Permissions and Agreements

- Issue Product Approval
- Grant Variance
- Register Design
- Issue Installation Permit
- Issue Operating Permit
- Renew Operating Permit
- Register Procedure
- Grant CSM (Client Safety Management) Program
- Renew Client Safety Management Program

Process Scope Model:

Trigger: — **Grant CSM Program** — *Results:*
Cases:
- New
- Grandfathered
- Ownership Change

Accept CSM Application | Audit CSM Program | Verify CSM Equipment | Determine & Collect Equipment Fees | Determine & Collect Consultation Fees | Issue CSM Authorisation

Client / Agency

Main Activities (or Milestones, Phases, or Subprocesses)

Process Summary Chart:

Applicant | Customer Service | Records Management | Safety Operations | Finance

Grant Client Safety Management Program

Accept CSM Application | Audit CSM Program | Verify CSM Equipment | Determine & Collect Equipment Fees | Determine & Collect Consultation Fees | Issue CSM Authorisation

Boxes

- Augmented Scope Model showing next level activities: *who - what - how*
- "Business-friendly" (just boxes & lines) flow models to maximise communication and participation
- Two levels – *Handoff* and *Service*

etc.

Boxes & Lines

- Detail for technical design, perhaps using full BPMN
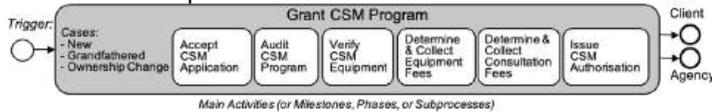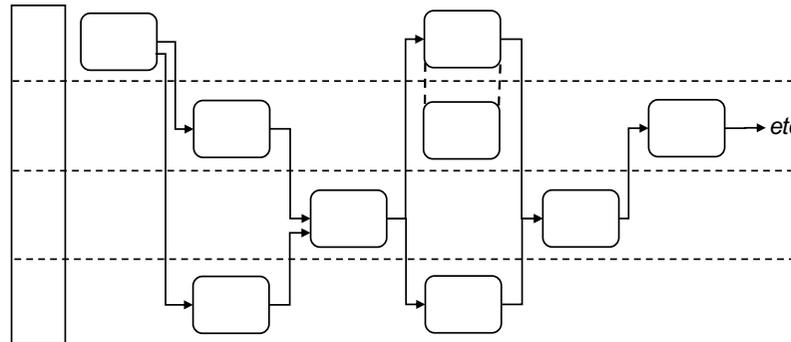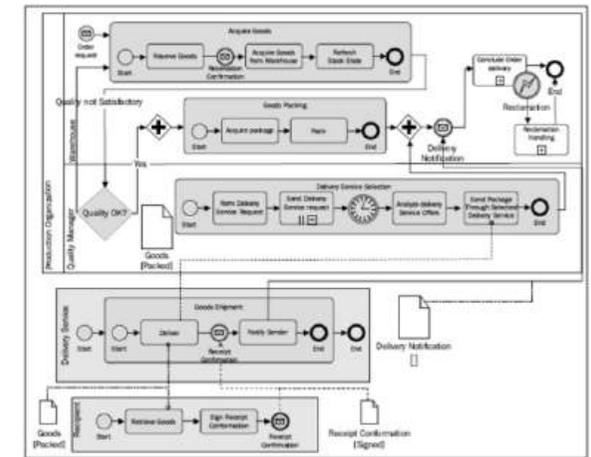
Boxes, Lines, & MANY Symbols   33

Our three-phase methodology – proven, practical, & agile

Some goal or issue, not rigorously specified

1 **Establish Process Scope and Objectives**

Identify & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model	Complete ***initial*** as-is process assessment, and to-be objective setting, by ***stakeholder***

- Customer
- Performers
- Owner
- others…

- ID processes & draw *Process Landscape* (Optional – only if you have a large scope)
- ID **T**rigger, **R**esults, main **A**ctivities, **C**ases (**TRAC**) & draw *Process Scope Model* – focus on *what, no* reference to *who* or *how*
- ID involved functions & mechanisms (*who* and *how*) & draw *Process Summary Chart*
- Conduct *stakeholder-based assessment*

2 ***Understand* the As-Is Process**

Perform more ***detailed*** as-is modelling: an Augmented Scope Model & optionally, Workflow Models	Complete ***final*** as-is process assessment by ***enabler***, and generate to-be improvement ideas

- Process
- IT
- M&M
- HR
- P&R
- Fac. or…

- Develop *as-is* models:
  - *Augmented Scope Model* – add ~5 – 7 more detailed Activities for each main Activity
  - (Optional) as-is *Workflow Models* – *only* enough detail to understand process behaviour
- Conduct *enabler-based assessment* and identify *potential improvements*

3 **Design the To-Be Process**

Refine to-be improvement ideas and determine 5-10 ***key features*** of the to-be process	Assess each to-be feature ***by enabler*** to ensure the new process is implementable and sustainable	Design the to-be process: 1 - ***essential*** activities first 2 - "who & how" next 3 – transport & protocol last

Re-think!

- Select key to-be *Features*

- Assess each key *Feature* by enabler
  - Identify and sequence *essential* activities
  - Develop *Workflow Models* for essential activities by adding *who* and *how*
  - *…on to requirements definition and implementation*

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Five key points plus a BA framework plus a methodology

F1	**F2**	**F3**	**F4**

Cross-functional process
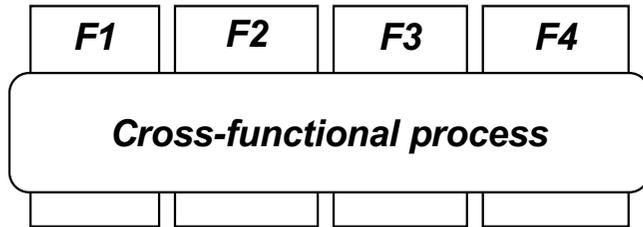
*Processes:
"large" and X-functional*

F1	**F2**	**F3**	**F4**

Cross-functional process
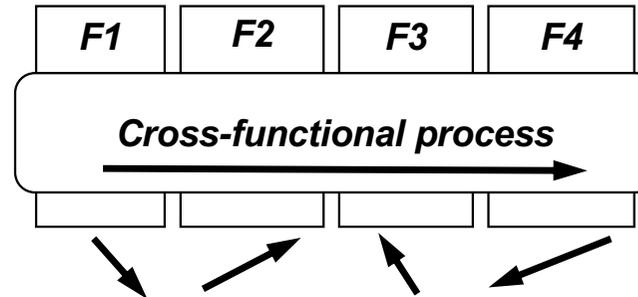
Misaligned measures

Model-driven framework

Process Modelling

Use Cases

Service Specification

Concept / Data Modelling

Business mission, strategy, goals, & objectives

Culture, core competencies, and management style

Business Process

Workflow Design	Information Systems	Motivation & Measurement	Human Resources	Policies and Rules	Facilities (or other)

Holistic method

Operational Excellence

Product Leadership

Customer Intimacy
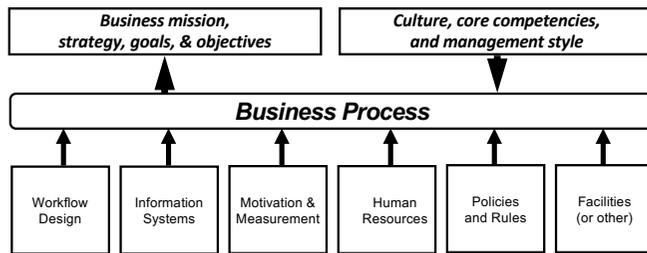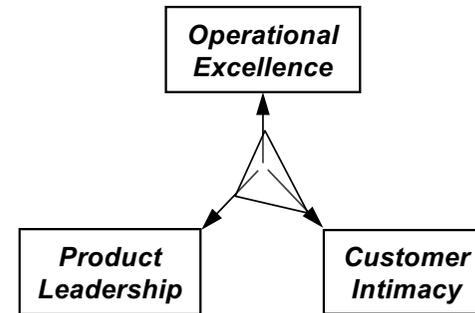
Differentiator

…and a proven Methodology

Establish Process Scope and Objectives

Understand the As-Is Process

Design the To-Be Process

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This slide left blank by accident

Identifying and Scoping Business Processes

1. Four things you *need* to know about *Business Processes*

2. Identifying true, end-to-end, cross-functional *Business Processes*

3. Process modelling for *humans*

4. Overview –
   the transition from *as-is* analysis to *to-be* design

Identify & scope process(es)

Some goal or issue, not rigorously specified

1 Establish Process Scope and Objectives

Identify & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model

Complete *initial* as-is process assessment, and to-be objective setting, by *stakeholder*

2 *Understand the As-Is Process*

Perform more *detailed* as-is modelling: an Augmented Scope Model & optionally, Workflow Models

Complete *final* as-is process assessment by *enabler*, and generate to-be improvement ideas

3 Design the To-Be Process

Refine to-be improvement ideas and determine 5-10 *key features* of the to-be process

Assess each to-be feature *by enabler* to ensure the new process is implementable and sustainable

Design the to-be process:
1 - *essential* activities first
2 - "who & how" next
3 – transport & protocol last

Clarify scope and context

I used to dive in here… … lots of issues!
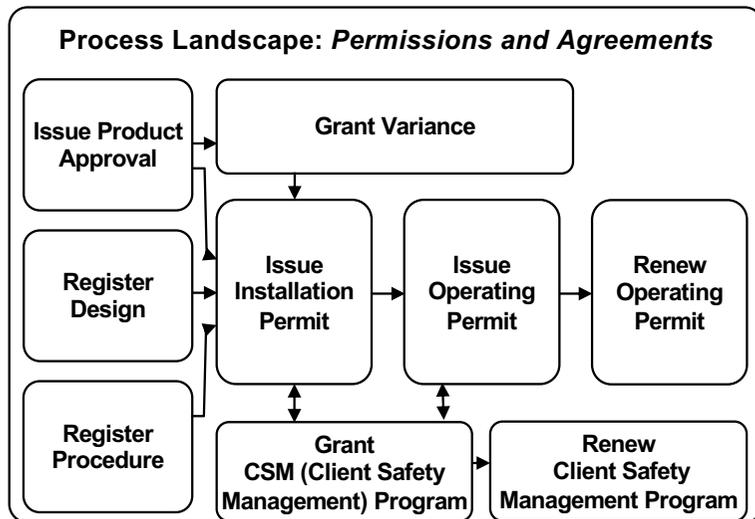
Whether it's a new initiative or "project recovery," *always:*

- Develop a Process Scope Model

Process Landscape: *Permissions and Agreements*

Issue Product Approval	Grant Variance		
Register Design	Issue Installation Permit	Issue Operating Permit	Renew Operating Permit
Register Procedure	Grant CSM (Client Safety Management) Program	Renew Client Safety Management Program	
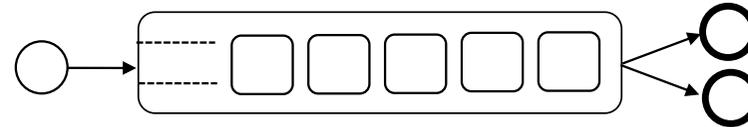
- Develop a Process Summary Chart

Function 1	Function 2	Function 3	Function 4
Cross-functional Business Process			
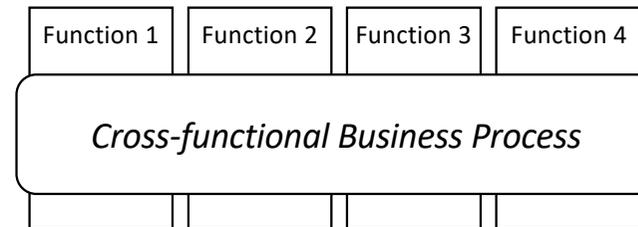
You *might* start at a higher level, with a ***Process Landscape*** – a decomposition of a business area into a family of *individual business processes*

Process discovery example

A bank believed they had identified the 12 *business processes* in their Commercial Loans Management area, including these 7:

Solicitation

Business Development

Loan Servicing

Syndication

Qualification

Booking

Payment Processing
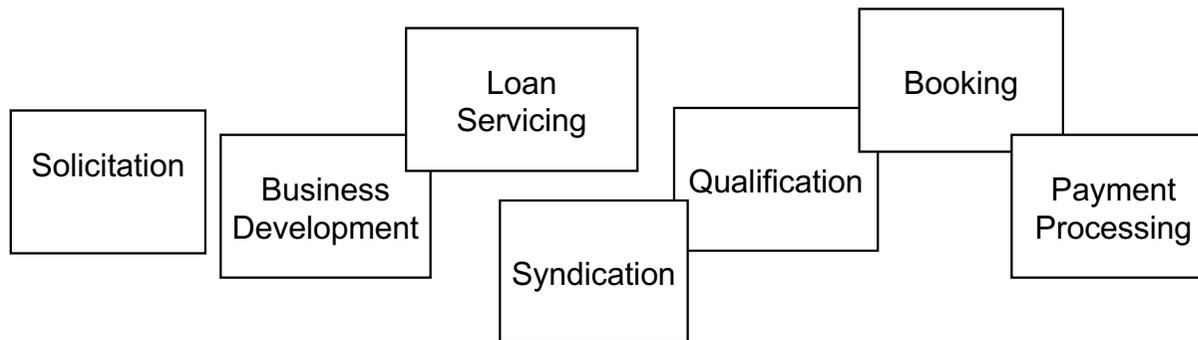
Discuss:

- What is wrong with the names of these processes?
- Can you think of any questions to help improve these process names?

Bottom-up process discovery – example

Loan Servicing

Booking

Solicitation

Business Development

Qualification

Syndication

Payment Processing
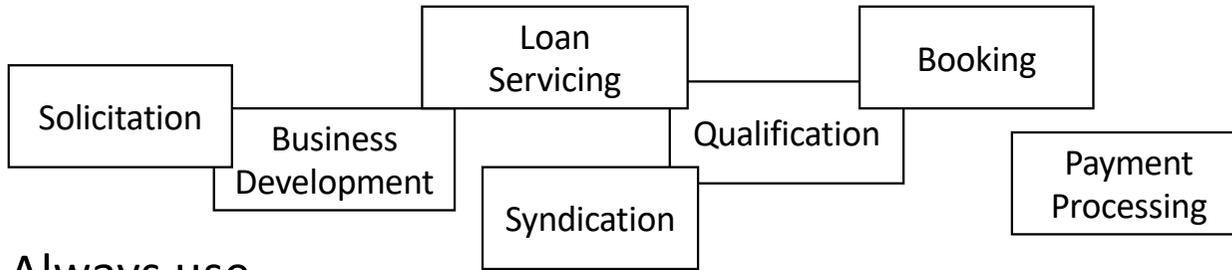
Dubious "business processes"

Always use
"active verb – noun" naming
with no "who and how"

~~Solicitation???~~

Solicit…
what?

