

Project Business Analysis

PMG 461 – MGM 461

Lecture 10

**Delivering Requirements, Managing
Changes, Growing Trends and Tools
in Project Business Analysis**

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What we will cover

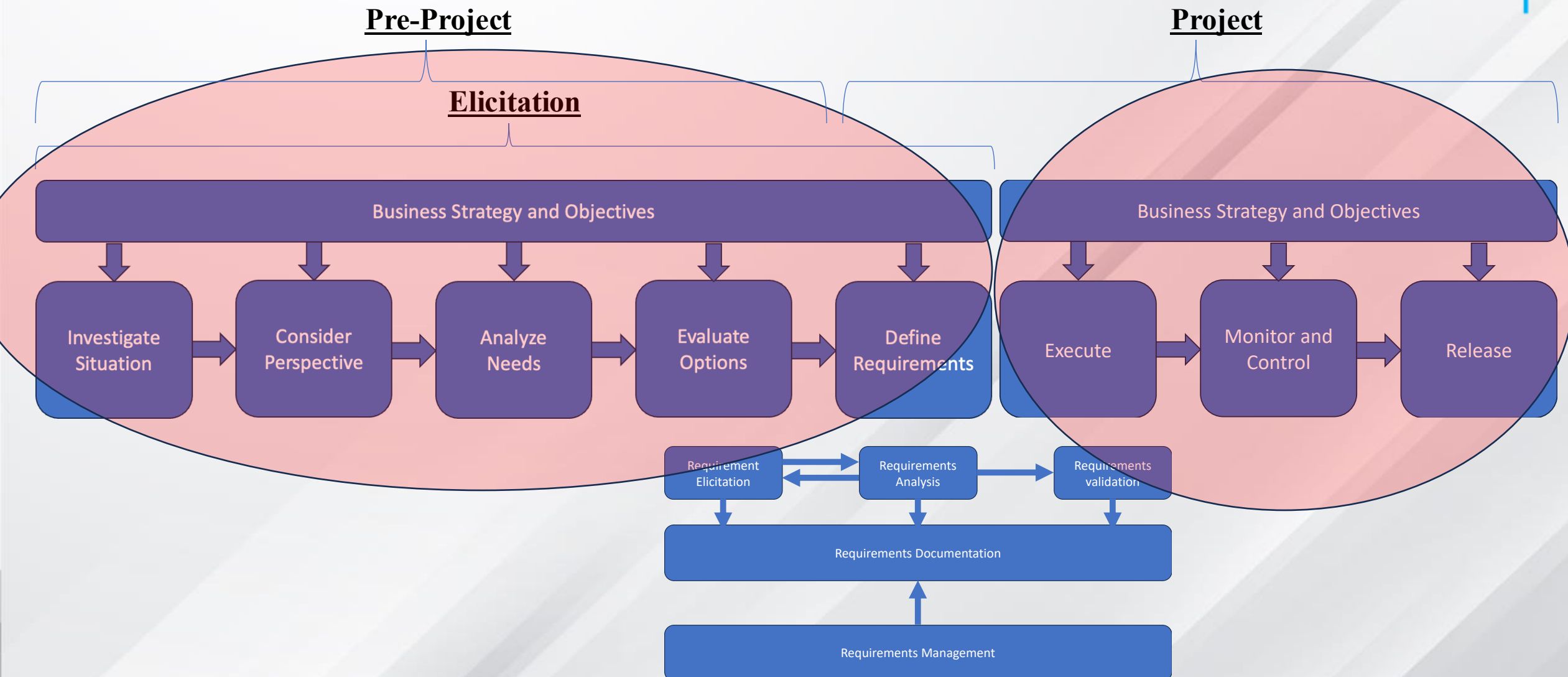
1. Delivering Requirements
2. Managing Changes to Requirements
3. Trends in Project Business Analysis
4. Tools for Project Business Analysis

