# COMPLEX BUSINESS MADE SIMPLE

### **BUSINESS PROCESS MAPPING** More than just flowcharts

Read more at **mza.is/simplify** 

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# DISCLAIMER

Not that we're talking about finance, but a quick disclaimer is needed. After all, it's serious business.

- **1.** The content of this presentation has been designed with the specific aim to simplify complicated business scenarios.
- 2. Models and processes especially those involving people carry complexity. Without sharp know-how and experience, it can be challenging to grasp their nuances and in turn, what's important to focus on.
- 3. While the purpose of this document is to provide help and share knowledge around key topics, because of its nature it's far from being a complete/exhaustive set of tools.
- 4. When adopting methodologies, tools and approaches shared in these slides, it's important to tailor and adapt them to the environment you're operating in not merely your specific needs.

There's a reason why there are professionals performing these activities for a living. If you are unsure on how to proceed, please seek professional advice as it can save you time, money and ultimately provide a positive outcome to your goals.

### **BUSINESS PROCESS**

What do we mean by business process? Here is what these slides talk about:



A business process is a collection of related, structured activities or tasks performed by people or/with equipment (tools, documents, etc.) in which a specific sequence produces an output (e.g. a service or product for a particular customer).\*

There are different "sizes" of processes, that vary from "Lead to Customer" to "Quotation follow-up".

**HINT** Whilst there is no strict rule around naming and "depth" of your process, there are useful standards and best practices that can save a lot of headaches depending on the objective of your mapping (e.g. to roll-out a new ERP system, to re-engineer them, and more).

### **BUSINESS PROCESS**

If you were never exposed to the concept of business processes, think it like this.

Processes are like ovens in a bakery

- you put "stuff" inside it e.g. some dough
- something happens within it e.g. the heat cooks the dough
- a "more valuable" product comes out e.g. a baked cake
- there could be different people providing input(s), working on it, and collecting output(s)
- there could be different systems

# PERFECT FOR THESE USE CASES

- Find inefficiencies in teams or activities within a company
- Identifying mistakes, blockers or bottlenecks in a process (e.g. ISO9001)
- Want to replicate best practices or "modus operandi" somewhere else
- Want to understand what happens in a given business process
- Need to rollout a new CRM/ERP/tool



## WHAT TO EXPECT

# THE FRAMEWORK

How to organise yourself for the best results

#### **PREP-WORK**

Set the stage depending on your final goal



### **PROCESS DESCRIPTION**

How do you describe a process besides a flowchart



#### **PROCESS MAPPING**

What to map and how - tools, tricks and more

#### **SCENARIOS**

We mapped a process, what's next?



# THE FRAMEWOR

How to organise yourself for the best results

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## THE FRAMEWORK

Whatever your goal, it's important the information you're mapping is easy to access and understand. The simplest approach to this is to organise it in a hierarchy.

**IMPORTANT** This chart does **not** imply processes happen in a chronological way.



# THE FRAMEWORK

Each process will describe activities, responsibilities, links to other processes, input and outputs, and more.

While we will map all of these in our process map, unless you're planning to map only a handful of sub-processes (at the activity level), it's extremely useful to have a "summary" of these and use it side-by-side while reviewing processes. In this document, capture information such as:

• Connection to other processes

• Process name

• KPIs (if any)

- Input(s)
- Output(s)

• Stakeholders



**HINT** For big projects, it's useful to assign a unique number to processes, too. This will be used in files, links within and between files, indexes, etc.

ID	Name	Input(s)	Output(s)	KPI(s)	Link to others	Stakeholders
P001	Process A	Document X	Document Y	Metric Z	Process K, Process A (parent)	Dept R
P002	Process K	(none)	Document X	(none)	Process A	Dept Q
P						

# THE FRAMEWORK

Without setting too many rules, in a balanced effort between documentation and actual information, you should end up with:

- A collection of files documenting all of the sub-processes within the scope of your mapping
- An "index file", containing references and links amongst processes
- A summary file, which is sortable and searchable it will be a detailed "map" of your work



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#### Why all this?

In almost all circumstances you will either review or hand over your work to somebody else, so that they can build, work on and possibly extend it. Whether it'll be you or somebody else consuming this information, the content and its internal relationships should be clear and unambiguous.



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How do you describe a process besides a flowchart

Many think the core of process mapping is the actual diagram of activities - and for a reason! However, this is only one piece of the puzzle. When mapping processes, there are many details that need to be gathered.

The following slides will address a distilled list of what would normally go in a process description.

#### **Parent process**

It's important to understand where the process at hand "sits" in the process hierarchy; this will clarify reasons behind certain activities, potentially point out inefficiencies and bottlenecks (e.g. due to the need to interface with processes under a different parent).

