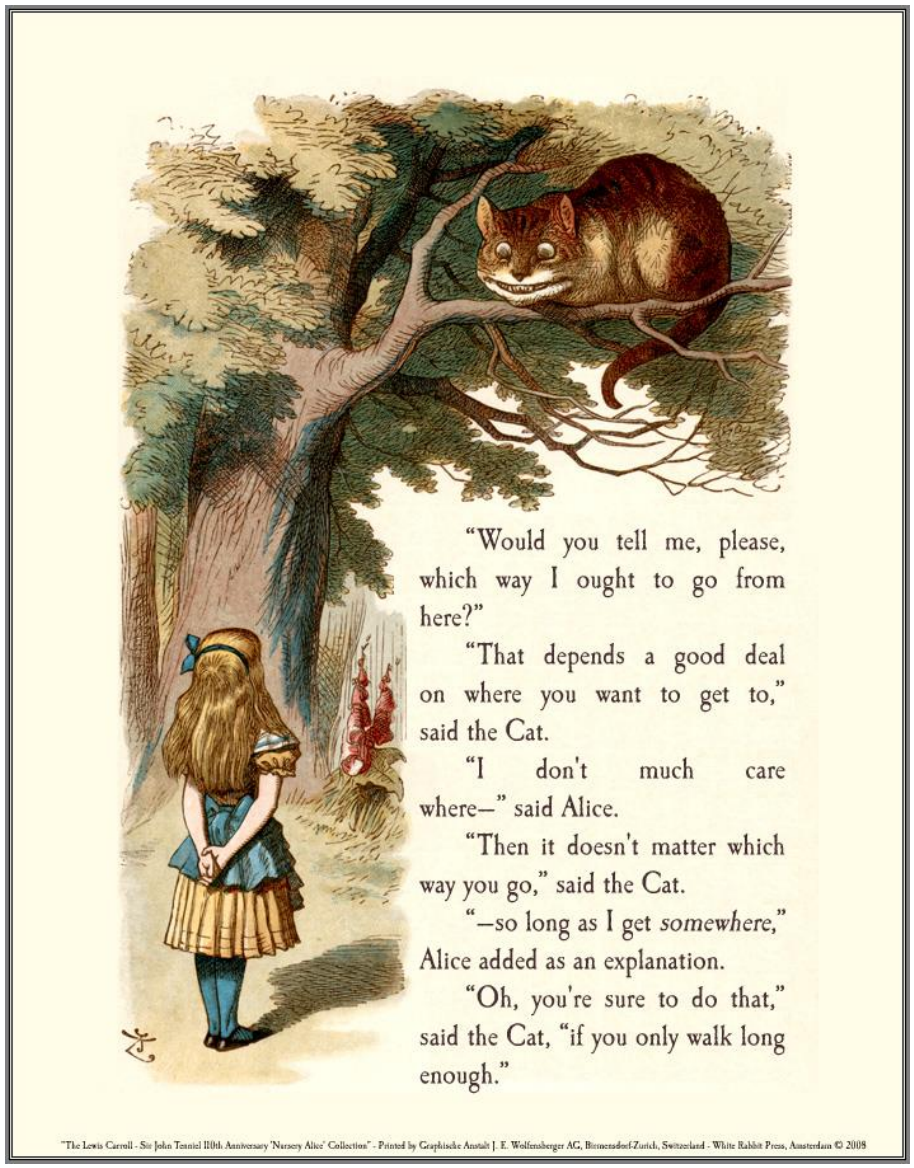
Backcasting
Document Purpose

Begin with the end in mind

– Stephen Covey
"7 Habits of Highly Effective People", Habit 2



- Not knowing what steps to take first in a new project increases the step choices and reduces the success of the entire project to random chance
- Beginning with the final objectives of a project and working backwards towards one's present state produces a plan that identifies:
  - requirements
  - gaps
  - internal resource requirements
  - external influences
  - task dependencies
  - appropriate task order
- Our brain naturally backcasts every day – it just feels foreign when the process is described (try describing how to tie shoes to a person on the phone)
- The document describes the backcasting process from different perspectives and is meant for a disparate audience (hence different presentation styles)
- Choose what you like but don't overthink it