Solicit Prospect

Solicit Loan Payment
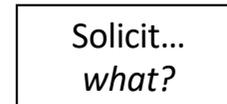
Client then identified *recognisable* activities, each producing an essential *result* (easy!)
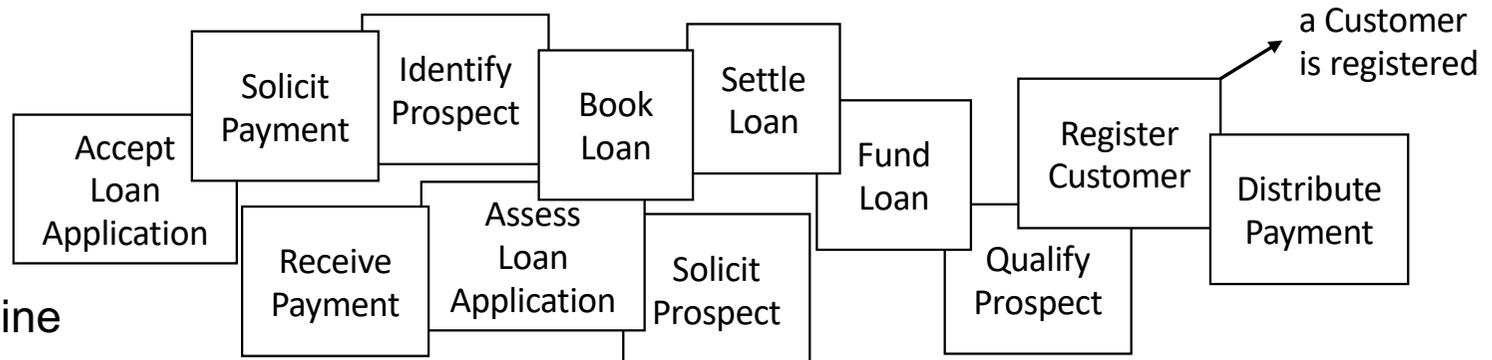
Let's put these
in sequence, then
use *TRAC* to determine
Business Processes.

Accept Loan Application

Solicit Payment

Identify Prospect

Book Loan

Settle Loan

Fund Loan

Register Customer

Distribute Payment

Receive Payment

Assess Loan Application

Solicit Prospect

Qualify Prospect

a Customer is registered

This was done in-person with Post-its and flipcharts
but tools like Lucidchart and Miro work well virtually

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Summary – sequence activities

Not usually linear – parallel chains are typical

Identify Prospect	Qualify Prospect	Solicit Prospect	Register Customer	Receive Loan Application	Assess Loan Application	Fund Loan	Book Loan	Solicit Payment	Receive Payment	Distribute Payment	Settle Loan
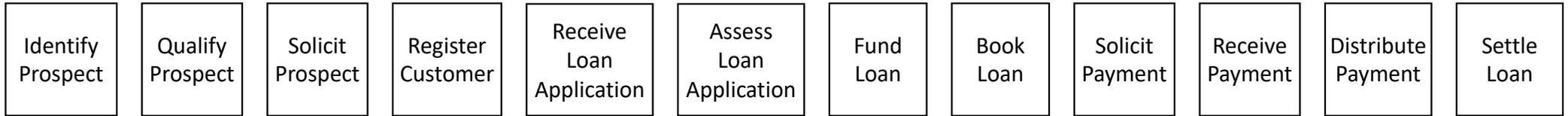
The clients arranged the activities in sequence:
- *easy!*
- *a learning experience!*

Solicit Payment · Accept Loan Application · Identify Prospect · Book Loan · Settle Loan · Fund Loan · Register Customer · Receive Payment · Assess Loan Application · Solicit Prospect · Qualify Prospect · Distribute Payment
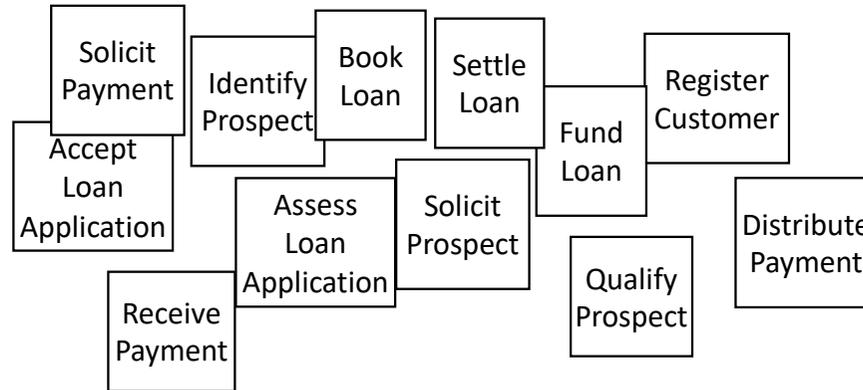
Now we'll use my "TRAC" framework for business processes –
- *Trigger*
- *Results*
- *Activities*
- *(Cases – later)*

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Summary – use TRAC to discover business process boundaries

Various… (they struggled with this one)

Customer seeks
loan financing
(decision event)

Time for
repayment installment
(temporal event)

Zero balance
(conditional
event)

				1:M						1:M			M:1	
1:1	1:1	1:1			1:1	1:1	1:1		1:1	1:1			

Identify Prospect → Qualify Prospect → Solicit Prospect → Register Customer | Receive Loan Application → Assess Loan Application → Fund Loan → Book Loan | Solicit Payment → Receive Payment → Distribute Payment | Settle Loan

Acquire Customer   **Grant Loan**   **Collect Payment**   **Settle Loan**

It appears we have discovered
four business processes, each with:
    Trigger
    Results
    Activities
    (Cases later)

Customer:
    an Account that enables
    business with the bank
The Bank:
    a new Customer (an asset)
Business Development:
    Commission credit

Customer:
    Loan funds available
The Bank:
    a performing asset (Loan)
Syndication Partners:
    a share of the Loan

Bank:
    Loan payment
    received &
    distributed
*Syndication
Partners:*
    Loan Payment
    received

Customer:
    release of
    Loan
    liability
*The Bank &
    Syndication
    Partners:*
    completed
    Loan
Regulator:
    Loan
    completion
    notice

1. ID where a final Result of value is delivered to
   one or more (usually at least two) stakeholders – "happiness points"
2. Identify points where a Triggering event (decision, time, condition) beyond the
   organisation's control is required before activities can proceed
3. Identify "cardinality" of connections between Activities (1:1, 1:M, M:1)
4. Identify "tokens" flowing through the activities
5. Name business processes with active verbs and nouns (usually the tokens)

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Four end-to-end business processes, objectively demonstrated

Various…

Customer seeks loan financing (decision event)

Time for repayment installment (temporal event)

Zero balance (conditional event)

Acquire Customer

- Identify Prospect
- Qualify Prospect
- Solicit Prospect
- Register Customer

Grant Loan

- Receive Loan Application
- Assess Loan Application
- Fund Loan
- Book Loan

Collect Payment

- Solicit Payment
- Receive Payment
- Distribute Payment

Settle Loan

- Settle Loan

Customer:
  an Account that enables business with the bank
The Bank:
  a new Customer (an asset)
Business Development:
  Commission credit

Customer:
  Loan funds available
The Bank:
  a performing asset (Loan)
Syndication Partners:
  a share of the Loan

Bank:
  Loan payment received & distributed
Syndication Partners:
  Loan Payment received

Customer:
  release of Loan liability
The Bank & Syndication Partners:
  completed Loan
Regulator:
  Loan completion notice *43*

Client had faith these were *their* business processes

Six guidelines for well-formed processes, two clients <u>really</u> appreciate

1. "Active verb – noun" naming that indicates primary result

2. Triggered by an event (decision, time, data) outside process' control

3. At the end are results that makes one or more stakeholders happy

4. In between are ~5 to 7 major Activities (phases, milestones, subprocesses, …)

5. Activities linked *1:1* are probably part of the same process; a *1:M* or *M:1* connection between activities is probably a boundary

6. The same *token* moves through the whole process, changing state, e.g. a Loan, from applied to booked; there will be a *change of token* across a process boundary

Acquire Customer: Identify Prospect — 1:1 → Qualify Prospect — 1:1 → Solicit Prospect — 1:1 → Register Customer

1:M

Grant Loan: Accept Loan Application — 1:1 → Assess Loan Application — 1:1 → Fund Loan — 1:1 → Book Loan

1:M

Collect Payment: Solicit Loan Payment — 1:1 → Etc.

M:1

Settle Loan: Etc.

change of token

token: a *Customer*, from prospect to registered

token: a *Loan*, from applied to booked

token: a *Payment*, from solicited to distributed

token: a *Loan*, from zero balance to notified

Clear, objective guidelines – *science, not just opinion*

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Correspondence to the Concept Model
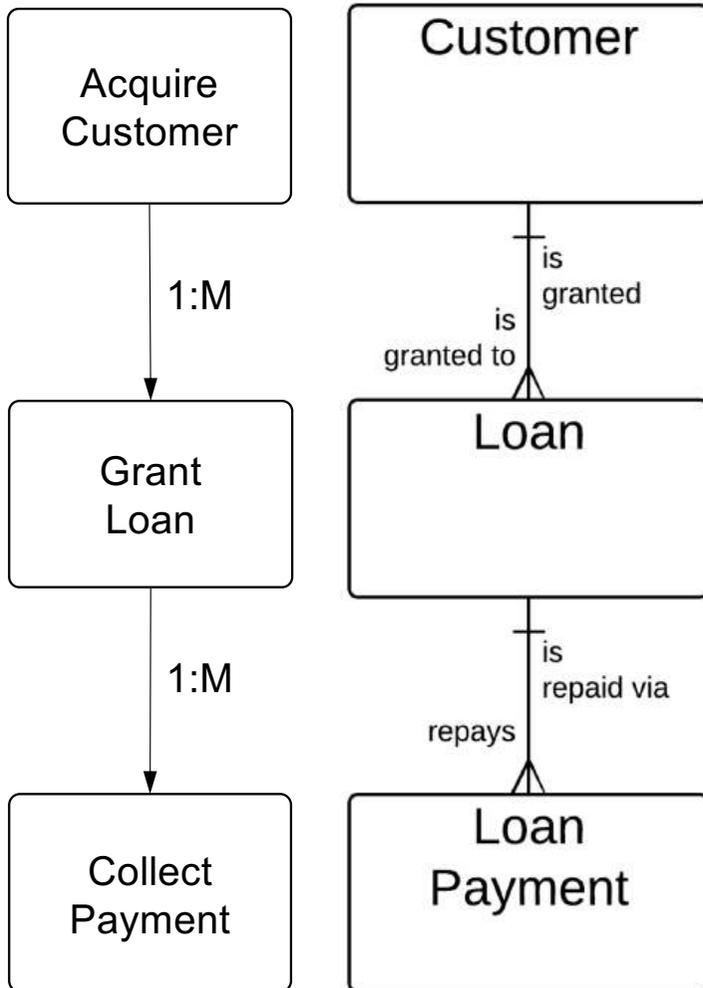
- The nouns in your verb-noun *Process* name are most often the *Entities* in your Concept Model, and each will usually have one primary *Process*

- The relative number of Process instances (e.g., 1:M or M:1) align with relationship cardinality

- This *does no*t mean there is only one Process per Entity

  - Assess *Customer* Performance

  - Retire *Customer*

  - Merge *Loans*

  - Write Off *Loan*

  - …

What next?

Commercial Loans Management

- Acquire Customer
  - Grant Loan → Collect Payment → Settle Loan
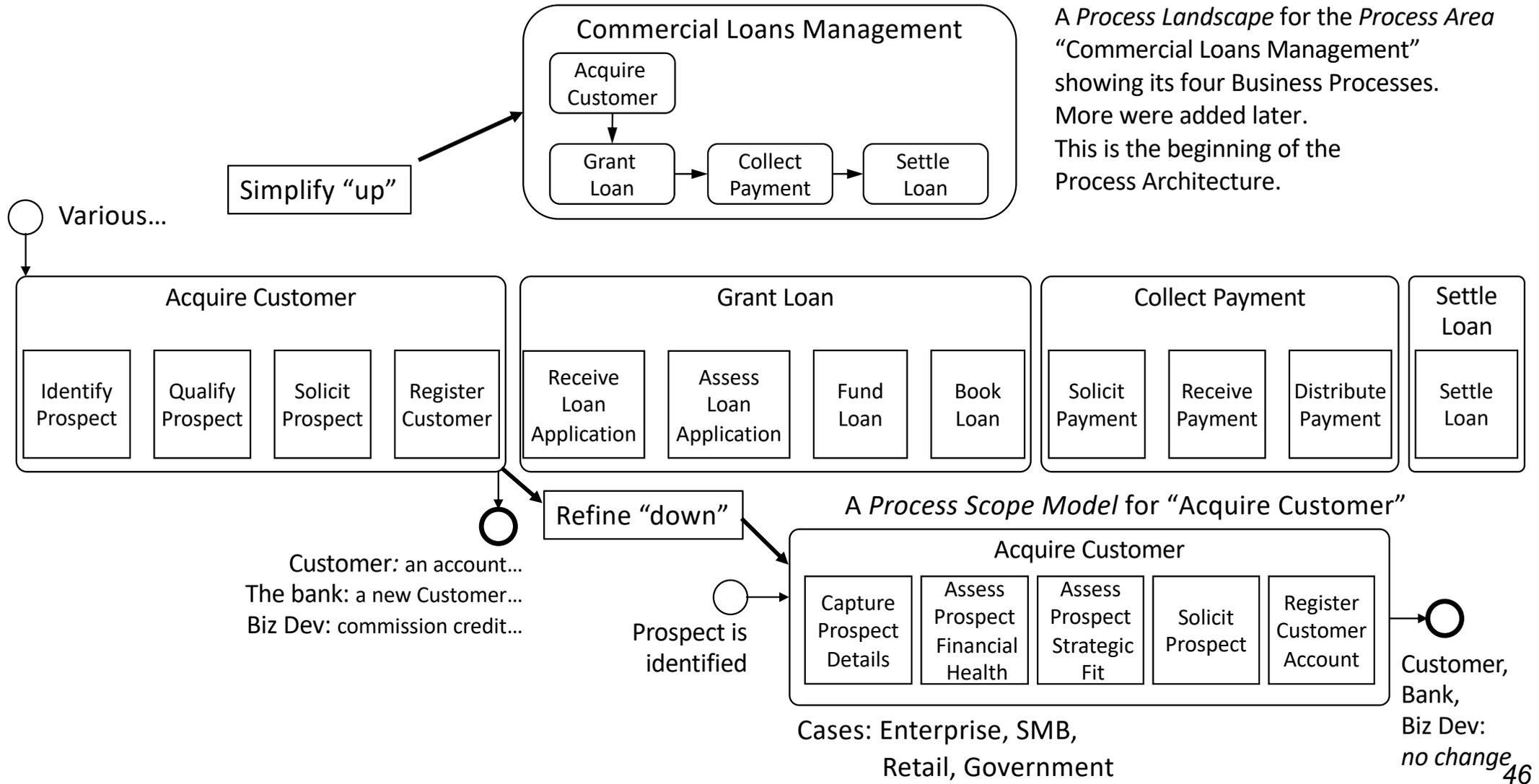
A *Process Landscape* for the *Process Area* "Commercial Loans Management" showing its four Business Processes. More were added later. This is the beginning of the Process Architecture.