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Delivering Requirements



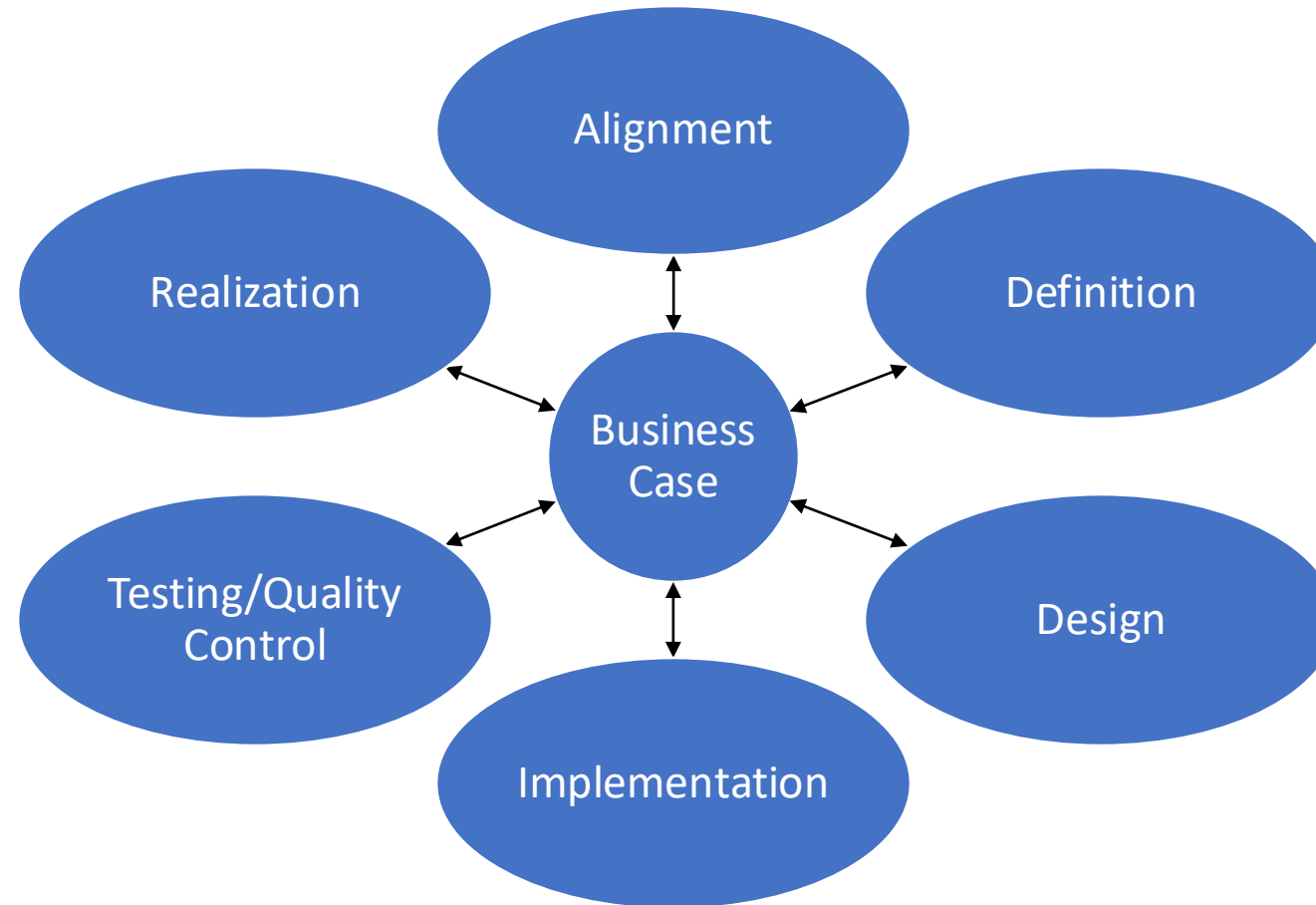
In Previous Lectures



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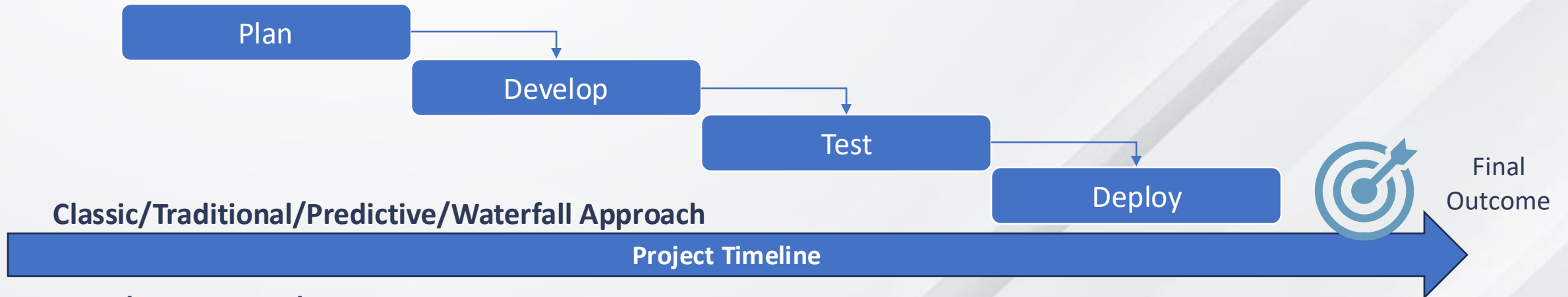
Business Change Lifecycle for Delivering Projects



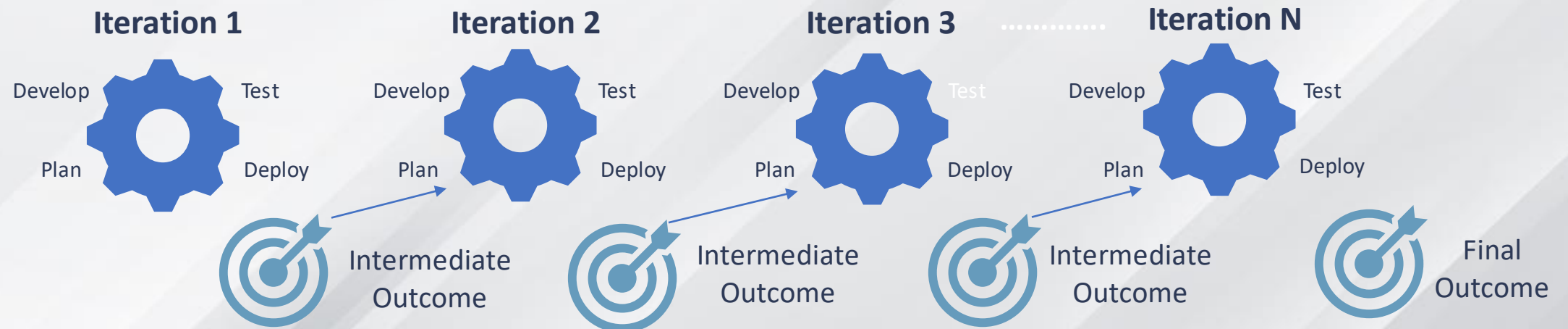
Agile vs. Traditional Lifecycle

Traditional: Requirements Engineering is performed at the beginning of the project

Agile : Requirements Engineering is done throughout the project



Agile/Incremental/Iterative Approach



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Agile vs. Traditional Lifecycle

	Waterfall	Agile
Requirements	Fixed	Dynamic
# of Deliveries	Single delivery	Frequent small deliveries
Activities	Performed once for the entire project	Repeated until correct
Goal	Manage cost	Customer value via frequent deliveries and feedback
Change	Constrained as much as possible	Incorporated in real-time delivery
Stakeholders	Involved at specific milestones	Continuously involved
Risks and Costs	Controlled by detailed planning or mostly knowable considerations	Controlled as requirements and constraints emerge

Source: Project Management Institute, *Agile Practice Guide*, Project Management Institute Inc., 2017, Page 18.