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Version 2.0

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The Brain – Constantly Backcasting Naturally

The Map Test:

- You are dropped into a city previously unknown to you and provided only with a map
- You must make your way to the local airport from your present location
- How do you get there?
  - You find where the airport is on the map
  - You then look at the roads that lead to the airport
  - You look for the roads that connect to those roads and so on until you find where you are located
  - You then proceed to follow the roads you have identified to get to the airport

The Recipe:

- You have to prepare a recipe you have never made before
- You examine the recipe to see what ingredients, cooking tools, etc. that you need
- You check your cupboard to see what ingredients / tools you have
- You go to the supermarket (optional) to obtain anything that is needed that you don't have
- You prepare the dish
- Optional step: You convince your partner that you need a new kitchen to finish recipe (Bonus Entrepreneur Step)

In both cases, you started with the end goal in mind and worked backward from there to figure out what you needed to move forward.

Can you think of other examples where your brain is backcasting?

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Backcasting (Right-to-Left Forecasting)
Why Use It – A Musing (draft)

Organizations / People

Some bubbles don't apply to specific personal / professional situations or need to be adapted depending on scenario.

need better

measurable goals

otherwise they

get lucky

stumble

die

straining

$

Other

personal / professional relationships

have

history

that is

what it is

goals

teams / relationships

bandwidth

consistent strategy methodology

that require

that need more

strategy / tactics tie in

organization / personal goal knowledge

organizational multi-tier cohesiveness

BA skills

humility

strategic planning skills

measurable outcomes

that require

tactics

strategy

which drives

requires

methodology

that have

tasks and milestones

how do I know?

that must answer

why?

via

independent review

that must demonstrably tie to

overall business / personal objectives and goals

injectable midstream in business / life

not overly complex

agnostic

objective

proven

scalable

compatible with existing processes

consistent

collaborative

measurable

communicable

that is

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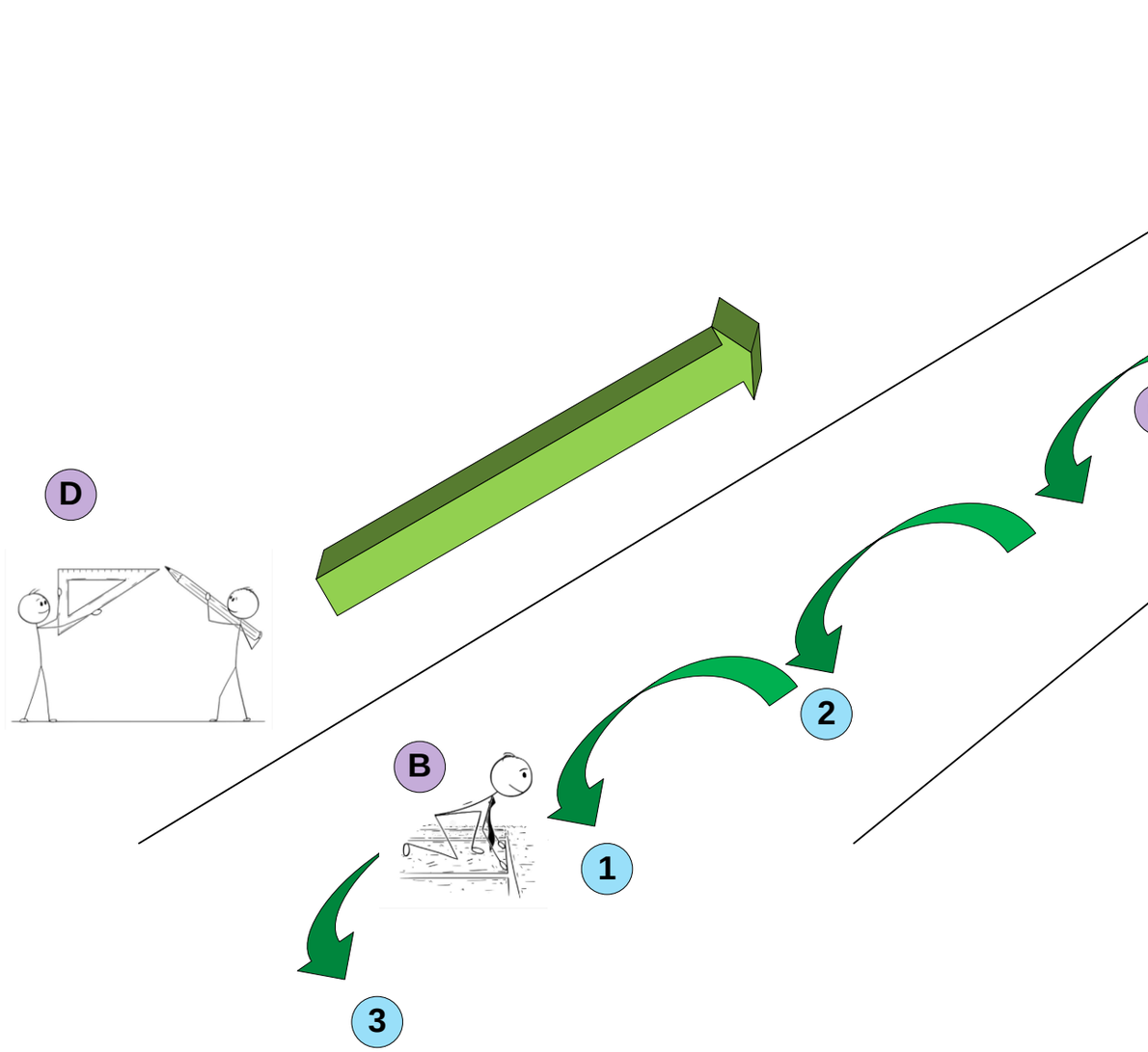
Backcasting (Right-to-Left Forecasting) – The Lite Version