#### Scope

If you're mapping processes of big organisations or for entities *outside* your own organisation, it's imperative to know who else is involved or "touched" by the process. Depending on your goal, you may need to keep them informed if you want to pursue changes, or work with them to improve the process. Often times, external entities will pose constraints on improvements you want to pursue - think of ability to change somebody else's processes or effort (time, money, partnerships, etc.) that may go into it.

#### Target of the process

This can arguably be a more "conceptual" part of the description, but can help an external party understand why a particular process is needed. Further, if you can't answer this question, you may want to question **after the mapping** whether a process really is needed in the first place.

#### Input(s)

Some processes **need input to work - or even to trigger them**! Keeping track of these is just as important as what happens in the process itself.

Part of the input is also understanding who (person, IT system) provides this input to the process.

#### Output(s)

Outputs are the **results of the process** working its magic. They are usually **the "value"** that a process produces, and logically there would be a receiver (a customer, an internal stakeholder, or an IT system) that will receive and consume this output. If not, there's a reason to evaluate whether this process is needed at all.

#### Trigger(s)

This refers to what kickstart the process. It could be a previous process (producing an output), an external event (e.g. a customer payment) or even a time-based trigger (e.g. the last day of the month).

#### Responsibility

Each process will see different actors (people, team, systems) performing different operations, however there is usually one stakeholder that is responsible for the process to run and run smoothly. In reality, you'll find that sometimes there is confusion around who is the responsible, even finding no-one claiming responsibility or having two (or more!) parties believing they are held responsible for the same process.

#### **Metrics and measurement**

Logically, some processes would have metrics attached to them. These are usually referred to as KPIs (Key *Process Indicators*, as if the word KPI wasn't abused enough!) and measure the performance of the process.

#### **Process mapping**

This is the descriptive flowchart of the process, showing the flow of activities and events in a sequential, logical fashion.

#### **Other details**

Here I have listed the most common/important ones, however there are a variety of other descriptive details that can be attached to a process mapping to aid subsequent work on them.

As an example, having distribution lists when you're planning to pursue changes within one or more processes can ensure you're not leaving any stakeholder behind.

Similarly, organising processes in variants can help grasp even the small differences when you need certain details to stand out.

#### **AS-IS and TO-BE**

If you're mapping a process that you know it will change, keeping track of the stage of the process is imperative. The common naming for the two most important stages are

- AS-IS how does the process currently look like
- TO-BE how will the future process look like

These slides will focus on process mapping, logically leaving out the "TO-BE" side of things. More on this practice later in the deck.



# **PREP-WORK**

Set the stage depending on your final goal

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# **PREP-WORK: FINAL GOAL**

Whilst the work to be done is largely the same when mapping processes, there is still a small component that may change depending on the goal of your exercise.

Think about your approach.

Tailoring your approach, plan and questions for your stakeholders around your final goal can greatly help in organising parts of your - and their! - efforts.

E.g.

- if you are mapping processes to roll-out a new software a CRM, ERP, etc. you may want to note down pains, propensity of each stakeholder, wish-lists, and so forth, as it will greatly aid the change management process you (or somebody else) will pursue later;
- similarly, if the aim is restructuring the process, you may need to pay special attention to certain details and all the possible variants of a process



# **PREP-WORK: FINAL GOAL**

Things to consider

• Who should map the process?

If you own - or are involved in - the process, ask someone else to interview you, or perform this exercise with the help of somebody else; they'll ask questions and ensure you're not letting anything slip

• How are we looking to affect the metrics that measure the process?

Re-engineering efforts commonly **pursue improvements in efficiency or effectiveness** (e.g. higher throughput, faster execution, removal of bottlenecks).

In cases like this, it's important to remember to have an **initial benchmark** of the AS-IS process to compare the TO-BE to. Ensure that you have enough data before you embark on mapping and especially amend the process.

If there are no metrics, sometimes it's important to still set a goal. For a process that works you may want to consider measuring its effectiveness and check that this is not being affected by changes you bring within or around it.

## **PREP-WORK: FINAL GOAL**

• Who is/are the right stakeholders to interview for the mapping?

In general, this is one of those situations where **who does the job, knows best**. Interviewing the actual "executors" of a process - rather than their line managers, for example - often gives you a more realistic picture of the AS-IS situation.

In fact, you'll always find an array of activities or subtle changes that the person responsible for the process doesn't even know about. These are mostly beneficial as they keep the process running, but you'll often find workarounds that deeply affect efficiency (this *usually* happens when resources have to consume information or ask approval from someone external to the process, or when the value of a certain activity is not perceived by whoever executes it).