Simplify "up"

◯ Various…

Acquire Customer				Grant Loan				Collect Payment			Settle Loan
Identify Prospect	Qualify Prospect	Solicit Prospect	Register Customer	Receive Loan Application	Assess Loan Application	Fund Loan	Book Loan	Solicit Payment	Receive Payment	Distribute Payment	Settle Loan

Refine "down"

Customer*: an account…*
The bank: a new Customer…
Biz Dev: commission credit…

A *Process Scope Model* for "Acquire Customer"

Acquire Customer

Prospect is identified ◯ →

Capture Prospect Details	Assess Prospect Financial Health	Assess Prospect Strategic Fit	Solicit Prospect	Register Customer Account

→ ◯ Customer, Bank, Biz Dev: *no change*

Cases: Enterprise, SMB, Retail, Government

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Our methodology – three responses to three common difficulties

Some goal or issue, not rigorously specified

1 Establish Process Scope and Objectives

Identify & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model	Complete *initial* as-is process assessment, and to-be objective setting, by *stakeholder*

Big picture first | **Don't start here!**

2 *Understand the As-Is Process*

Perform more *detailed* as-is modelling: an Augmented Scope Model & optionally, Workflow Models	Complete *final* as-is process assessment by *enabler*, and generate to-be improvement ideas

Flow first, detail later

3 Design the To-Be Process

Refine to-be improvement ideas and determine 5-10 *key features* of the to-be process	Assess each to-be feature *by enabler* to ensure the new process is implementable and sustainable	Design the to-be process: 1 - *essential* activities first 2 - "who & how" next 3 – transport & protocol last

---

My *hardest* assignments	**1 – Premature diagnosis of the situation**	*Don't* start with a problem statement! There will be some goal or issue, but don't formalise it *yet*. And remember… it may not be a "process" issue.
	2 – Failure to identify true end-to-end processes	Rigorous techniques to identify real business processes – a Process Scope Model and a Process Summary Chart make scope and context visible.
	3 – A rapid descent into unhelpful detail	Clarify the big picture, then take a *controlled* descent with well-defined levels of detail.

Now that you have e2e context, perform initial as-is assessment

1 Establish
Process Scope and Objectives

| *Identify* & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model | Complete *initial* as-is process assessment, and to-be objective setting, by *stakeholder* |

2 *Understand* the As-Is Process

| Perform more *detailed* as-is modelling: an Augmented Scope Model & optionally, Workflow Models | Complete *final* as-is process assessment by *enabler*, and generate to-be improvement ideas |

3 Design the To-Be Process

| Refine to-be improvement ideas and determine 5-10 *key features* of the to-be process | Assess each to-be feature *by enabler* to ensure the new process is implementable and sustainable | Design the to-be process: 1 - *essential* activities first 2 - "who & how" next 3 – transport & protocol last |

Some goal or issue; not rigorously specified

Why does this process need to change?

But for a process…

Process Scope Model

THE GOLDEN CIRCLE

WHY HOW WHAT

by SIMON SINEK

What first

Who & How next

Only then **Why?**
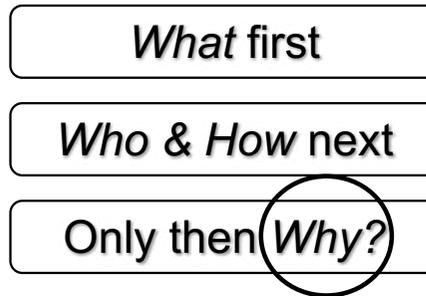
"People don't buy *what* you do, they buy *why* you do it."

Why does this process *need* to change?
We'll answer that with a *Case for Action* (a nuanced form of problem statement)

Process Summary Chart

| Function 1 | Function 2 | Function 3 | Function 4 |

Cross-functional Business Process

Supporting Mechanisms
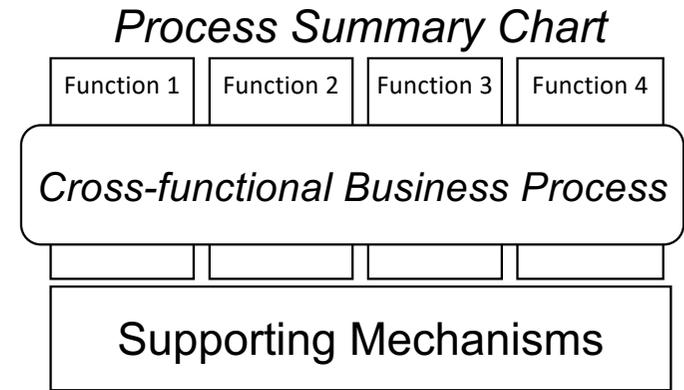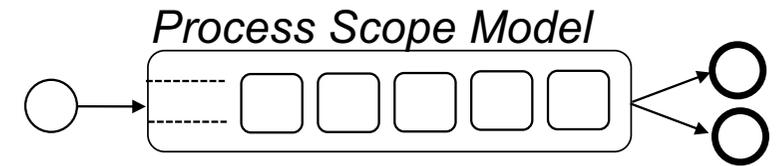
Now we have an end-to-end, cross-functional perspective.

My version of Michael Hammer's "Case for Action"

Simplified, re-sequenced, more stakeholder-focussed

1) Stakeholder assessment **–** makes it *real*

What are the concerns of *each* stakeholder group?

!

- Customer
- *Performers*
- Owner/manager (the enterprise itself)
- Others (regulator, partners, ...) as needed 😔

We're not that bad!

2) Context **–** makes it *blame-free*

What changes in the environment since the process was "designed" have caused these issues to surface? 😀

Yay – It's not our fault!

3) Consequences of inaction **–** makes it *compelling* 😲

What will happen if the process is left as-is?

We'd better get on with it! 49

THE MONUMENTAL *NEW YORK TIMES* BESTSELLER
UPDATED TO INCLUDE ANSWERS TO
THE MOST FREQUENTLY ASKED QUESTIONS ABOUT REENGINEERING

REENGINEERING
THE CORPORATION

A MANIFESTO
FOR
BUSINESS
REVOLUTION

FORGET WHAT YOU
KNOW ABOUT HOW BUSINESS SHOULD WORK—
MOST OF IT IS WRONG!

MICHAEL HAMMER
& JAMES CHAMPY

"May well be the best-written, most well-reasoned business book for the managerial masses since *In Search of Excellence.*" —John Byrne, *Business Week*

1. Stakeholder concerns

"You must communicate in a clear and compelling way why the process has to change by completing the initial assessment for the as-is process."

Initial assessment – 3 components

Stakeholder assessment – makes it *real*
- Customer
- Performers
  (***what's in it for me?)***
- Owner/manager
  (the enterprise itself)
- Others, as needed

Initial assessment – typical questions

Customer:
- Are there too many interactions?
- Are rules, requirements, protocol reasonable?
- Can *your* work be located within the process?
- Are *you* the process integrator –
  the human glue that connects the process steps?

Performer:
- What are your major sources of frustration?
- Do you have the necessary tools and support?
- Are there redundant steps or steps that serve no purpose?
- Are problems caused upstream? Does the workload vary wildly?
- What would you change if you could?
- *Is* there a documented process?

Owner/manager:
- Does the process use resources you would rather re-allocate?
- Is it a net contributor or a source of problems?
- Does the process constrain innovation, growth, or opportunities?
- Is it a source of customer or media *criticism?*

2. Context – assessing changes in the environment

Context – makes it blame-free
What changes in the environment since the process was first "designed" have caused these issues to surface?

Areas to consider:

- Regulatory change

- Workforce changes (e.g., "recruiting and retaining" vs. "retiring")

- Emergent technology (AI, robotics, drones, BP Automation, SMAC ("Social, Mobile, Analytics, Cloud,") or current technology is EOL ("End Of Life")

- Changing customer expectations

- Competition, especially new or emerging *Current "Top Five"*

- Economic conditions

- Change in business volume (growth or contraction)

- Change in business model (e.g., customised or standarised)

- Change in business ownership (public, private,) M&A, divestiture

- Change in business leadership / executives

- Change in government (post-election fallout)

- Changes in business operating locations

- Socio-political change   *And many others (see "PESTLE")*

- Environmental ("green") concerns

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3. Consequences of inaction

Consequences of inaction – makes it compelling
*What will happen if the process is left as-is,
and the status quo is maintained?*

For the individual:

- Unsatisfying work environment?

- Diminished opportunities?

- Reduced employment
  or *loss of employment?*
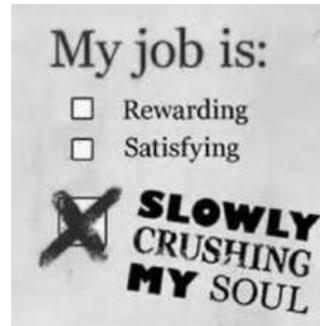
For the organisation:

- Reduced performance?

- Reduced stature or reputation?

- Withdrawal from the market?

"Case for Change" example

Situation:
- Manufacturing firm redesigns core *Financial Reporting* processes prior to COTS selection
- No progress! – Project has descended into "the blame game"

Stakeholder assessment –
- *Customer* – financial markets / fund managers cannot get the info they need for investment decisions
- *Performers* – Finance staff spend all their time on assembling "the numbers" with no time for value-added analysis
- *Owner/manager* – CFO is under constant pressure and criticism from the financial markets and other executives

Context –
- Firm recently divested from a huge conglomerate
- Financial reporting was formerly to Head Office, but now is to financial markets which the processes were *never designed to do*

Consequences of inaction –
- Planned acquisition of competitor will not go ahead due to lack of financial market support for new bond issue;
- *Firm likely to be acquired by the competitor. Uh oh… Finance staff quickly realised their employment was threatened and got on board!*

Client was very happy!

Alec, I'm so happy I could just kiss you!

That's not in my contract

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Then, establish process goals / improvement targets

"You must also provide a sense of direction by defining to-be process goals and objectives."

Subjective goals	**Measurable objectives**

Give people a *"feel"* for direction:
- "Customers will love this process because…"
- "Performers will love this process because…"
- "The process owner will love this process because…"

Provide *specific targets*
Establish baseline to *prove* success
Format:
- Topic
  (what will be improved?)
- Target
  (what is the measurable objective?)
- Timeframe
  (when will these results be realised?)

> **It may now be appropriate to introduce new process measures, metrics, and key performance indicators (KPIs) to establish baseline performance**

Example from in-person workshop – assessment to goals

At this point, also think about the process' differentiator

Stakeholder-based Initial Assessment of the as-is. ("Case for Action")

1) Stakeholder concerns

Customer:
- excessively "high touch" (too many meetings)
- long lead times from contact to publication
- errors in ads and invoices

Performers:
Sales Rep:
- too many review meetings which cut into selling time
- overhead ("administrivia") in order submission procedure

Production:
- Monday to Wednesday crunch
- too many cycles to obtain ad approval

Finance:
- redundant ad order data leading to errors
- lack of pricing controls

Owner:
- ceiling on growth
- lost revenue
- staff frustration

2) Context: growth, customer expectations, IT, competition.
3) Consequences of inaction: Out of business!

Stakeholder-based goals for the to-be

Subjective ♡	Objective
"Why will they 'love' the new process?"	"measurable" topic / target / timeframe
fewer or no meetings	ads approved at first review / 80% / Q4 2017
shorter lead time	lead time / reduced from average of 10 days to 5 / Q4 2017
no errors in ads or invoices	invoice error rate / .3% / Q4 2017
fewer or no meetings	ad orders/week (or commission?) / +20% / Q1 2018
relief from burdensome order submission	time spent on order submission / —% / Q4 2017
level workload	daily workload variation / ≤5% daily / Q4 2017
more ads approved on first review	ads approved at first review / 80% / Q4 2017
elimination of ad order data redundancy ("single source of truth")	
GROWTH	page count / increasing at 15% per annum / Q1 2018
no lost revenue to errors	
eliminate stress and friction	staff satisfaction score / ? / Q1 2018

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This slide left blank to maintain balance in the universe

Making process modelling relevant

1. Four things you *need* to know about *Business Processes*

2. Identifying true, end-to-end, cross-functional *Business Processes*

3. Process modelling for *humans*

4. Overview –
   the transition from *as-is* analysis to *to-be* design

3 – Complete additional as-is modelling

	① Establish Process Scope and Objectives	② Understand the As-Is Process	③ Design the To-Be Process

① Establish Process Scope and Objectives
- ***Identify*** & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model
- Complete ***initial*** as-is process assessment, and to-be objective setting, by ***stakeholder***

② Understand the As-Is Process
- Perform more ***detailed*** as-is modelling: an Augmented Scope Model & optionally, Workflow Models
- Complete ***final*** as-is process assessment by ***enabler***, and generate to-be improvement ideas

③ Design the To-Be Process
- Refine to-be improvement ideas and determine 5-10 ***key features*** of the to-be process
- Assess each to-be feature ***by enabler*** to ensure the new process is implementable and sustainable
- Design the to-be process:
  1 - ***essential*** activities first
  2 - "who & how" next
  3 – transport & protocol last

Some goal or issue, not rigorously specified

The goal is to *understand* the as-is process, not document it in *excruciating detail!*
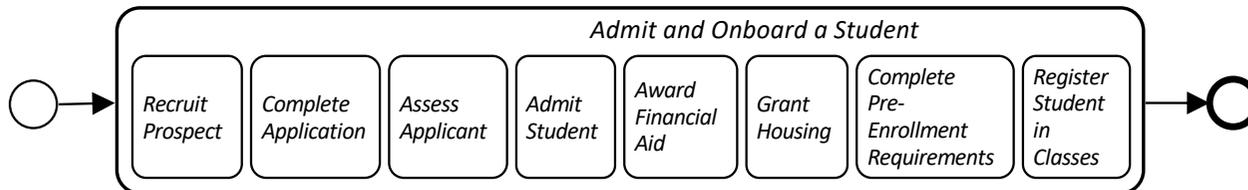
Admit and Onboard a Student

Recruit Prospect	Complete Application	Assess Applicant	Admit Student	Award Financial Aid	Grant Housing	Complete Pre-Enrollment Requirements	Register Student in Classes
• Identify Suspects • Qualify Prospects • Engage Prospect • etc.	• Collect App Fee • Initiate Application • Submit Application • etc.	• Confirm Application • Evaluate Application • Verify Req'ts • etc.	• Make admit / deny / assess decision • Notify Student • etc.	• Receive FAFSA • Assess Need • Determine Aid • etc.	• Provide Housing Req'ts • Assess Application • Provide Alternatives • etc.	• Confirm Other Requirements (visa, shots, writing, …) • Register Orientation • etc.	• Identify Courses • Create Class Schedule • Register Classes • etc.