The Process

A Awareness / Visioning – the Finish Line (with dates and measurable stuff)

B Baseline Mapping / Original State – The Starting Block (where you are now)

C Creative Solutions – The Backcast Process (watching for minefields, needs, etc.)

D Decide / Confirm Priorities – Finalize the Plan

The Result

1 Backcast perfectly to present date – ready to go!

2 Backcast finishes in future – move completion date earlier or increase vision size (or leave unchanged and wow people with early delivery)

3 Backcast finishes in past – move completion date later or decrease vision size (or leave unchanged and freak people out with disappointing delivery)

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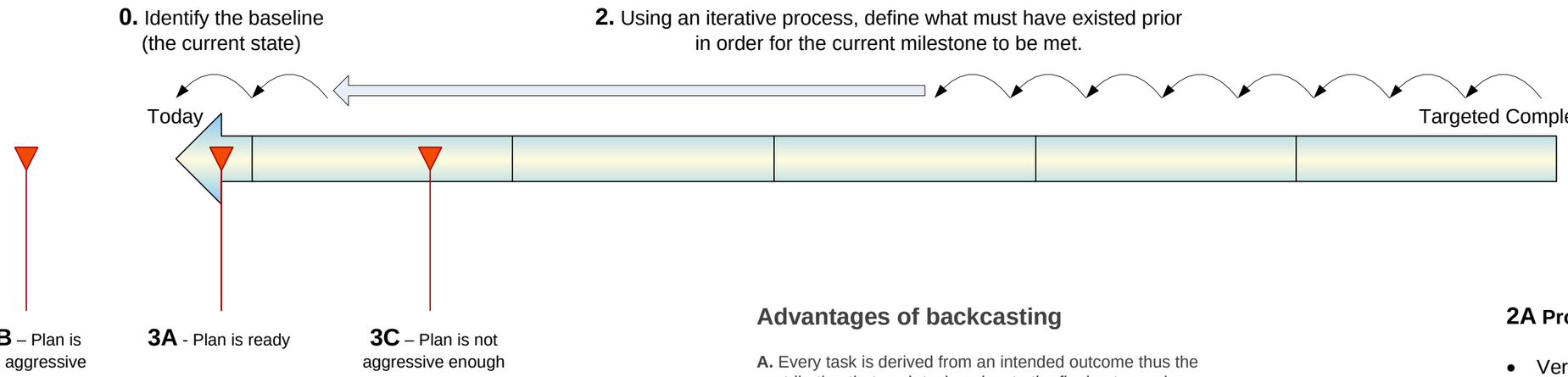
Backcasting (Right-to-Left Forecasting) – The Dry Techie Version