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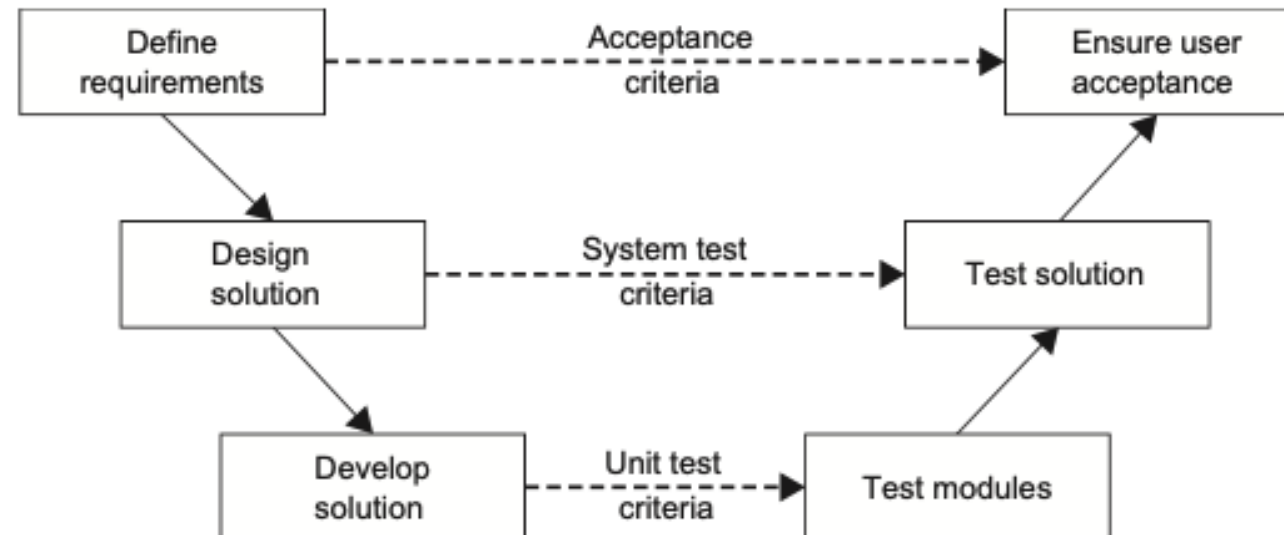
Other Lifecycles