Who:	Registration Assistant
What:	Register Classes
How:	via Workday SRS

Optionally, model initial Workflow –
- Simplicity – minimal symbols and detail
- "Flow first, detail later!"

I always build an Augmented Scope Model –
1. *What* the *detailed* activities are, e.g. "Register Class" (verb + noun)
2. Add *who* and *how*, e,g, "*Advisor* Register Class *via SIS*"

This is often good enough! – no need for an as-is swimlane diagram / workflow model

www.lucidchart.com
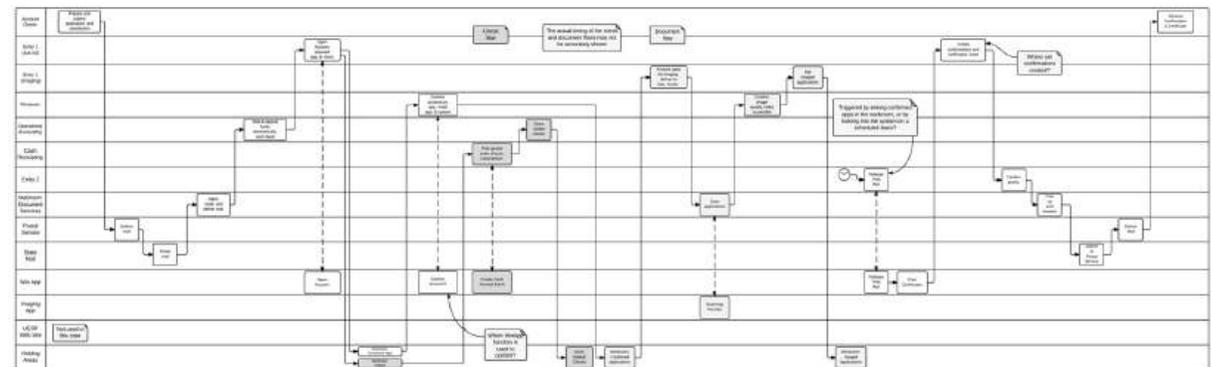
Simple Swimlane Diagrams – maximise their strengths

Complete semester enrollment (partial)

Student
- Prepare enrollment package
- Submit enrollment package
- Decide to proceed
  - yes
  - no → Student gives up!
- Provide supporting documentation

Departmental Assistant
- Submit enrollment package
- Decide if supporting documentation needed
  - yes
  - no
- days later!

Departmental Advisor
- Confirm course prerequisites
- Decide if waiver required
  - no
  - yes
- Enroll student per instructions
- Prepare confirmation → Etc.
- Must be printed and signed.

Departmental Dean
- Approve or reject waiver request
- Note - This is simplified - we haven't shown the "transport mechanisms."

Other Process
- Grant Financial Aid

Actor:
A participant in the process – could be a person, organisation, job, system, tool, or anything else that "holds the work."

Handoff:
A flow from one actor to another.

Flow:
A sequential dependency between steps.

Step:
An activity or step carried out by one or more actors.

- Shows *sequence and dependency*, left to right
- Simple – *anyone* can read
- Shows *all* actors and therefore *all* handoffs
- The *entire,* e2e process
- *What,* but not *how*

Who – the actors

What – the steps

When – the flow

Other tools are better for capturing detail –
how the steps are done:
- step-by-step procedures
- checklists
- decision trees
- use cases
- etc.

Why did simple Swimlane Diagrams become popular?

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A quick Google Images search on "swimlane diagram" reveals…

… lots of diagrams I might draw differently.

Dota 2 Flow Chart …
reddit.com

complex RENO flowcharts easier …
weibull.com

Follow flowchart best practices without …
cacoo.com
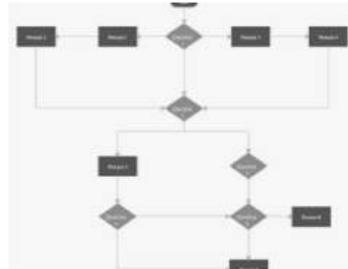
Flowchart Tutorial (Complete Flowchar…
creately.com
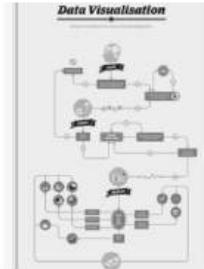
21 Creative Flowchart …
visme.co
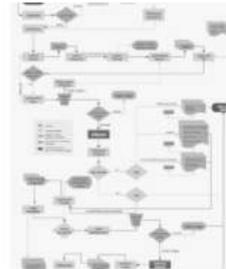
Flowchart Programming …
conceptdraw.com

Free Flowchart Templates …
gliffy.com

Flowchart Tutorial (with Symbols, …
visual-paradigm.com
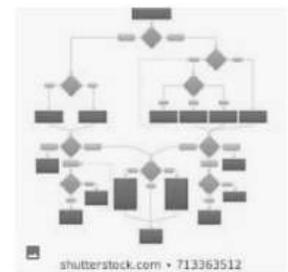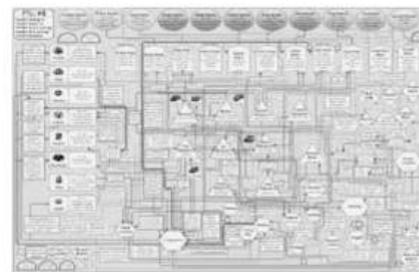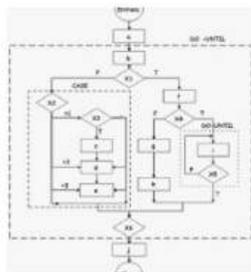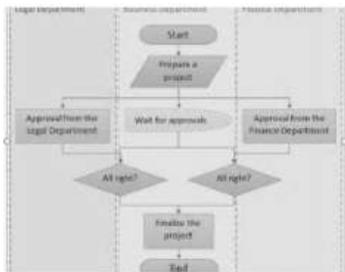
shutterstock.com • 713363512

One example… "Chaos With Colours"

Help!

Customer · Role 1 · Role 2 · Role 3 · Role 4 · Role 5

Both or One? (×3)
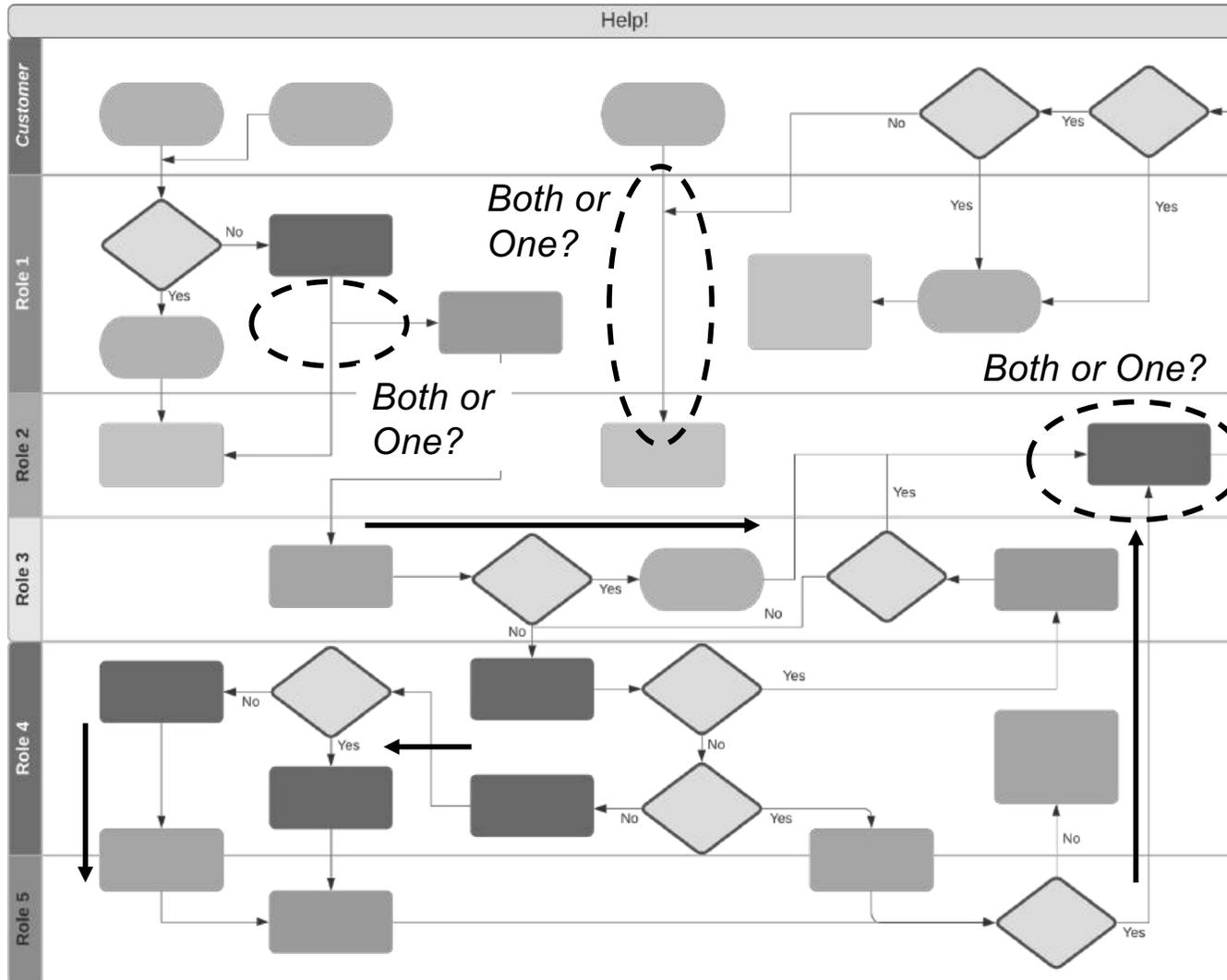
Probably accurate,
not too many symbols, but…
- do unexplained colours help?
- significance of multiple flows?
  - two separate flows inbound to a step
  - two joined flows inbound to a step
  - one outbound flow splitting
- but most of all…
  flows in all directions!:
  - left to right
  - right to left
  - top down
  - bottom up

Why???

Forcing it into a "one-pager" defeats the graphic power of the diagram.

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If you <u>need</u> a one-pager draw an Augmented Scope Model

Add 5 – 10
Activities per
Major Activity

Admit and Onboard a Student

| Recruit Prospect | Complete Application | Assess Applicant | Admit Student | Award Financial Aid | Grant Housing | Complete Pre-Enrollment Requirements | Register Student in Classes |

- Identify Suspects
- Qualify Prospects
- Engage Prospect
- etc.

- Collect App Fee
- Initiate Application
- Submit Application
- etc.

- Confirm Application
- Evaluate Application
- Verify Req'ts
- etc.

- Make admit / deny / assess decision
- Notify Student
- Complete Integrated Assessment
- etc.

- Receive FAFSA
- Assess Need
- Determine Aid
- etc.

- Provide Housing Req'ts
- Assess Application
- Provide Alternatives
- etc.

- Confirm Other Requirements (visa, shots, insurance, …)
- Register Orientation
- Complete Orientation
- etc.

- Identify Courses
- Create Class Schedule
- Register Classes
- etc.

Later add
who & *how* to
each Activity

Who:	Registration Assistant
What:	Register Classes
How:	via Workday SRS

We're almost at swimlane level!

Before "swimlaning"…

Always!
Process Scope Model *(TRAC)*

Always!
Process Summary Chart

| Function 1 | Function 2 | Function 3 | Function 4 |

Cross-functional Business Process

Almost always!
Augmented Scope Model

The Cognitive Psychology of diagramming

What do people first perceive on a diagram?