Understanding backcasting (right-to-left forecasting)

Note: Cognitive mapping has proven to be useful in the following exercise using software such as Decision Explorer or similar..

A. Begin by identifying the current state (item 0) and the measurable outcomes (Item 1) including dates (step 0 and then step 1 or vice versa is a personal preference).

B. Assuming that these outcomes occur by this date, define what milestones (item 2A) must have occurred immediately prior in order for these outcomes to have manifested.

C. Assuming that item 2A has occurred, define what milestones (item 2B) must have occurred immediately prior in order for 2A to have occurred.

D. Assuming that item 2B has occurred, define what milestones (item 2C) must have occurred immediately prior in order for 2B to have occurred.

E. Repeat process until all milestones and tactical requirements have been defined. You will now have a project start date and a plan with milestones.

F. Review plan for opportunities and risks.

G. If the start date is close to today's date (item 3A), then one has a plan to execute by flipping the timeline in reverse, running it forward towards the measurable outcomes.

H. If the start date is significantly prior to today's date (item 3B), then the outcomes are too aggressive and require more time to implement then the defined outcome date permits. In this case, either push the date back or make the outcomes less aggressive, reducing the size or number of them.

I. If the start date is significantly in the future (item 3C), then the outcomes are not aggressive enough. In this case, either pull the date closer to today's date, add additional outcomes or expand upon existing measurable outcomes.

Advantages of backcasting

A. Every task is derived from an intended outcome thus the contribution that each task makes to the final outcome is known. There are no wasted tasks.

B. Gaps in knowledge and resources are identified up front before the plan is executed. There are no surprises later, providing for strong risk mitigation.

C. Areas of concern (or impossible expectations) are identified early, enabling a resetting of expectations if required.

1. Measurable Outcomes:

- Leadership attributes
- Prospect targets
- Client targets
- Staff strategy

Drives

- Life Purpose
- Corp. Vision
- Corp. Mission
- Customer Needs
- Other

2A Prospect Targets

- Verticals
- Technologies
- Other

2B Verticals

- Attribute 1
- Attribute 2
- Attribute 3

2B Technologies

- Attribute 1
- Attribute 2
- Attribute 3

2B Other

- Attribute 1
- Attribute 2
- Attribute 3

2C Technologies Attribute 1

- Prospect 1
- Prospect 2
- Prospect 3
- Prospect 4

2D Prospect 1

- Project 1
- Project 2
- Project 3
- Project 4
- Project 5
- Project 6

(items omitted for clarity purposes – subset shown as example)

