# What's topdown approach and how to apply it?



## TABLE OF CONTENS

Content 1

What is Top-Down?

Content 2

Why Top-Down?

Content 3

**Different bottoms-Up Approach & Top-Down Approach** 

Content 4

Who Should Use Top-

Down?

Content 5

When to Implement Top-Down?

Content 6

Where to Apply Top-Down?

Content 7

**How to Apply Top-Down?** 

# What is Top-Down?

#### **Definition of Top-Down Approach:**

Top-down approach is a method of designing and building systems starting from the highest-level, big picture view of the system, defining the general necessary functions and behaviors. Then, the large system is broken down into smaller sub-systems, which continue to be broken down into specific components and modules.

Finally, the detailed modules are implemented, integrated, and tested. The benefits of this method include having a clear overview of the entire system and setting clear goals/constraints for the sub-elements.

# **Key Characteristics of Top-Down Approach:**

#### **Centralized Authority:**

Decision-making authority is concentrated at the highest leadership level of the organization.

#### **Comprehensive Strategy:**

The strategy and overall direction are set from the top level, influencing every aspect of the organization.

#### **Efficiency in Management:**

Management and decision implementation are carried out effectively and in accordance with guidance from leadership.



# Why Top-Down?



Provides an overall system overview



Guides and constrains detailed design



Facilitates collaboration & organization

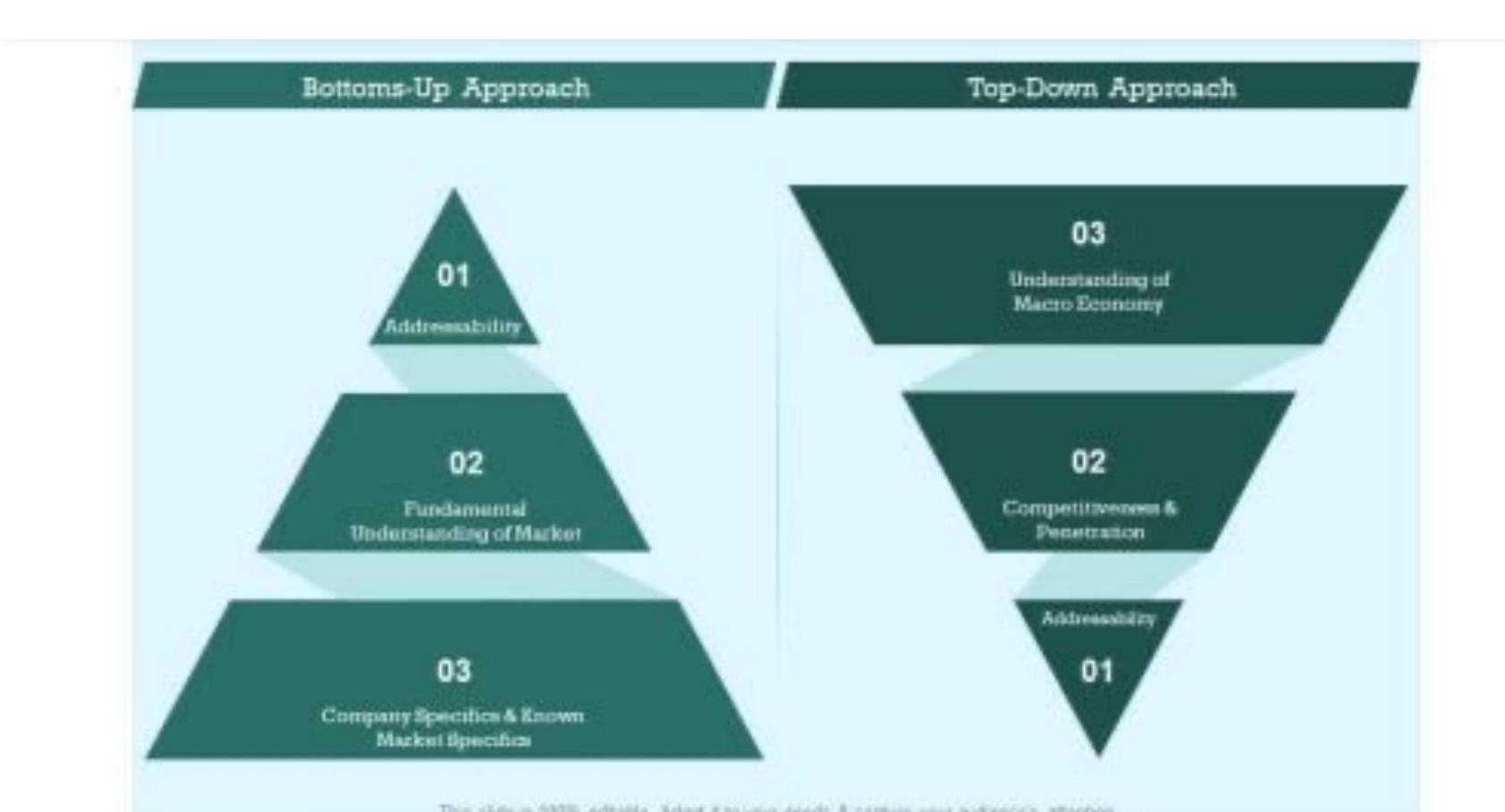


Earlier
testing &
detection of
flaws



Prioritizes critical highlevel elements firstNhắn Lobby

#### Different bottoms-Up Approach & Top-Down Approach





### Who Should Use Top-Down?

#### Target Audience for Bottom-Up Approach:

Organizations or teams that value input and feedback from all levels of their workforce. Companies seeking to empower employees and encourage innovation from the grassroots level.

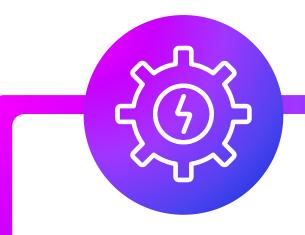
#### Relevant Industries:

- **Technology Startups:** Bottom-Up Approach can be beneficial for fostering a culture of innovation and creativity, often seen in dynamic tech startups.