Adaptive
Halfway between
traditional and agile

Hybrid
Mixing Traditional
and Agile

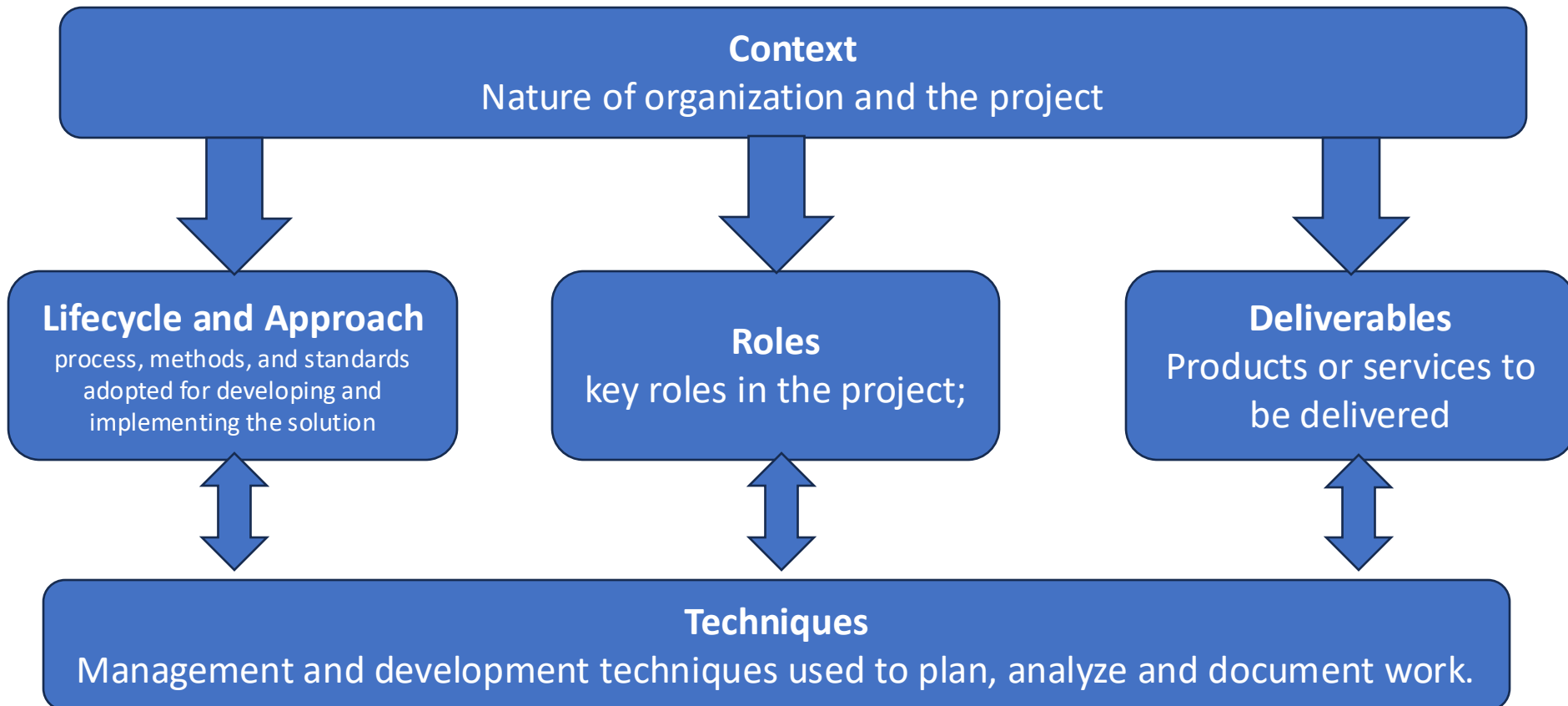
V-Lifecycle

V-Lifecycle



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Factors Impacting the Lifecycle



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Business Analyst Role in Delivering Requirements (1 / 3)

☐ Facilitating Communication

- Act as a liaison between stakeholders, including business users, developers, and project managers, to ensure clear communication of requirements throughout the implementation process.

☐ Stakeholder Engagement

- Maintain ongoing communication and collaboration with stakeholders to address concerns, resolve issues, and ensure satisfaction with the delivered solution.

☐ Requirement Traceability

- Establish traceability between business requirements, system specifications, and test cases to ensure that all requirements are adequately addressed in the final solution.

Business Analyst Role in Delivering Requirements (2 / 3)

☐ Acceptance Testing/Quality Control

- Collaborate with stakeholders to define acceptance criteria and participate in acceptance testing to verify that the implemented solution meets business requirements and quality standards.

☐ Requirement Verification

- Verify requirements with stakeholders through reviews, walkthroughs, and demonstrations to ensure accuracy, completeness, and alignment with expectations.

☐ Requirement Engineering for New Requirements

- New or modified requirements elicitation, prioritization, documentation, and validations.

Business Analyst Role in Delivering Requirements (3 / 3)

☐ Change Management

- Manage changes to requirements throughout the implementation process, assessing their impact on scope, schedule, and budget, and obtaining stakeholder approval as needed.

☐ Continuous Improvement:

- Identify opportunities for improvements and enhancements based on lessons learned, aiming to optimize future projects and deliver greater value to the organization.

Roles in Execution based on Lifecycle

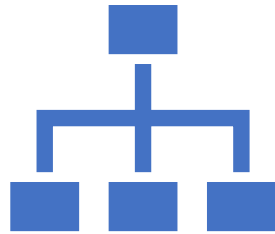
Traditional

- Project Manager
- Business Analyst
- Architect/Designer
- Developer/Team Member
- Tester /Quality Control

Agile

- Product Owner: Business representative
- Team Leader/Agile Coach/Project Manager
- Team Member: team is 5-9 people, cross-functional or T-Shaped

Testing/Quality Control



Based upon

Use Case Scenarios (Traditional)

User Stories in (Agile)



Role of Business Analyst

Develop Use case scenarios or user stories

Detail Acceptance criteria

Participate in testing

Facilitate testing between stakeholders (or end users) and technical teams

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Verification of Requirements

- Performed after Testing results and involves Stakeholders to confirm requirement is met
- Business analyst with technical team, might do a demo, walkthrough or test.
- Uses Requirements Traceability Matrix as bases, and verification results are recorded in it.