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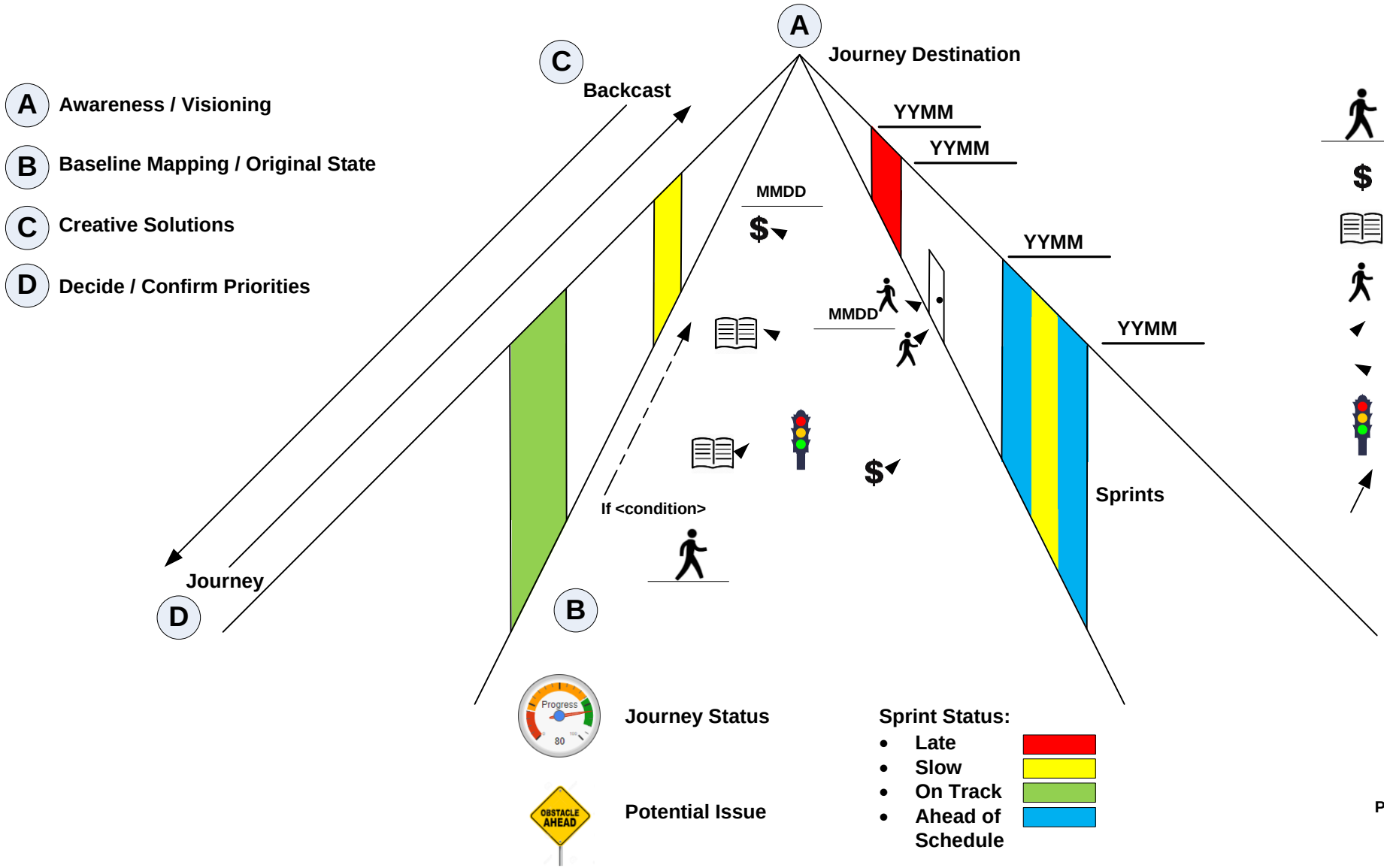
Backcasting (Right-to-Left Forecasting) – The Complex 3D Version