1. relative size

an important step

a less important step
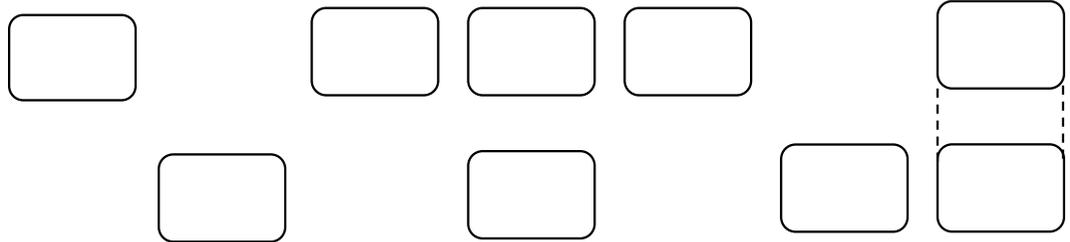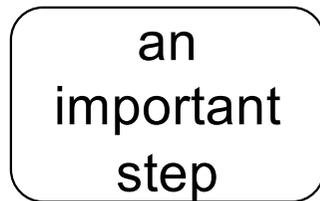
Make all the steps the same size, *unless* you're trying to make a point

2. relative X-Y position

Actors

Y

X → *Flow (time)*

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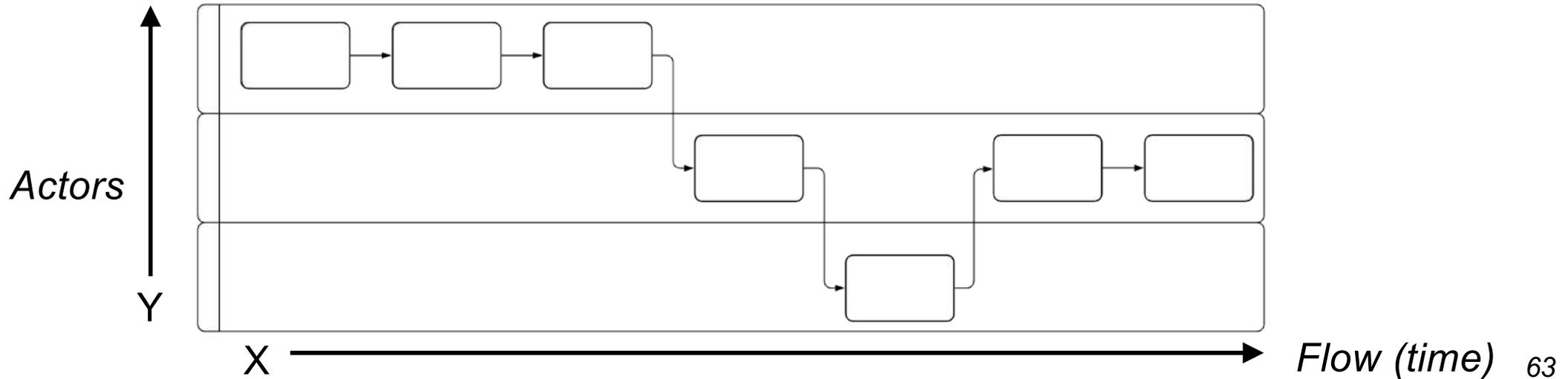
Don't conceal sequence and dependency
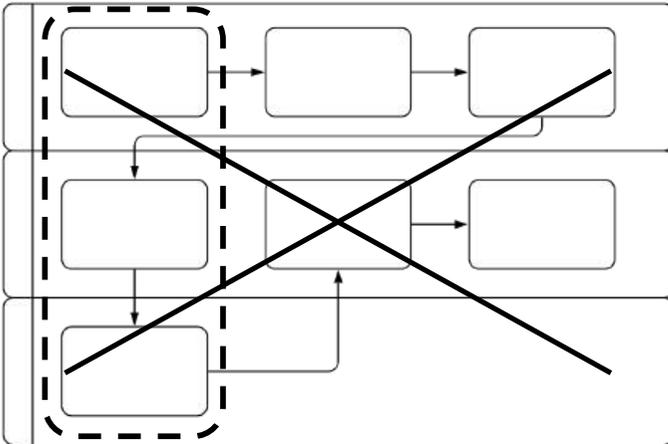
Steps perceived as happening in *parallel*,
even though flow lines indicate *sequential*.

Critical in analysing a process:
- sequential vs. parallel
- dependent vs. independent
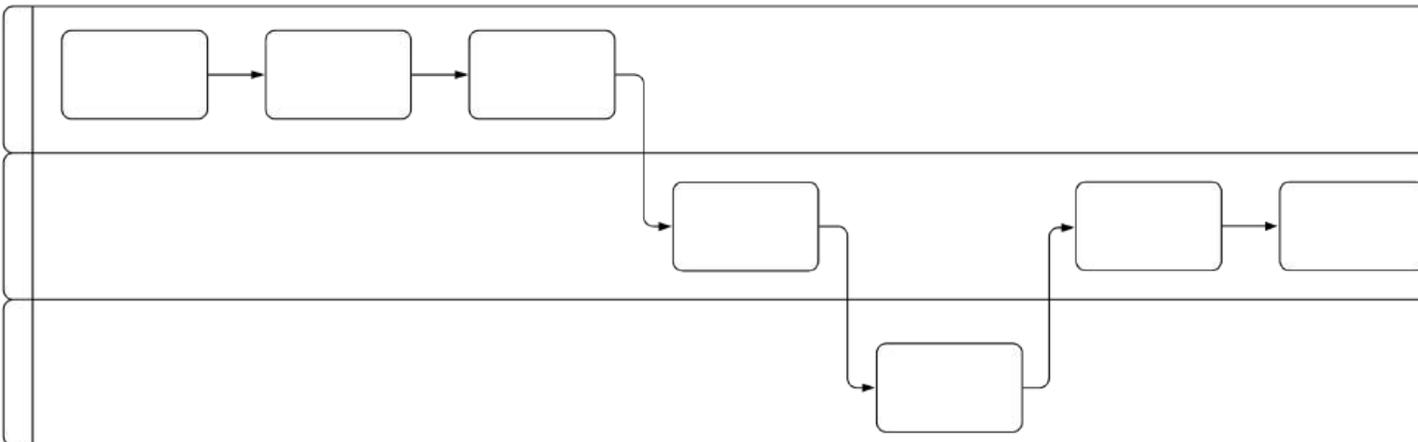
A simple guideline:
flow lines *only* leave
the right edge
and *only* enter
the left edge – never
the top or bottom.

"I think I know why our business partners don't want to review this…"

Probably a good DFD
(Data Flow Diagram)
useful to a technical
audience

Not a good
Process Flow Diagram,
useful to business
professionals, because...

- no obvious flow
- too many symbols
- cryptic acronyms
- lanes aren't actors
- …

What's wrong with this diagram
as a means of communicating
with a business audience?

65
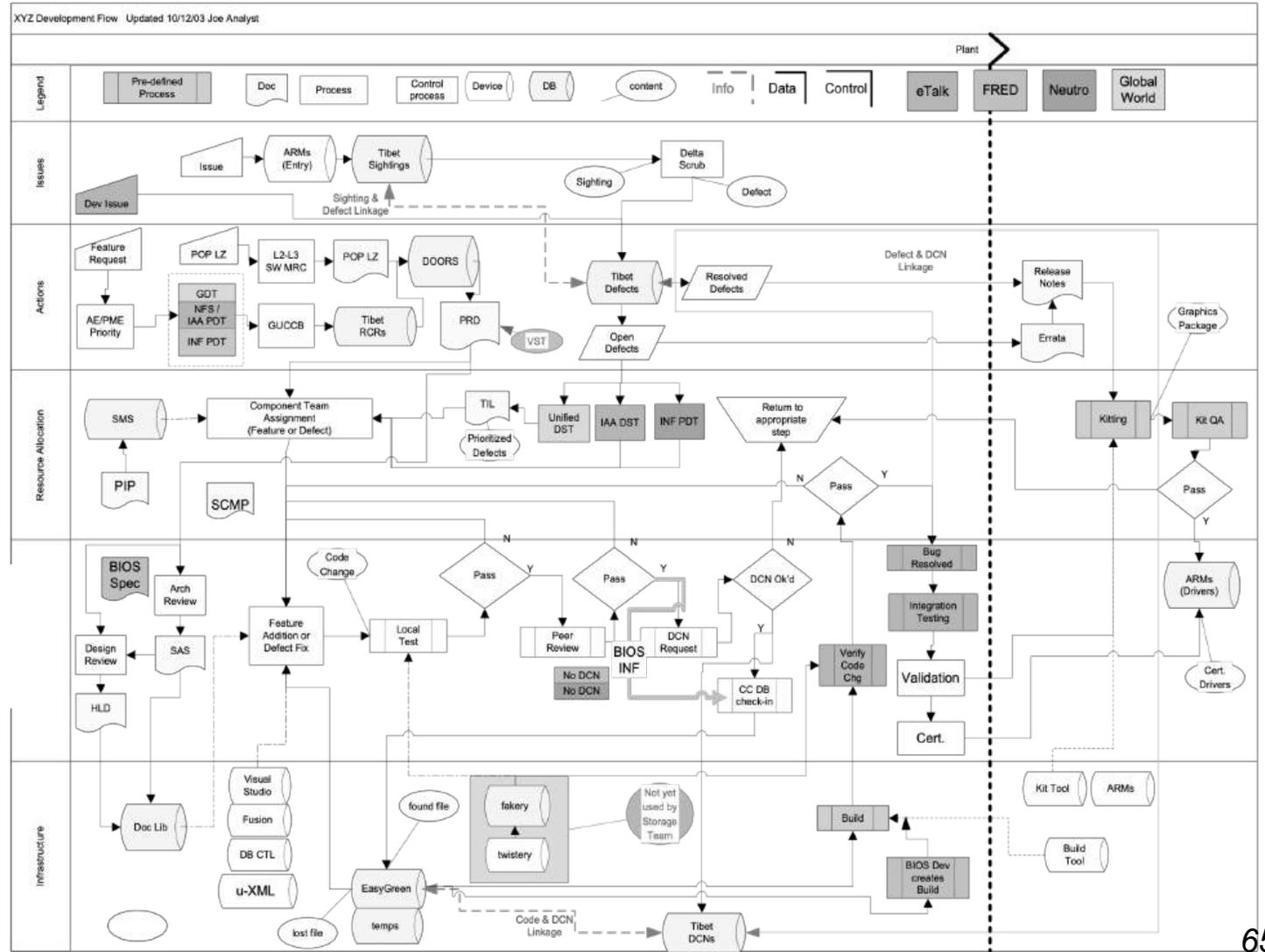
Boxes alone are a great start

Remember – you can build an initial flow model with Post-its, real or virtual

Minimal symbols

Later, redrew it with *Lucidchart* (www.lucidchart.com) – add rigour, but still focus on flow and simplicity.
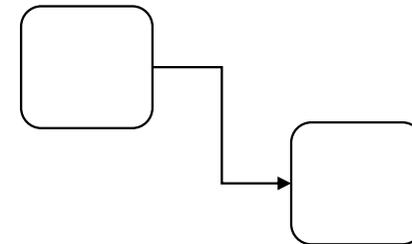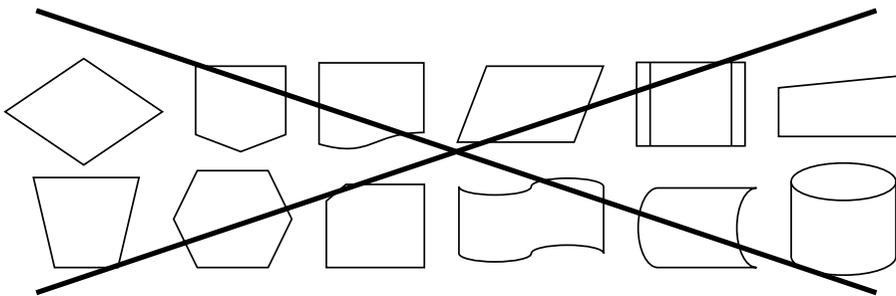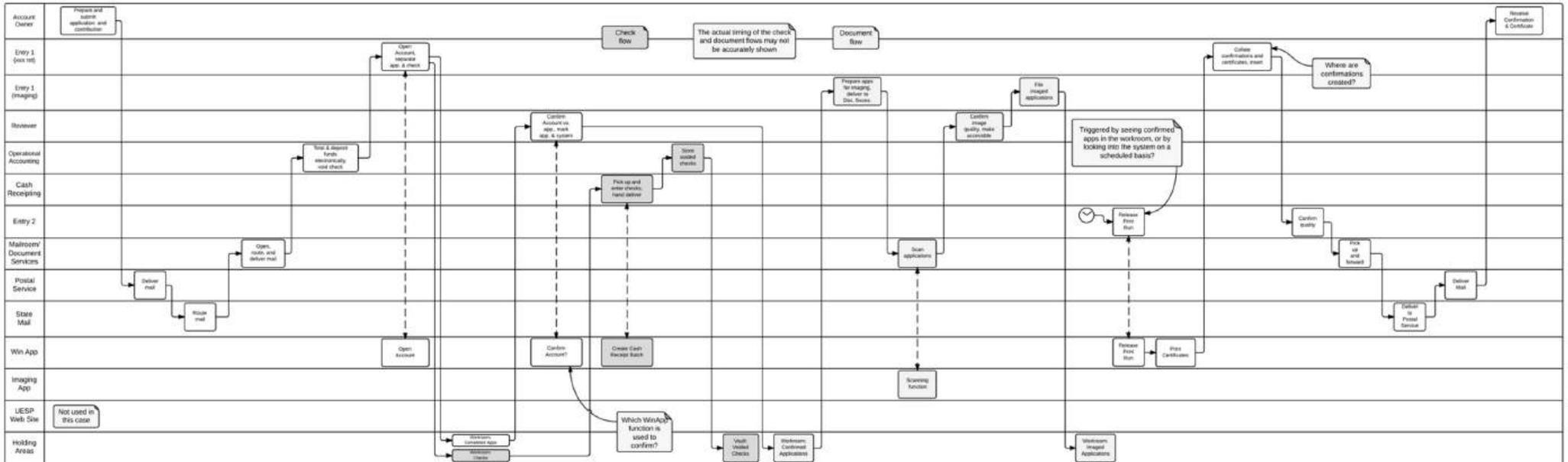
Full BPMN* – not useful for business purposes