Requirement Information			Relationship Traceability			
ID	Requirement	Source	Business Objective	Deliverable	Verification	Validation
Unique ID for requirement	Description of the requirement	Name Of person who identified the requirements	List the business objective that is met by fulfilling the requirement.	Identify the deliverable that is associated with the requirement.	Describe the metric that is used to measure the satisfaction of the requirement.	Describe the technique that will be used to validate that the requirement meets the stakeholder needs.

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Managing Changes to Requirements



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Requirements Changes in Execution?

Why?

Unforeseen Needs

Shifting priorities

Evolving stakeholder expectations

What?

New
Requirements

Modify
Requirements

Remove
Requirement

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How to Handle Requirement Changes?

Assessing the impact of modifications

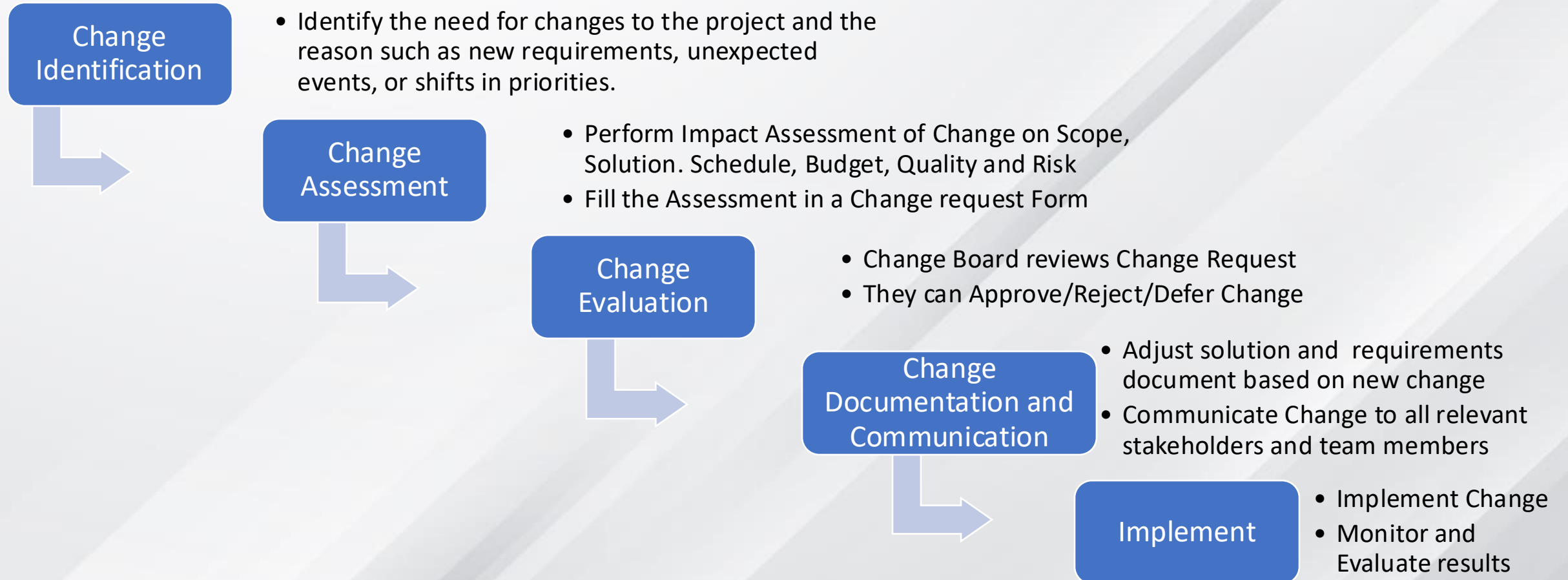
Obtaining appropriate approvals

Implementing adjustments

Minimizing disruption

“any change with the potential to affect the main project baselines—scope, cost, schedule, and quality—necessitates careful analysis through a change management process”.