A Awareness / Visioning

B Baseline Mapping / Original State

C Creative Solutions

D Decide / Confirm Priorities

Observer vantage point

$ Money

Knowledge

People

Leave / Expend / Share

Arrive / Earn / Acquire

Go / No Go Checkpoint

Conditional shortcut / express path

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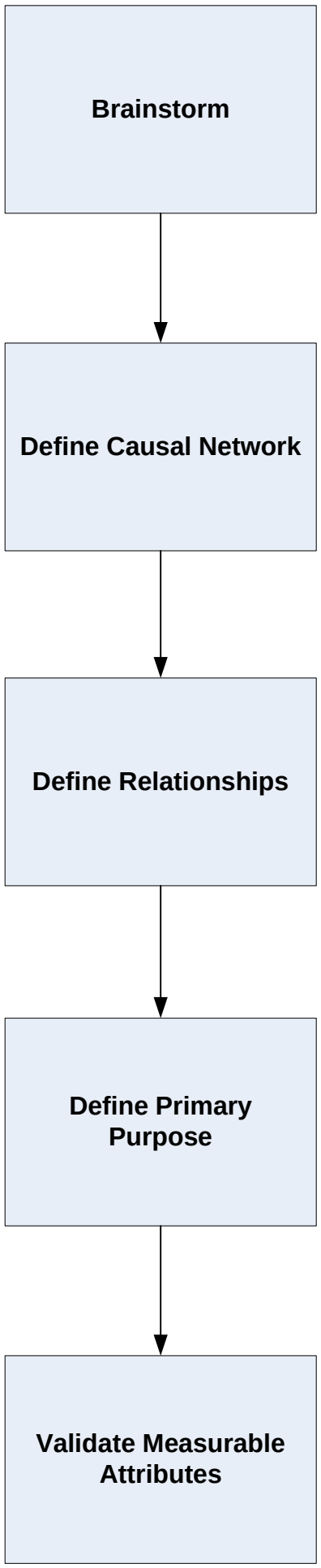
Defining Measurable Outcomes



On a whiteboard using post-it notes, brainstorm potential set of goals, aims, outcome indicators, aspirations, mandated requirements and critical success factors.

- **Purpose statements should begin with a verb (obtain, produce, create, show, demonstrate, etc.)**
- **Each statement should describe a single purpose only**

Arrange the post-it notes to create a causal network or hierarchy.

Show how purposes are linked by inserting arrows to indicate the direction of causation, influence or support (the arrows go from a means to an end or from an action to an outcome).

Decide which is the primary purpose / measurable outcome and which ones are supporting / secondary purposes / measurable outcomes.

Multiple primary purposes / measurable outcomes will create dilution of effort or confusion in strategy / execution.

Make sure measurable outcomes have dates and quantifiable data (e.g. revenue, number of customers, etc.).

The brain cannot move towards goals in specific, demonstrable, consistent ways (especially with multiple team members) unless the outcomes are measurable and have no areas of ambiguity.

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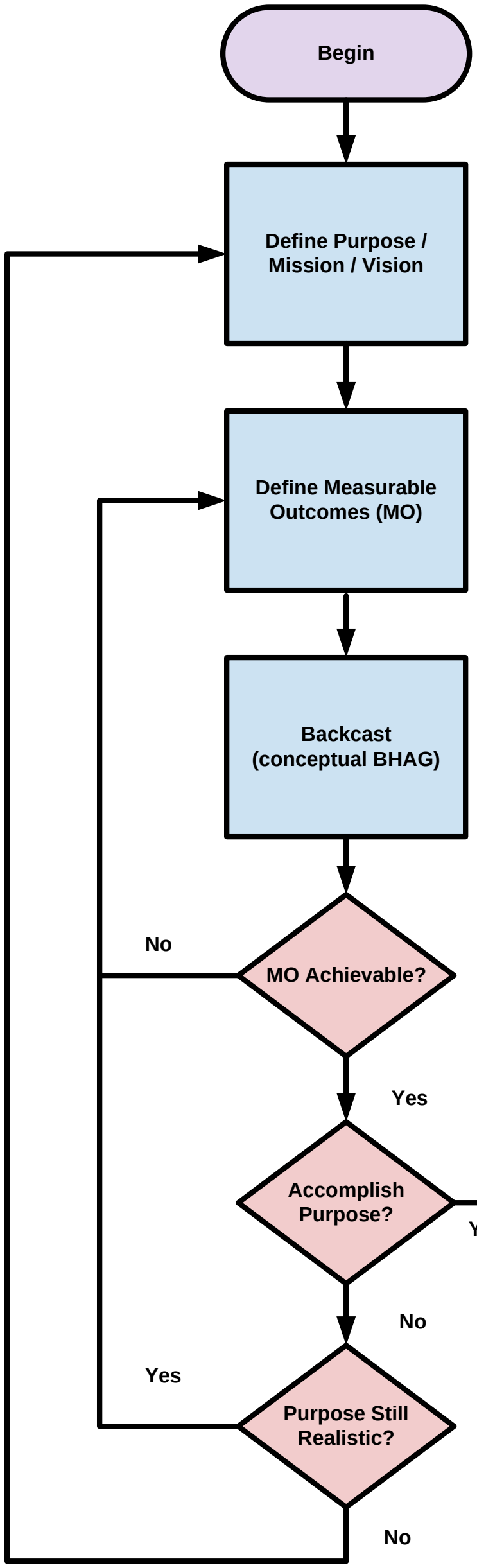
Defining Measurable Outcomes - Advanced