- **Creative Industries:** Advertising agencies, design firms, and other creative industries can benefit from the diverse and varied ideas generated through a Bottom-Up Approach.

#### Successful Examples:

- **Google:** Google encourages its employees to spend a portion of their work hours on personal projects, fostering innovation from the ground up.
- Toyota: Toyota has successfully implemented Bottom-Up Approach in its production processes, empowering employees to contribute ideas for continuous improvement.

# When to Implement Top-Down?



#### **Guidelines:**

Use during organizational change to harness perspectives.
Apply for innovation initiatives to spur creative thinking



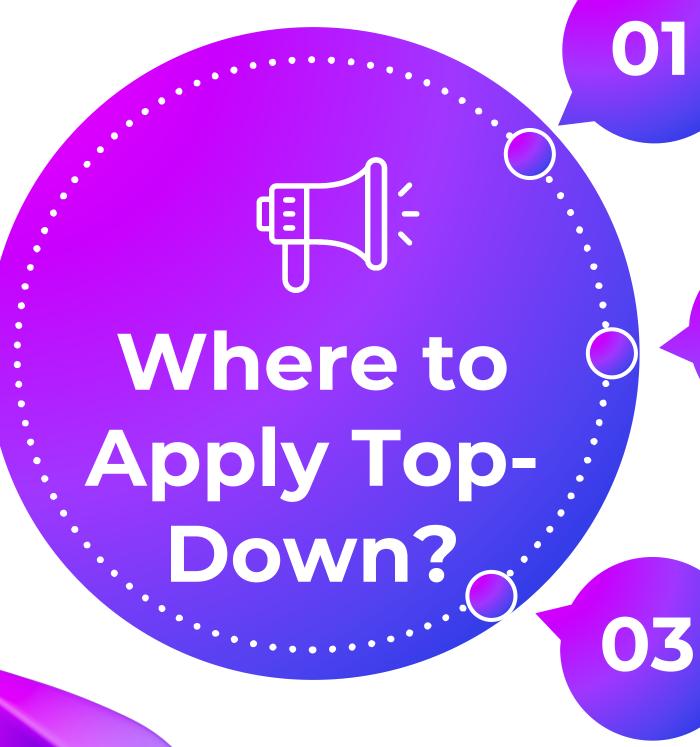
#### **Ideal Conditions:**

Flat structure with decentralized decisionmaking Collaborative cultures valuing open communication



#### **Industry Trends:**

Aligns with shifting
workforce preferring
collaboration.
Allows frontline staff to
contribute innovations with
new technologies



#### **Effective Application Areas:**

02

- Large-scale organizations with hierarchical structure
- Strategic planning initiatives to align with organizational goals

#### **Suitable Environments:**

Stable, predictable work environments Industries with strict regulatory compliance

#### **Considerations for Implementation:**

- Clear communication channels from leadership to all levels
- Alignment among leadership on vision and strategic goals

# How to Apply Top-Down?

#### **Define Vision and Outcomes**

Leadership defines the vision, mission, and desired overall system outcomes

#### **Determine Implementation Sequence**

- Prioritize critical foundation elements first
- Sequence builds from stabilized sub-systems to detailed modules

#### **Verify Integration Continuously**

- Confirm components integrate properly
- Validate system behavior meets goals

#### **Map High-Level Architecture**

- Decompose the system into main sub-systems and components
- Outline specifications of components
- Define interfaces between elements

#### **Assign Roles & Responsibilities**

- •Align teams to sub-system workstreams
- Manage dependencies across groups

#### Adjust as Needed But Retain Vision

- •Refine specifications as issues emerge
- •But maintain alignment with original strategy and architecture

# Thank you