• How do I prepare for the interview?

There is not much to prepare, really. In fact, I would suggest to **focus on the interviewee**: set the expectations even before booking the time, pick a comfortable place (some interviews go for hours!), you could even bring some food and refreshments in some cases.

Bottom line is - you need to get knowledge out of somebody else's head, so make sure they trust you and know what you will be doing with it.

# **PREP-WORK: INTERVIEWS**

For those scenarios where you're not mapping your own process, you will be conducting interviews with people who know their processes well.

Let the person interviewed explain their work and how the process work, from start to end.

Your role is to merely **moderate the conversation** so that it gets to a level that is useful for your mapping and follows a (chrono-)logical flow of events. Take notes of these (usually in the form of flowcharts) so that you can easily work on them later.

**Important**: you'll hear plenty of things that you would disagree with or for which you'd have improvements in mind. Sometimes you'll even feel compelled to offer alternatives or suggest different approaches. Don't. This is not the time, and doing so may block the other person from sharing more or tamper with the trust they put in you.

Depending on the situation, you may get a chance of offering help later; this will potentially be even more useful, since you'll have a better picture in mind of the situation.



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- NOT INCREASE FLOOD RISK IN TEMPORARY CASE



What to map and how tools, tricks and more



There are a variety of tools available online (free or otherwise) to cover all your process mapping needs.

#### The "summary file"

For the "summary file" containing all processes' description, usually a **text editor** (LibreOffice Writer, MS Word, Pages, Google Docs, etc.) is more than sufficient. I am a big fan of NOT bending tools for purposes different from the ones they were created for, however if you know your way around spreadsheets, organising information in an **Excel-like document** could be very powerful (think of sorting, filters, etc.).









### TOOLS

#### The "index file"

For the "index file" and the collection of flowcharts, you can find paid, powerful software such as **MS Visio or Omnigraffle** (on Mac), but also free alternatives such as **Dia** or even online solutions such as **Whimsical or Diagrams.net** (former Draw.io) and more.

Things you should keep in mind when selecting a solution (esp. for flowcharts):

- who will consume the file Do they have this software? Can they open this extension?
- how they will consume the file Do they need to modify it? Do they need a login?
- whether you'll work on it collaboratively Do you need real-time editing?
- what is the expected complexity of the work Can we just use PowerPoint?

If you are to produce a high-level, high complexity work (many processes, need editing, etc.) I highly suggest Visio. You will not have to worry about conversion, accessibility (at least on Windows) and support of your work.

If you are to produce a one-off, let's-work-as-a-team flowchart, or a simple sketch, then my go-to tool is Whimsical.

If it's anything in between, then it's Draw.io (or Dia, if I'm concerned about privacy).

# Application example

A bakery

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#### Main processes



#### Sub-process of the Sales process





# **KEY SHAPES 1/3**

There are many shapes used in diagrams, however for most (simple) cases, the following is a good collection to have handy.



Process Start

Process End

Not an actual activity, just a placeholder - "start here"

Similar to the above. Marks the end of the flowchart.



Process (sub/parent/container)

Trigger (event)

It's the container of the flowchart, but can also represent another process within the chart itself.

Describe the event triggering the process, if any.



Define a choice in the flow of activities.



# **KEY SHAPES 2/3**

There are many shapes used in diagrams, however for most (simple) cases, the following is a good collection to have handy.



# **KEY SHAPES 3/3**

There are many shapes used in diagrams, however for most (simple) cases, the following is a good collection to have handy.



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The process is simple: sit with the interviewee and ask him/her to go through the steps.

#### Key things to think about:

- Make the person feel at ease, bring some snacks and make the atmosphere less formal
- You are there to guide the discussions
  - Start from the beginning, ensure the flow of events is coherent and if you feel there's a step missing or something is unclear, ask before you move on
  - Collect precise names of documents, resources, stakeholders (roles) and systems

#### • Ensure you map the process "AS-IS"

- Get ready for the "this should happen but in reality..." (reality is the AS-IS)
- Often you'll find people wanting to suggest improvements these are important, but may distract you and the interviewee from a proper mapping
- People "go around" processes if that happens, document it professionally, you may find opportunity for improvements later on

#### • Manage exceptions

- Beware of "rabbit holes" (e.g. describe hundreds of different scenarios)
- The best processes are arguably the ones that deal with exceptions instead of wiping/constraining them try your best to model the behaviour

# **HOW TO MAP**

There are different approaches to navigate the complexity of process mapping, however a good one is a straightforward **top-down approach**.