Define the purpose, mission and vision (overall),

What do we want to accomplish?

Define the measurable outcomes that, if achieved, will allow the purpose, mission and vision to be accomplished.

How will we measure it?

Begin with the measurable outcomes and move backward to the present state.

- **Can we accomplish it?**
- **How do we accomplish it: Primary choices, Secondary Choices, Fundamental Choices ***
- **With whom?**
- **What do we need?**
- **When and in what order?**

If No is a consistent answer here, then Purpose needs to be revisited. Flowchart does not contain an explicit evaluation of Purpose on a No since it produces too much "naval gazing" regarding Purpose. However, infinite No selections suggest Purpose may not be achievable and needs to be reviewed.

It is possible that the MO are realistic and achievable but were not defined correctly in order to achieve purpose.

It is also possible that having reviewed MO and Purpose, that Purpose needs to be revisited. Infinite loop here (for either Yes or No) suggests Purpose needs to be revisited by an objective observer for viability / reality.

Reflection Questions

- **Where do we go?**
- **What do we do?**
- **What do we say?**
- **… and to Whom?**
- **What quality do we seek?**
- **What quality do we create?**
- **Who should we be?**
- **Who are we being?**

Choices:

- **Primary – choices that produce specific, measurable results**
- **Secondary – choices that influence / contribute to primary choices**
- **Fundamental – state of being or state-of-existence choices, not subject to external influence / circumstances**

Knowing where we are is as important as where we need to go. Asking for directions to Penn Station in NYC will require different directions depending on whether we are in Manhattan, are in Seattle or are in London, England and will require different resources and different time to execute.

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Defining Measurable Outcomes - Scoring – More Advanced

Four Primary Elements

25% Awareness / Visioning

25% Baseline Mapping

25% Creative Solutions (Backcast)

25% Priority Selection

100%

Scored Using →

One Point For Each (16 total)

Critical Thinking Criteria

- Argument
- Bias
- Context, time and place
- Diagramming
- Evidence
- Fallacies

Choice Avoidance Criteria

- Choice by limitation
- Choice by indirectness
- Choice by elimination
- Choice by default
- Conditional choice
- Choice by reaction
- Choice by consensus
- Choice by adverse possession
- No choice by excessive permutation
- No choice by over-processing

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Life Has Many Dimensions That Must be Factored In

Dimensions (slices) divided into specific time periods (weekly, monthly, quarterly)

W M Q	W M Q	W M Q	W M Q		W M Q	W M Q	W M Q	W M Q	Goals
				Financial					☑
				Relational (relationships)					☑
				Physical (personal health)					☑
				Intellectual (knowledge acquisition)					☑
				Vocational (career)					☑
				Other (All Are Specific to Individual Needs)					☑

Each dimension / slice is backcast separately but with awareness of other dimensions / slices including resource needs, complementary or detraction opportunities, etc. For example, acquiring knowledge may require expending finances, spending time away from relationships, etc.

For every week / month / quarter (or other level of granularity), make sure that the sum of the effort across all dimensions for that time period can be accomplished within the timeframe, otherwise the goals for some slices will need to be adjusted. It is not enough to defer effort within a dimension / slice to another time period because it means that that time period will likely be overloaded in regards to effort.

Ignoring or not defining a dimension will ultimately cause defined dimensions to fail, since the undefined or ignored dimensions will still require attention and effort, detracting from the effort noted for defined dimensions. Reality doesn't care what you hope or think or what you choose to ignore.

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