If you choose to use BPMN, use extreme restraint! Only use a few symbols such as Lanes, Tasks, Flows, simple Events, and optionally Gateways
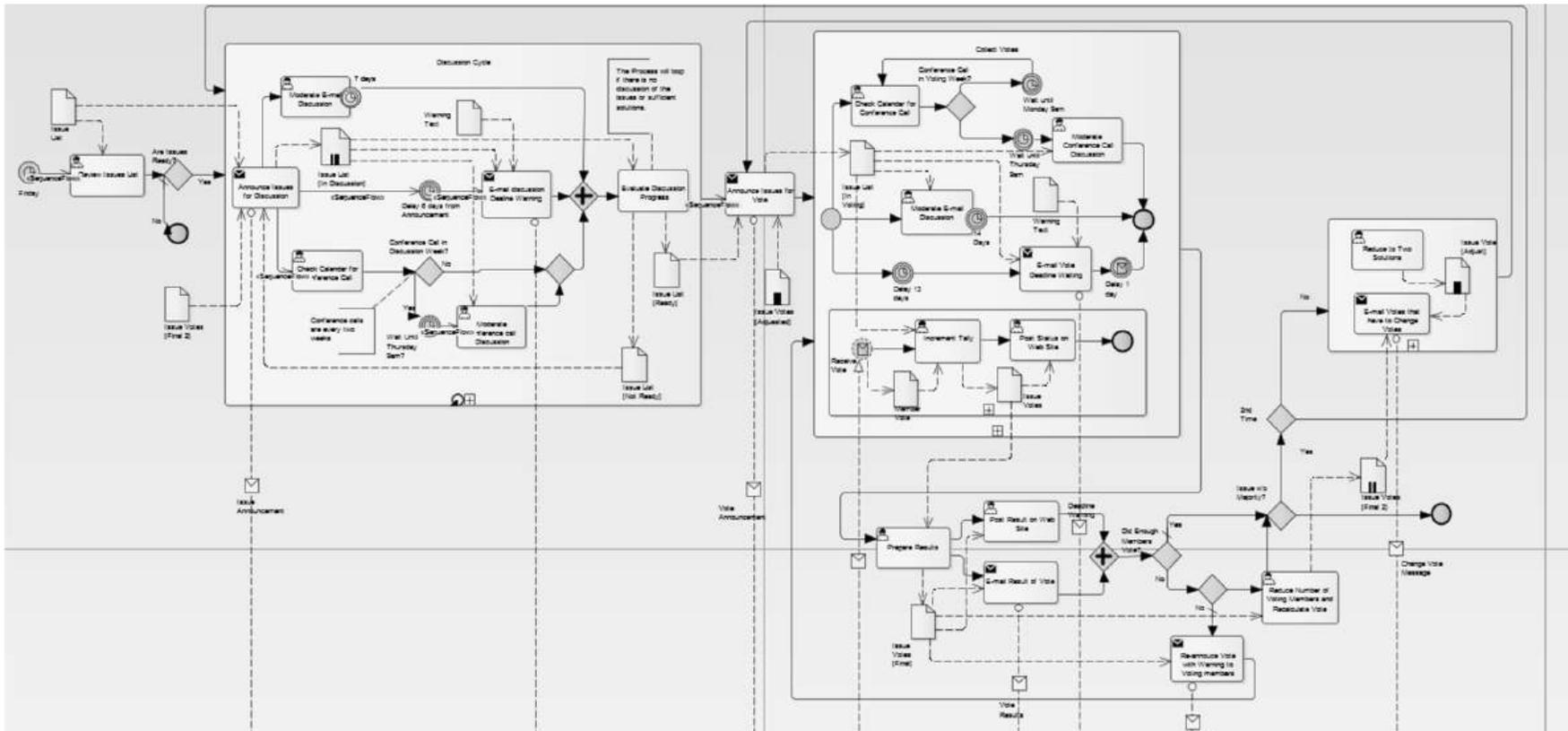
*Business Process Model and Notation, a standard by the OMG. BPMN was created to be a *visual programming language* for automating workflow, not for business modelling.

The full BPMN symbol set (why we use a subset)

4 kinds of Activities (plus Markers & Task Types)

7 kinds of Gateways

63 kinds of Events

6 ways to represent Data

Three questions to develop your <u>initial</u> workflow model

Emphasis:

- keep you out of the details – focus on *flow*

- ensure the involvement of *every* actor is shown –
  it doesn't matter *how much* or *how little* they do,
  or whether they *add value*

Three simple questions:

1. "*Who* gets the work next?"

2. "*How* does it get there?"
   – Often uncovers "transport" actors or systems

3. "Who *really* gets the work next?"
   – Often uncovers additional actors
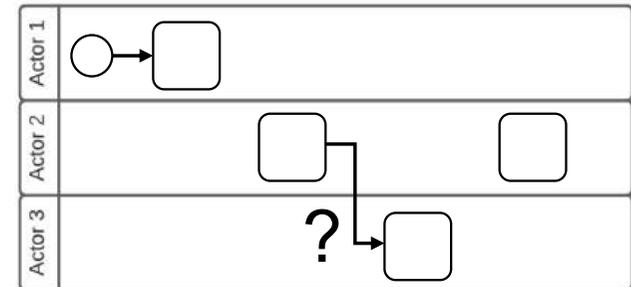
Guideline for the initial Handoff Diagram:
Whenever an actor *holds the work*,
whether they do a *lot* or a *little*,
draw *one* box (or post *one* sticky)
and *move on!*
(And no value judgements – include
every actor that holds the work!)

Question 1 – "Who gets it next?" traces overall flow

Process: Issue Building Permit
Case: Single Family Dwelling (SFD)

My mantra – "Flow first, detail later"

Builder	
Permit Control Clerk	Etc. – In some cases it will carry on to Schools, Parks and Recreation, Legal, …
Zoning	
Fire Safety	
Road-works	
Water-works	

How would you describe this process?
Be factual, not judgmental
What questions do you have for the Building Permit experts? *Focus on why it works the way it does, not "Couldn't we do it this way instead…?"*

Two key concepts:
– sequential vs. parallel
– dependent vs. independent

In scoping, you identified the trigger, the result, and the main actors. Now, starting at the triggering event, keep asking question 1 –
"Who gets the work next?"
- trace the flow of work through to the Customer's result, following one path only!
- at a decision or parallel flows, follow the main path, mark the other with a cloud, and return later
- **DO NOT** ask "What do you do?"

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Question 2 – "How does it get there?" uncovers more actors

Process: Issue Building Permit
Case: Single Family Dwelling (SFD)
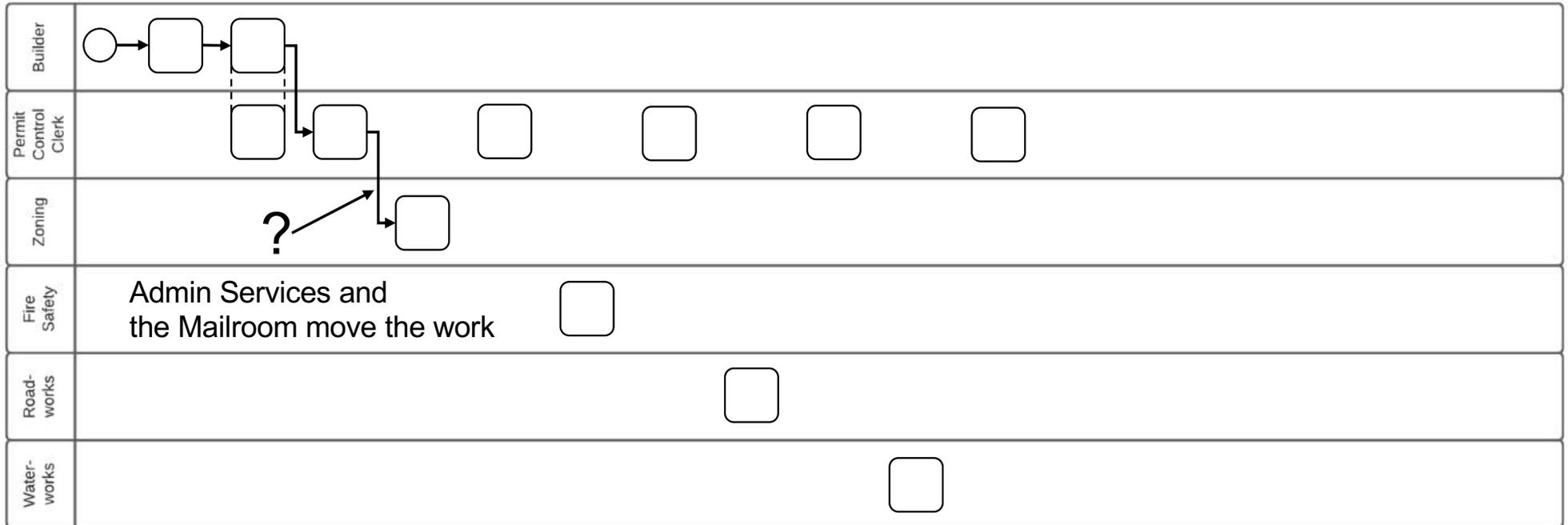
Next, at every handoff, ask question 2 –
"How does it get there?"
- uncovers *additional actors*, and therefore more handoffs
- a handoff is a potential source of *delay, error, or expense*

.

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Question 2 revealed more actors and transport mechanisms

Builder

Permit Control Clerk — etc. — etc.

?

Zoning

Who really gets it in Zoning?

Fire Safety

Road-works

Water-works

Admin. Services — Pick Up — Deliver

Mailroom — Sort
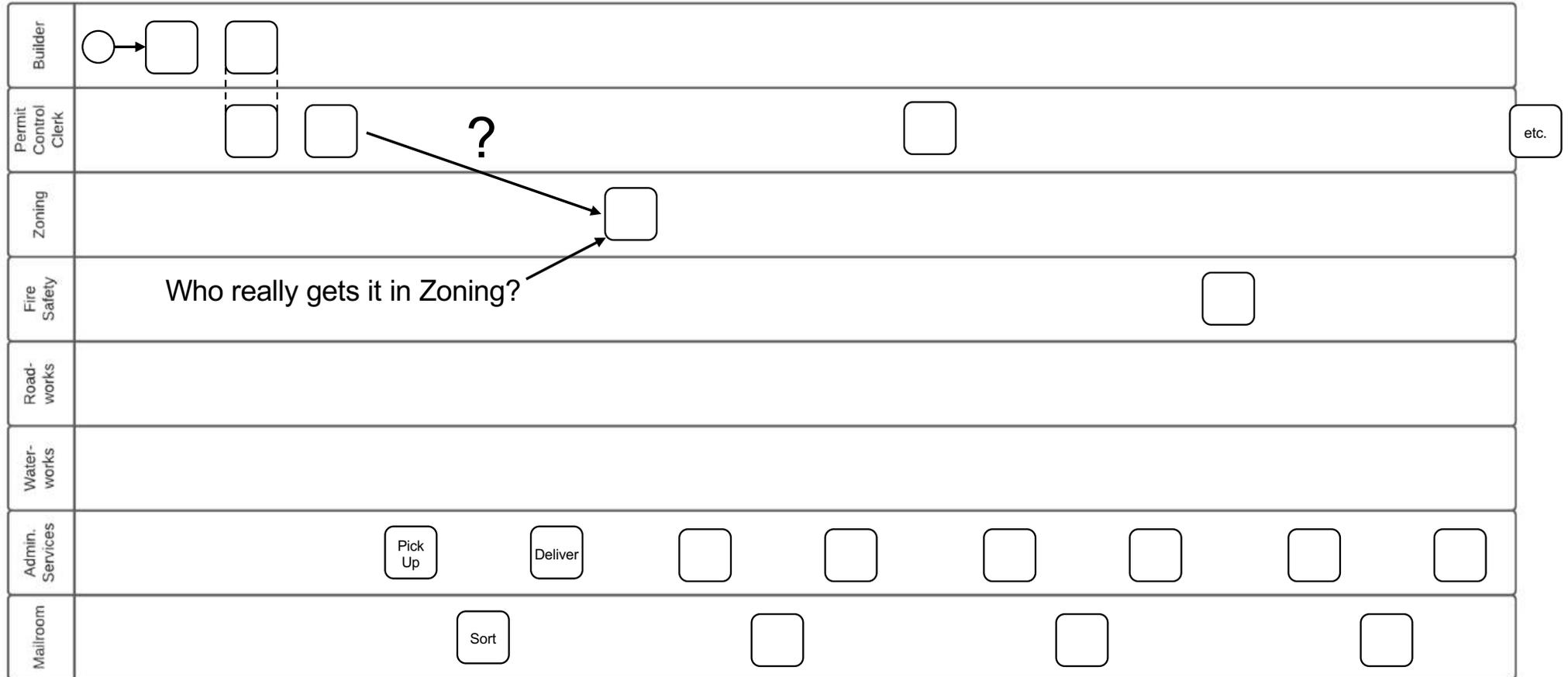
Now, inspect handoffs again, looking for missing actors, ask question 3 -
"Who really gets it next?"
- does it *really* go directly to the actor you first identified?

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Question 3 – "Who really gets it next?" uncovers specific roles

Builder

Permit Control Clerk

Zoning
- **Admin Assistant**: Log, Forward
- **Manager**: Review
- **Compliance Officer**: Assess

THREE actors within Zoning

If you stick to the 3 questions, this is *fast* – trace one overall flow through the process without bogging down in detail.

Fire Safety

We found FOUR actors within Fire Safety

Road-works

Only when we got to the level of *individual actors* did we see where the delays were

Water-works

Admin. Services

Mailroom

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We have <u>started</u> a "Handoff Diagram"

| | Builder |
| Permit Control Clerk |
Admin Assistant	*a little* Log Forward
Zoning Manager	Review
Compliance Officer	*a lot* Assess
Fire Safety
Road-works
Water-works
Admin. Services
Mailroom

Guideline:
Whenever an actor holds the work, whether they do a lot or a little, draw one box (or post one sticky) and *move on!*

Emphasises *who* is involved *when*.
Shows handoffs and pattern of involvements – the overall flow, not the individual tasks.

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Now develop a "Service Diagram"

Builder
○ → Prepare App'n → Accept App'n & Fee

Permit Control Clerk
Accept App'n & Fee → Route App'n

Admin Assistant
First, name steps in the handoff diagram, draw flow lines, check for alternate or parallel flows, etc.

Log App'n

Zoning Manager
Review App'n

Compliance Officer

Steps within an actor's involvement that complete a service, e.g., one handoff-level step could become four service-level steps:

Assess Zoning Compliance

becomes…

Assess Zoning Compliance | Assess Site Coverage Compliance | Assess Height & Enclosure Compliance | Assess Easement & Encumbrance Impacts

Etc.

Puts the emphasis on *what* is achieved by showing the significant intermediate results or milestones – no procedural level "how."

Fire Safety

Road-works

Water-works

Key point!
The model grows left-to-right but not up-and-down – *no new actors* appear in the Service Diagram. If they do, go back and revise the Handoff Diagram.

Admin. Services
Pick Up App'n → Deliver App'n

Mailroom
Sort App'ns

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Two levels of swimlane diagrams

Level	Definition	Emphasis	Notes
1 Hand-off	• Draw one step (box) every time an actor continuously "holds the work," no matter how much or little they do	"Who" and "When" - pattern of involvement	• Sometimes this level of detail is enough to understand As-Is process behaviour
2 Service	• Decompose handoff-level steps into discrete services, *as necessary:* one step each time actor achieves a significant result or state change	"What" is actually achieved	• Usually, we don't go any further than this for the As-Is process • Also called a "Milestone" diagram

The handoff-level diagram is <u>critical</u> – ensures we discover the overall flow before diving into detail.