Change Management Process



Change Request Form

- A change request is a formal document submitted to project sponsor or relevant stakeholders to request modifications in the project.
- Change requests include rationale for the change, impact on project objectives, potential risks, required resources, and any supporting documentation.
- Change requests are subject to review and approval or rejection.

Change Request			
Requestor:			
Category:	☐ Scope	☐ Quality	☐ Requirements
	☐ Cost	☐ Schedule	☐ Documents
Detailed Description of Proposed Change			
Justification for Proposed Change			
Impacts of Change			
Scope	☐ Increase	☐ Decrease	☐ Modify
Description:			
Quality	☐ Increase	☐ Decrease	☐ Modify
Description:			
Requirements	☐ Increase	☐ Decrease	☐ Modify
Description:			
Cost	☐ Increase	☐ Decrease	☐ Modify
Description:			
Schedule	☐ Increase	☐ Decrease	☐ Modify
Description:			
Stakeholder Impact	☐ High Risk	☐ Low Risk	☐ Medium Risk
Description:			

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Change Log Form

- A change log is a document that records and tracks all changes made to a project over its lifecycle.
- Captures information as description, status, approval status, implementation details, and any associated comments or notes.
- Serves as a centralized repository for documenting and managing changes.
- It enables project stakeholders to monitor the status of change requests.

Change ID	Change Description	Requested By	Change Request Date	Impact	Decision (Approve / Reject / Defer)	Decision Date	Responsible

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Trends in Project Business Analysis



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Why Project Business Analysis Matters Today

- Organizations face increasing complexity and rapid change
- Business analysts bridge strategy, execution, and customer needs
- Demand is rising for analysts who integrate business, data, and digital capabilities
- Shift from documentation → value-driven decision support

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1: Digital Transformation & AI-Driven Analysis

Use of AI for requirements discovery, impact analysis, and risk prediction

Automation of repetitive BA tasks (user stories, test cases)

Increased use of analytics platforms, natural language tools, and intelligent dashboards

BA roles evolving into digital product advisors

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2: Shift Toward Product-Centric Ways of Working

BAs contribute to **continuous product evolution**, not just project delivery

Stronger alignment with product managers

Focus on **value streams**, customer journey mapping, and MVP thinking

Long-term ownership of outcomes instead of temporary project lifecycle

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3: Agile & Hybrid Delivery Models

Increased use of Scrum, Kanban, SAFe, and hybrid Agile–Waterfall

BA responsibilities embedded within cross-functional Agile teams

Emphasis on **incremental requirements**, story refinement, backlog management

Rise of the **Agile Business Analyst**

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4: Data-Driven Decision Making

Business analysts increasingly leverage:

- Descriptive & diagnostic analytics
- Process mining
- Predictive modelling for forecasting project outcomes

Integration of BA with BI/Analytics team workflows

Data literacy becoming a mandatory BA skill

5: Customer-Centered & Experience-Driven Analysis

- Greater focus on human-centered design (Design Thinking)
- Use of service blueprints, empathy maps, and customer journey analysis
- Co-creation with users and non-technical stakeholders
- Requirements validated through prototypes and usability testing

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6: Enterprise Analysis & Strategic Alignment

BAs increasingly
involved in
strategy
formulation

Linking business
cases to
enterprise OKRs,
KPIs, and benefits
realization

Prioritizing
initiatives using
value-driven
frameworks

Expansion of the
BA role into
portfolio and
strategy
management

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Tools for Project Business Analysis



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Key Tool Categories for Project Business Analysis

- Project Business Analysts typically work across multiple tool types that support discovery, analysis, solution design, and decision-making.