Draw a "process map" that shows the main processes and drill down into them one at a time.

As a rule of thumb, you will find that from a "top process" you could step down by two additional levels of details to identify the "atomic activities".







#### Main processes



#### Sub-process of the Sales process



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# **HOW TO MAP**

Some suggestions to make your job easier:

- First, remember you are MODELING the behaviour trim the irrelevant details
- When clarifying or discussing parts of the process, let the interviewee see the draft of your flowchart it will help following the trail
- I found using pen and paper makes a humongous difference when you need to concentrate on your interview and especially interviewee
- Once you are pretty confident a process is finalised, take your interviewee through a review of your flowchart additional details may pop up
- Go backwards to ensure you don't miss steps you can do it either for the review or for the initial mapping, or both

## **AN EXAMPLE**





# SCENARIOS

We mapped a process, what's next?



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### **SCENARIOS**

There are many reasons why you would want to map processes.

Whilst these are left out of the scope of this document, the following are some suggestions on how to approach the next steps after the mapping exercise.

In particular:

- Rollout of applications
- Certifications (e.g. ISO 9001)
- Set up metrics and performance indicators (KPIs vs KPIs)
- BPR / Business Process Re-engineering



# **SCENARIO: ROLLOUT OF APPLICATIONS**

#### Things to pay attention to during the mapping exercise

- Map unspoken things
- Collect name of applications and files! used today and obtain a copy whenever possible
- Collect improvements people think about during process, but don't dwell on it during the interview
- You'll also get a "wishlist", write things down

#### After the interview

- Implementation metrics vs business metrics
- Understand where the bottlenecks currently are and how you could solve them

#### **Generic suggestions**

• Rolling out an application is pure change management - treat it as such

# **SCENARIO: CERTIFICATIONS**

#### Things to pay attention to during the mapping exercise

- Don't focus too much on the details
- Grab things that are important for the certification (e.g. files, etc.) and remember to ask if there are other copies that are not "controlled documents" and that need to be destroyed/marked as external to the quality system

#### After the interview

- Ensure processes work as they're expected to
- Confirm actors/stakeholders involved in the process really know how the process works
- Think on where to put mechanisms in place to monitor process effectiveness and efficiency

#### **Generic suggestions**

- Simplify the model as much as possible, you'll have to maintain the information once it makes it into your quality system and many details are irrelevant for quality systems
- When picking tools, ensure you're savings you mapped process in files/software that are available to whoever will then maintain them afterwards

# **SCENARIO: SET UP METRICS**

#### Things to pay attention to during the mapping exercise

- Try to get a feeling of what is the pain that you or your stakeholder are trying to solve (NOT what you want to measure)
- Focus on the output what are you trying to achieve? How does it add value? How can this be measured? But also, how does this output contribute to the overall value for the customer?

#### After the interview

- Then think where in your processes the information that relates to this is
- If you want to measure the process, what is critical to measure in the process? Its effectiveness or efficiency?
- Who is responsible to measure things?
  - How often?
  - How is it reported and distributed?

#### **Generic suggestions**

• Clearly differentiate implementation metrics from business metrics

# **SCENARIO: PROCESS RE-ENGINEERING**

#### Things to pay attention to during the mapping exercise

• Similar to roll-out of applications

#### After the interview

- Focus where you need to apply changes
- Any bit of information that gets handed back and forth?
- Any change in responsibility that blocks the process?
- Any output that is generated but not used? (extreme, but happens especially across teams)
- Where are the bottlenecks? (e.g. where the process stops for input or other activities)

#### **Generic suggestions**

- Implementation metrics vs business metrics
- Remember change management is not (just) fancy corporate jargon

## **EXCURSUS: SCRUM vs AGILE vs WATERFALL**

#### Process ≠ <u>Methodology</u>

These methodologies arim at managing work processes through communications and structure. The final goal is the same - facilitate the completion of projects.

#### Waterfall

Requirements  $\Rightarrow$  Design  $\Rightarrow$  Development  $\Rightarrow$  Deployment  $\Rightarrow$  Testing  $\Rightarrow$  Maintenance



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# **EXCURSUS: SCRUM vs AGILE vs WATERFALL**

Waterfall	Agile (Scrum being part of it)
Projects are broken down into sequential and linear stages (e.g. construction)	Adaptive, "parallel" workflows, completing incremental work (e.g. IT development)
Requirements must to be clear from the start (can't go back to previous stages)	Collaborative and self-organizing approach to completing work and requirements
Change in requirements are typically more challenging than change in resources	Can cope with changing requirements even on short-term basis

THANKS

Do you have any questions?

**Please reach out!** (I also love feedback!)

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