Stop diagramming before you get into "how"

Stop workflow modelling when work isn't flowing.
Do **not** use a workflow model to describe **how** an activity is done –
that belongs in the activity description or in a linked document.

No

Validate
Application
Completeness

Yes

Determine
Credit Limit

Set Up
Account

Checklist
- All contact info
  complete?
- Tax registration
  number provided?
- Net income
  <= gross income?
- etc.

Procedure
- Determine gross
  annual income
- Subtract annual tax
- Subtract child
  support
- Etc.

Use Case
- When credit rep enters…
  Then system displays…
- When credit rep selects…
  Then system calculates…
- etc.
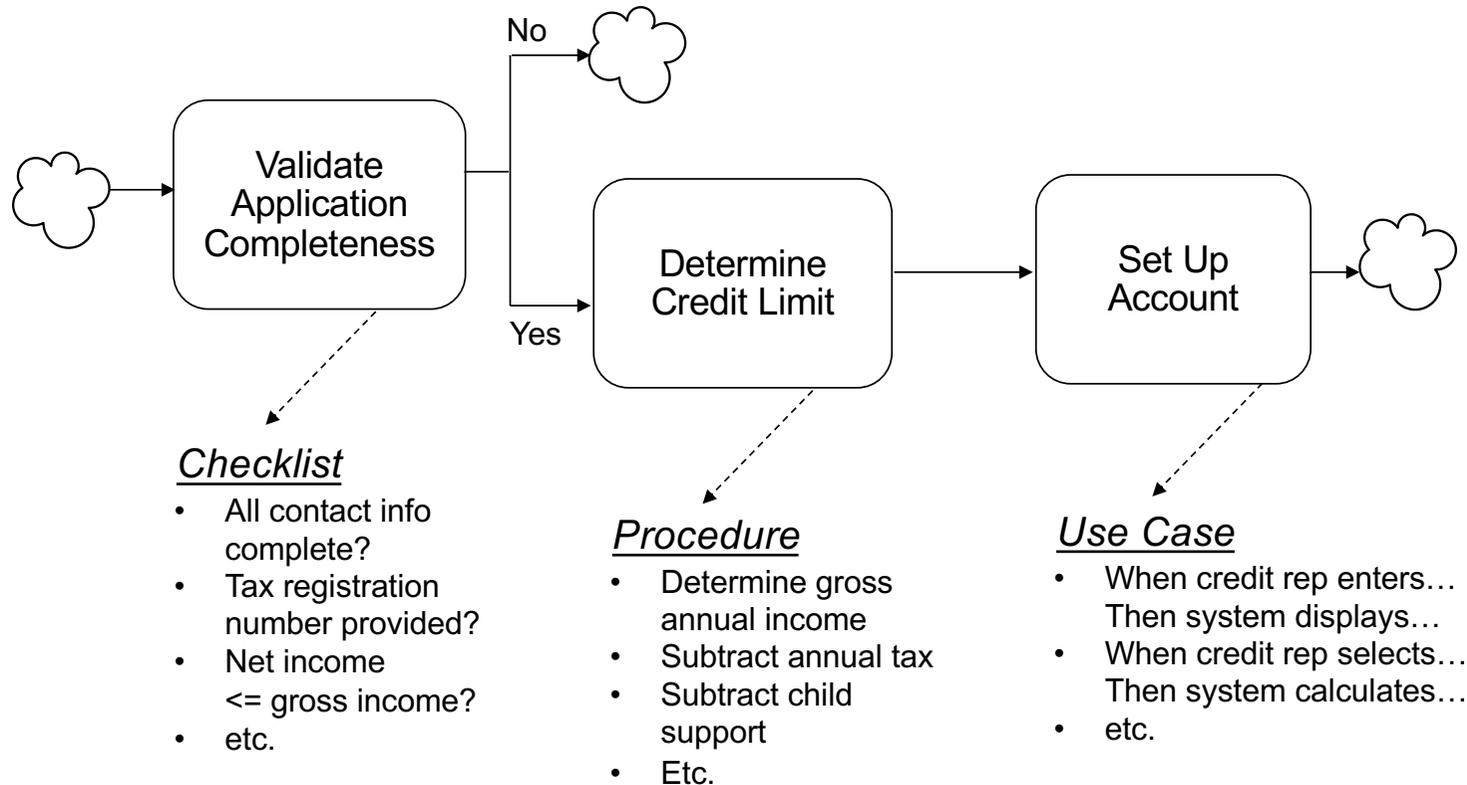
Knowing when you've gone too far

Do ***not*** use a workflow model to describe ***how*** an activity is done –
that belongs in the activity description or in a linked document.

Handle TEO
(Telecom Equipment Order)

Customer	Submit TEO (web/fax/print)									
Lead CSR		Receive TEO	Print TEO	Login to OSS	Create Pre-Order	Assign Input Service Coordinator	Input Org ID, Contact Info, Order Type	Input Customer Request from TEO	Print Order from OSS	Print Labels	Distribute Papers & Orders to Assigned CSR
Assigned CSR										Login to CDC
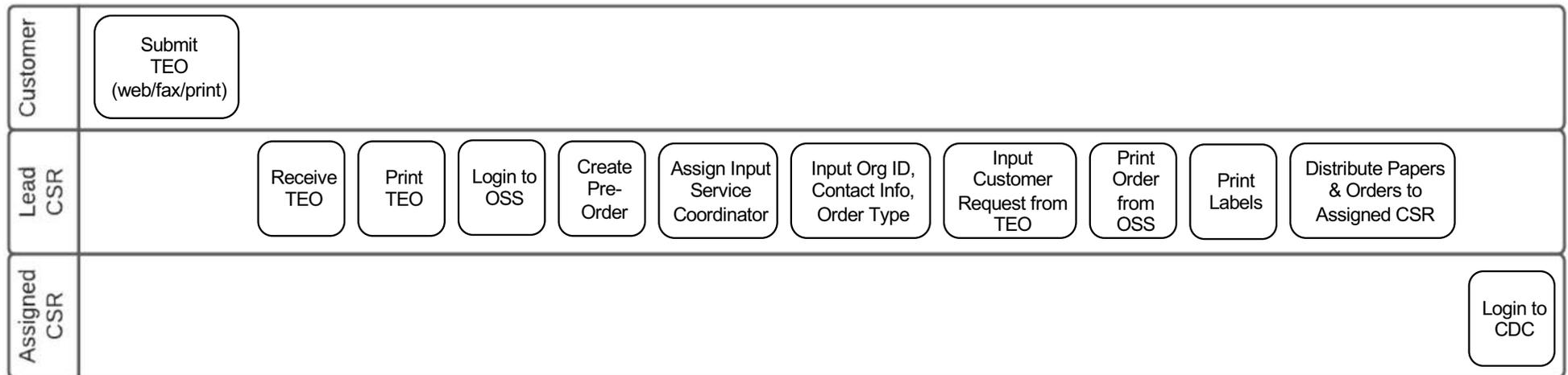
You've gone too far if:
- there are multiple steps in sequence by the same actor
- the steps include "how-to" instructions (procedural level detail)

Summary – where we've been, where we're going

Principles

The purpose of a *Workflow* Model is to show the *Flow* of *Work*

Simplicity is a virtue

Always do a Scope Model and a Summary Chart before flow modelling

Why they work

Flow (sequence & dependency) is clearly visible, left to right

Simple to read – the symbols are mostly boxes and lines

Shows all actors and their steps, and therefore all interactions and handoffs

Shows the entire, end-to-end process, from trigger to results

Shows "what" the steps are without diving into "how"

The most *common* errors

Concealing flow by drawing a convoluted diagram, usually in an attempt to make it a "one-pager"

Using a lot of symbols that regular folks don't understand

Omitting actors just because they play a minor part – *everyone* has an impact

Cutting the diagram into one-page segments – the initial flow model should be continuous

Using a Workflow Model to document procedural level detail

Moving into to-be design

1. Four things you *need* to know about *Business Processes*

2. Identifying true, end-to-end, cross-functional *Business Processes*

3. Process modelling for *humans*

4. Overview –
   the transition from *as-is* analysis to *to-be* design

The link between the As-is Process and the To-be Process

1 Establish
Process Scope and Objectives

2 *Understand*
the As-Is Process

3 Design
the To-Be Process

Some goal or issue, not rigorously specified

| *Identify* & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model | Complete *initial* as-is process assessment, and to-be objective setting, by *stakeholder* | Perform more *detailed* as-is modelling: an Augmented Scope Model & optionally, Workflow Models | Complete *final* as-is process assessment by *enabler*, and generate to-be improvement ideas | Refine to-be improvement ideas and determine 5-10 *key features* of the to-be process | Assess each to-be feature *by enabler* to ensure the new process is implementable and sustainable | Design the to-be process: 1 - *essential* activities first 2 - "who & how" next 3 – transport & protocol last |

1   **2**   **3**   **4**

This activity (**1**) marks the pivot from as-is to to-be:

- we capture what we learned while studying the *as-is*

- we use this to generate ideas for the *to-be*

- three more activities (**2** **3** **4**) lead us to a new design

Key point!
Much of what we learn comes from discussions along the way, not from studying the swimlane diagram.

Complete final as-is assessment, generate to-be ideas

① Establish Process Scope and Objectives

| **Identify** & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model | Complete **initial** as-is process assessment, and to-be objective setting, by **stakeholder** |

② Understand the As-Is Process

| Perform more **detailed** as-is modelling: an Augmented Scope Model & optionally, Workflow Models | Complete **final** as-is process assessment by **enabler**, and generate to-be improvement ideas |

③ Design the To-Be Process

| Refine to-be improvement ideas and determine 5-10 **key features** of the to-be process | Assess each to-be feature **by enabler** to ensure the new process is implementable and sustainable | Design the to-be process: 1 - **essential** activities first 2 - "who & how" next 3 – transport & protocol last |

Some goal or issue, not rigorously specified

Considering all six enablers is at the heart of this methodology

Business Process

enables .... *enables*

Business Process Design (Workflow)	Technology & Information Systems	*Motivation & Measurement*	*Human Resources & Organisation*	*Policies & Rules*	Facilities (or, **Knowledge / Info / Data**, Communications, Documents, …)
• Too many actors • Non-value - added steps • Duplicate steps • Delays and bottlenecks • Excessively sequential	• Unavailable information • Data re-entry • Missing functionality • Awkward interfaces • Lack of support for workflow	• Inappropriate performer or process measures • Internal rather than customer focus • Measures of tasks vs. outcomes	• Mismatches between task value and performer • Too little empowerment • Fragmented jobs / roles • Inappropriate recruiting and placement	• Out-of-date policies or numerical limits • Excessive review or approval steps • "Anecdotal" or inconsistent policies • Misinterpreted regulations	• Mismatch of work needs and facility • No support for team work • Layout that impedes flow of people or material

This *always* uncovers issues that would have been missed otherwise and *always* generates ideas (potential *features*) for the to-be process

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A few examples…

Business Process Design (Workflow)	Technology & Information Systems	*Motivation & Measurement*	*Human Resources & Organisation*	*Policies & Rules*	Facilities (or, **Knowledge / Info / Data**, Communications, Documents, …)

Workflow AND Technology
- Failing to rethink process design to take advantage of new technology…
- *The new "Settle Claim" process was still completely sequential after implementing a Workflow system because they copied the old paper-based workflow*

Motivation and Measurement
- What you measure is what you get…
- *Customer Service Representatives: measured on not exceeding 2 minute call time, so they hung up on Customers at 1:58 or 1:59*
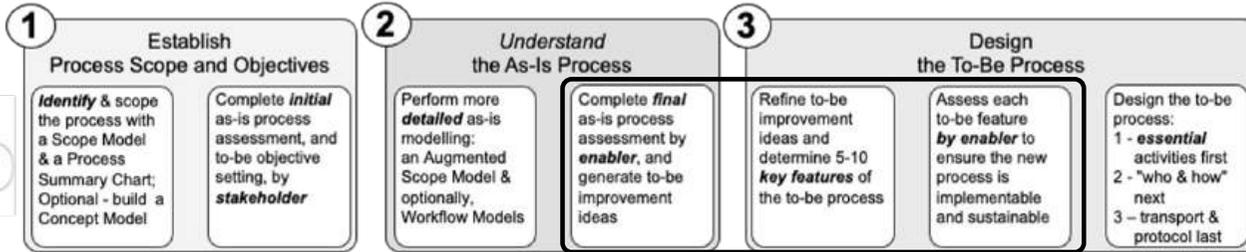
Human Resources
- Depressingly common…
- *Clerical, administrative, and support staff made redundant, so highly-paid professional staff do the work instead (and poorly)*

Policies & Rules
- Micromanagement…
- *Laboratory technicians: work had to be checked by a senior manager after every step, so the process was bogged down in pointless reviews*

A Business Process Primer prepared for ING Belgium

Assess by enabler, establish 5-10 to-be features, assess each feature by enabler

Some goal or issue, not rigorously specified

1 Establish Process Scope and Objectives
- *Identify* & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model
- Complete *initial* as-is process assessment, and to-be objective setting, by *stakeholder*

2 Understand the As-Is Process
- Perform more *detailed* as-is modelling: an Augmented Scope Model & optionally, Workflow Models
- Complete *final* as-is process assessment by *enabler*, and generate to-be improvement ideas

3 Design the To-Be Process
- Refine to-be improvement ideas and determine 5-10 *key features* of the to-be process
- Assess each to-be feature *by enabler* to ensure the new process is implementable and sustainable
- Design the to-be process:
  1 - *essential* activities first
  2 - "who & how" next
  3 – transport & protocol last

A *feature* is a significant *change* or *improvement* to the process, or a significant *factor* in the design of an all-new process.

Enabler-based assessment of the as-is process generates ideas for the to-be process.

Assessment:

Features:

Enabler	Assessment	Feature	Note
Motivation & Measurement	Sales Reps motivated entirely by commission, with no motivation to return and submit Service Orders	~~Increase Rep's commission for early submission~~	Rejected by execs. A *feature*.
		New Sales Assistant role to enter Service Orders	
Human Resources	Order Capture and Order Submission are not effective uses of a Sales Rep's time	Service Order entry directly by Customer	Another *feature*.
		New Sales Assistant role to enter Service Orders	Same *feature* again.

Then, assess each Feature – what changes are needed, enabler by enabler, to make this feature work?