**Requirements &
Documentation
Tools**

**Process Modeling
& Mapping Tools**

**Data & Analytics
Platforms**

**Project & Portfolio
Management
Tools**

**Collaboration &
Communication
Tools**

**Testing &
Validation Tools**

**AI-Assisted BA
Tools**

Requirements Management Tools

- Used for capturing requirements, linking user stories, traceability matrices, change control, include tools as:
 - **Jira / Jira Service Management**
 - **Azure DevOps**
 - **Confluence**
 - **Jama Connect**
 - **Helix RM**
 - **ClickUp**

Process Mapping & Modeling Tools

- Used to visualize current-state, future-state, and gaps, such as:
 - **Miro / Mural** – whiteboards for workshops, ideation
 - **Visio** – process diagrams, swimlanes
 - **Lucidchart** – BPMN, UML, value stream mapping
 - **Bizagi Modeler** – BPMN process modeling
 - **ArchiMate Tools (Archi, Bizzdesign)** – enterprise architecture
 - **Draw.io** – free modeling tool

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Data & Insights Tools Supporting BA Decisions

- These tools help validate assumptions using real operational data, such as:
 - Power BI – dashboards, insight visualization
 - Tableau – advanced analytics
 - Excel – data cleaning, modeling, feasibility calculations
 - SQL / Databricks – for querying and validating data
 - Process Mining Tools (Celonis, UiPath Process Mining) – identifying bottlenecks

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Project & Portfolio Tools for BA Alignment

- Key BA role: ensuring requirements align with roadmap, backlog, and priorities.
 - MS Project Online / Primavera P6 – timeline & dependency planning
 - Smartsheet – flexible PMO oversight
 - Wrike / Monday.com – hybrid workflows
 - Trello, Slack, Clickup, Notion for Agile Project Planning and collaboration
 - Jira Align – enterprise value stream management

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Business Case & Financial Analysis Tools

- BAs create business cases, benefits maps, and investment justification.

Excel / Google Sheets

- ROI, NPV, cost-benefit analysis

Anaplan / Adaptive Planning

- financial modeling

Value Realization Tools (Amplify, Planview Evergreen)

- benefits tracking

Testing, Validation & Traceability Tools

- BAs often support UAT, acceptance criteria clarity, and traceability. Examples of tools are:



Zephyr (Jira plugin) – user story test cases
TestRail – structured testing
Postman – API testing and data validation
Selenium / Cypress – automated testing

AI-Assisted Business Analysis Tools

- AI helps accelerate:
 - User story generation
 - Impact analysis
 - Document writing
 - Risk identification
 - Workflow recommendations
- ChatGPT / AI Copilots – drafting requirements, analyzing feedback
- ClickUp AI / Jira AI – automated summaries, risk detection
- Figma AI – rapid prototyping and interface suggestions

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What the Future BA Looks Like

- Project Business Analysis is evolving into a high-impact, insight-driven, strategic discipline.
- Competencies of the next-generation BA:
 - AI-assisted analysis & data fluency
 - Strategic and product mindset
 - Strong facilitation & stakeholder co-design
 - Multi-framework adaptability (Agile, hybrid, value stream)
- Ability to connect business needs → technology → measurable outcomes

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Key Points

- Business Analyst role is involved throughout execution in various activities as facilitating communication, stakeholders' engagement, requirements traceability and verifications, and requirements change management.
- The role and activities for the business analyst differs between Traditional and Agile Lifecycles.
- Requirements Traceability Matrix is the main document used to monitor and control requirements.
- Requirements Changes that leads to changes in scope, schedule, cost or quality need to a follow a formal change request process.
- Growing trends focus on AI, digital transformation, BA strategic role, Customer and Product Centered approaches, and using Agile and Hybrid models.
- There are several tools for different BA tasks that a BA should be familiar with and use in projects.

- Reading, Chapters 12 “Delivering the Requirements” and 14 “Implementing Business Change” from textbook “Business Analysis” by James Cadle, Malcolm Eva, Keith Hindle, Debra Paul, 2nd edition

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For Discussion Panel and
Next Lecture





Thank You