Feature	Process Design	Info. Systems & Tech.	Motivation & Measurement	Human Resources	Policies & Rules	Facilities (or other)	Feasibility & Notes
Direct Service Order entry by Customers	Need to get the Service Order from the server to the Engineering Supervisor for assignment, and then to Engineer for assessment. Customer review?	Obviously, all the Web stuff. Integrated Service Order DB. Workflow functionality? What format for Customer sketches?	Commission? What impact on commissions for current sales force?	Displacement of current Sales Reps? What are expectations for freed-up Sales Rep time? Customer training?	Will all Customers have access to this?	Electronic orders may free up space currently used for bins, boards, etc..	Highly feasible. What will Customer and Sales Rep reaction be?

Avoids unanticipated consequences!

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A bit more on assessing each to-be feature, enabler by enabler

Intent:

- Ensure each feature is *implementable* and *sustainable*
- Avoid *unanticipated consequences* through a holistic assessment

For each *feature,* ask…

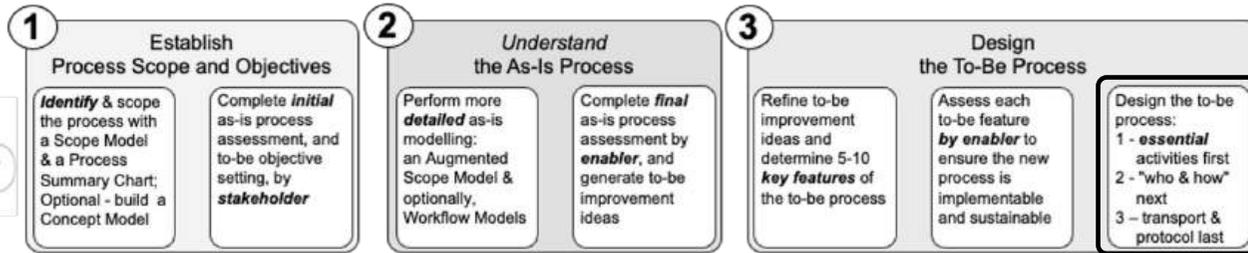"What needs to change in *this specific enabler* to make this *feature* work?"

***Changes in multiple enablers are usually needed for each feature.

Feature	Process Design	Info. Systems & Tech.	Motivation & Measurement	Human Resources	Policies & Rules	Facilities (or other)	*Feasibility & Notes*
Assign authority for higher-value work to Support Staff rather than having it all done by Senior Records Managers.	Need to decide whether we can auto-route requests to the appropriate staff member, or if all should go to a Senior Records Manager for routing	Current systems are much too complex for most cases, especially the ones that would now go to Support Staff. Need to isolate and only display essential functions	We MUST adjust the performance measures of Support Staff to ensure they are not penalised for taking on additional responsibility	Revise job descriptions for Support Staff as necessary. Provide additional training in Records Management functions and the RM System	Current policies dictate that all categorization and classification work be carried out by Records Managers – this will have to change. Some regulations may be a factor	Some Support Staff will be moved closer to Records Managers, but this is a minor change	Highly feasible if we can resolve Policy issues. Support Staff are very positive about the opportunity, and Records Managers look forward to more time for high-value work.

This feature required change in *all six* enablers, especially M&M and P&R!

# Design to-be process – overview (beyond scope of Primer)

Table: Three-stage process overview

1 Establish Process Scope and Objectives		2 Understand the As-Is Process		3 Design the To-Be Process		
Identify & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model	Complete **initial** as-is process assessment, and to-be objective setting, by **stakeholder**	Perform more **detailed** as-is modelling: an Augmented Scope Model & optionally, Workflow Models	Complete **final** as-is process assessment by **enabler**, and generate to-be improvement ideas	Refine to-be improvement ideas and determine 5-10 **key features** of the to-be process	Assess each to-be feature **by enabler** to ensure the new process is implementable and sustainable	Design the to-be process: 1 - **essential** activities first 2 - "who & how" next 3 – transport & protocol last

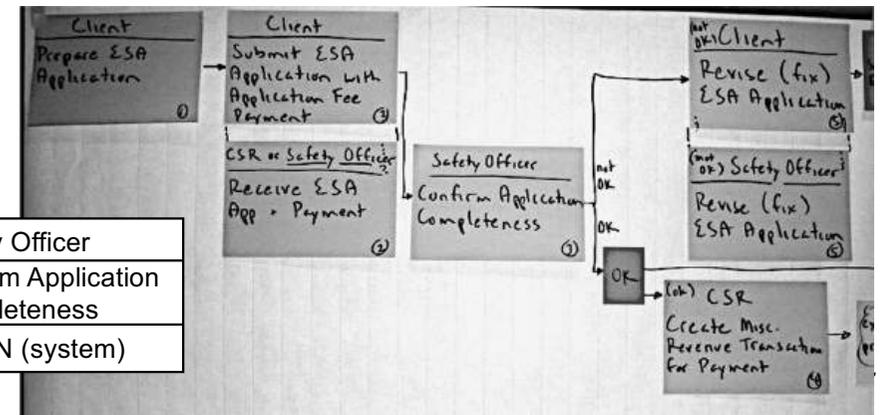Some goal or issue, not rigorously specified

Key points:
- As with the as-is process – *"What first, who and how later"*
- Design around *essential* steps, not *administrative steps*
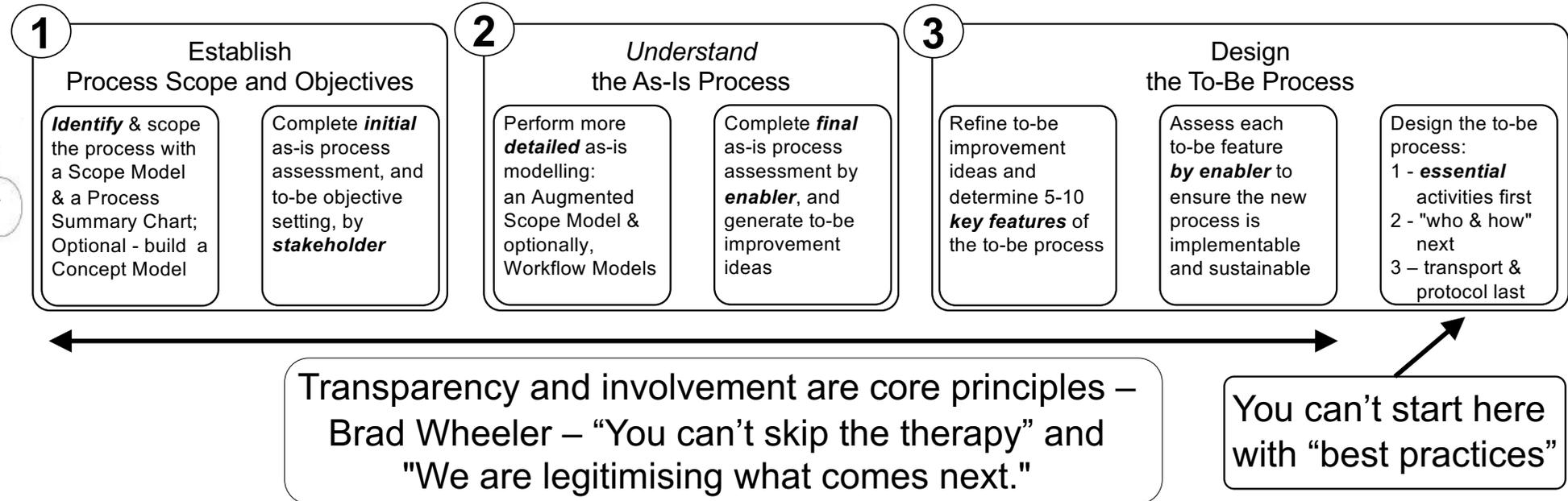
- Use an Augmented Scope Model to determine <u>what</u> the essential activities are

- Next, factor in <u>who</u> will perform each activity, then <u>how</u>
  - a person as a manual activity
  - a person interacting with a system, e.g. a use case
  - a system, e.g., RPA (Robotic Process Automation)

- Link essential activities by dependency – a PERT chart

- Adjust – e.g., verify activity is assigned to the correct role

- Only then redraw as a swimlane diagram

- *Finally,* add non-value-added but necessary activities:
  - transport, record keeping, notification, etc.
  - ensure any approval steps are *really* necessary ("Don't confuse notification with approval.")
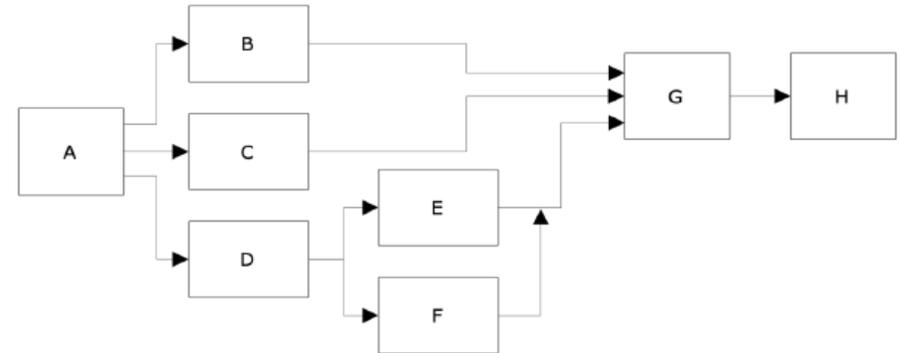
Who:	Safety Officer
What:	Confirm Application Completeness
How:	S-MAN (system)

Remember – "It's a process!"

Some goal or issue, not rigorously specified

1 Establish
Process Scope and Objectives

Identify & scope the process with a Scope Model & a Process Summary Chart; Optional - build a Concept Model

Complete *initial* as-is process assessment, and to-be objective setting, by *stakeholder*

2 *Understand*
the As-Is Process

Perform more *detailed* as-is modelling: an Augmented Scope Model & optionally, Workflow Models

Complete *final* as-is process assessment by *enabler*, and generate to-be improvement ideas

3 Design
the To-Be Process

Refine to-be improvement ideas and determine 5-10 *key features* of the to-be process

Assess each to-be feature *by enabler* to ensure the new process is implementable and sustainable

Design the to-be process:
1 - *essential* activities first
2 - "who & how" next
3 – transport & protocol last

Transparency and involvement are core principles –
Brad Wheeler – "You can't skip the therapy" and
"We are legitimising what comes next."

You can't start here with "best practices"

Making the new process sustainable:
- Alignment of *all* enablers, especially *Motivation & Measurement, Human Resources & Organisation*, and *Policies & Rule*s
- Visibility of the process – the *whole* process, right down to *job aids*
- *Training* in the new process for current and new staff
- Time for *each feature* of the new process to *take hold* before more change – *continuous* change should mean *regular* but not *constant* change

Other courses for analysts by Alec Sharp

Working With Business Processes – *Process Change in Agile Timeframes* — 2 days

Business processes matter, because business processes are how value is delivered. Understanding how to work with business processes is now a core skill for business analysts, process and application architects, functional area managers, and even corporate executives. But too often, material on the topic either floats around in generalities and familiar case studies, or descends rapidly into technical details and incomprehensible models. This workshop is different – in a practical way, it shows how to discover and scope a business process, clarify its context, model its workflow with progressive detail, assess it, and and transition to the design of a new process by determining, verifying, and documenting its essential characteristics. Everything is backed up with real-world examples, and clear, repeatable guidelines.

Business-Oriented Data Modelling – *Useful Models in Agile Timeframes* — 2 days

Data modelling was often seen as a technical exercise, but is now known to be essential to other initiatives such as business process change, requirements specification, Agile development, and even big data, analytics, and data lake implementation. Why? – because it ensures a common understanding of the things – the entities or business objects – that processes, applications, and analytics deal with. This workshop introduces concept modelling from a non-technical perspective, provides tips and guidelines for the analyst, and explores entity-relationship modelling at contextual, conceptual, and logical levels using techniques that maximise client involvement.

Working With Business Processes Masterclass – *Aligning Process Work with Strategic, Organisational, and Cultural Factors* — 3 days

This 3-day interactive workshop combines the core content from two highly-rated classes by Alec Sharp – "Working With Business Processes" and "Advanced Business Process Techniques." This structure is popular because it gets both new and experienced practitioners to the same baseline on Claritiq's unique, agile, and ultra-practical approach to Business Process Change. First, it shows how to effectively communicate Business Process concepts, discover and scope a business process, assess it and establish goals, and model it with progressive detail. Then, it shifts to advanced topics – specific, repeatable techniques for developing a process architecture, encouraging support for change, and completing a feature-based process design. The emphasis is always on ensuring business process initiatives are aligned with human, social, cultural, and political factors, and enterprise mission, strategy, goals, and objectives.

Business-Oriented Data Modelling Masterclass – *Balancing Engagement, Agility, and Complexity* — 3 days

Our most popular workshop! This intensive 3-day workshop combines the core content from two popular offerings by Alec Sharp – "Business Oriented Data Modelling" and "Advanced Data Modelling." First, the workshop gets both new and experienced modellers to the same baseline on terminology, conventions, and Clariteq's unique, business-engaging approach. We ensure a common understanding of what a data model *really* is, and maximising its relevance. Then, we provide intense, hands-on practice with more advanced situations, such as the enforcement of complex business rules, handling recurring patterns, satisfying regulatory requirements to model time and history, capturing complex changes and corrections, and integrating with dimensional modelling. Always, the philosophy is that a data model is a description of a business, not of a database, and the emphasis is on engaging the business and improving communication.

Model-Driven Business Analysis Techniques – *Proven Techniques for Processes, Applications, and Data* — 3 days

Simple, list-based techniques are fine as a starting point, but only with more rigorous techniques will a complete set of requirements emerge, and those requirements must then be synthesised into a cohesive view of the desired to-be state. This three-day workshop shows how to accomplish that with an integrated, model-driven framework comprising process workflow models, a unique form of use cases, service specifications, and business-friendly data models. This distinctive approach has succeeded on projects of all types because it is "do-able" by analysts, relevant to business subject matter experts, and useful to developers. It distills the material from Clariteq's three, two-day workshops on process, data, and use cases & services.

*** *Note: two-day in-person workshops are delivered virtually as three half-day sessions via Zoom.*
Three-day in-person workshops are delivered virtually as five half-day sessions via Zoom.

Thank you!

Alec Sharp, West Vancouver, BC, Canada

If you have questions or comments…
don't be shy, get in touch!

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