

Introduction

Chapter 1

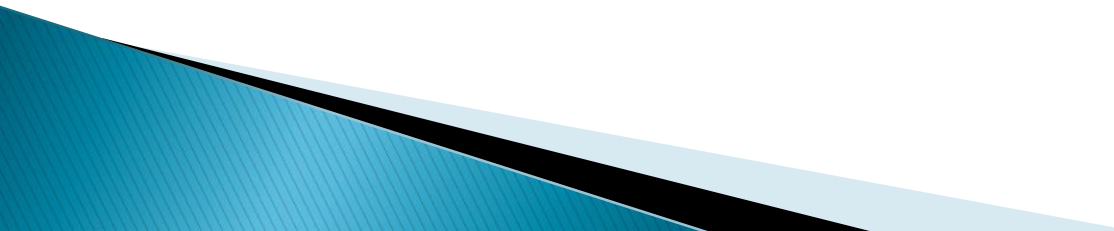
What is a Project?

- ▶ Projects are *complex, one-time* processes.
- ▶ Projects are *limited* by budget, schedule, and resources.
- ▶ Projects are developed to resolve a *clear goal* or *set of goals*.
- ▶ Projects are *customer-focused*.

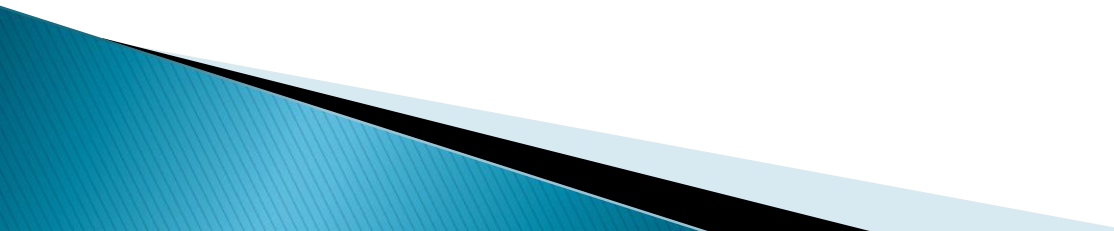
*A project is a **temporary endeavor** undertaken to create a unique product, service, or result.*

PMBok 5th edition

General project characteristics

- ▶ Projects are *ad hoc* endeavors with a clear life cycle.
 - ▶ Projects are *building blocks* in the design and execution of organizational strategies.
 - ▶ Projects are responsible for the newest and most *improved products, services, and organizational processes*.
 - ▶ Projects provide a philosophy and strategy for the *management of change*.
 - ▶ Project management entails *crossing functional and organizational boundaries*.
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General project characteristics

- ▶ Traditional *management functions* of planning, organizing, motivation, directing, and control apply to project management.
 - ▶ Principal outcomes of a project are the satisfaction of *customer requirements* within the constraints of technical, cost, and schedule objectives.
 - ▶ Projects are terminated upon successful completion of *performance objectives*.
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Process & Project Management

- ▶ Repeat process or product
 - ▶ Several objectives
 - ▶ Ongoing
 - ▶ People are homogenous
 - ▶ Well-established systems
 - ▶ Greater certainty
 - ▶ Part line organization
 - ▶ Established practices
 - ▶ Supports status quo
- ▶ New process or product
 - ▶ One objective
 - ▶ One-shot-limited life
 - ▶ More heterogeneous
 - ▶ Integrated system efforts
 - ▶ Greater uncertainty
 - ▶ Outside of line organization
 - ▶ Violates established practice
 - ▶ Upsets status quo

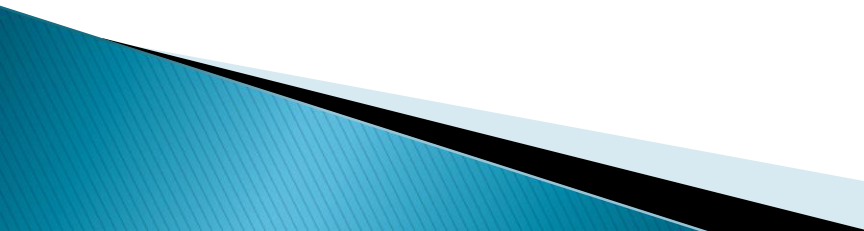
PROCESS

PROJECT

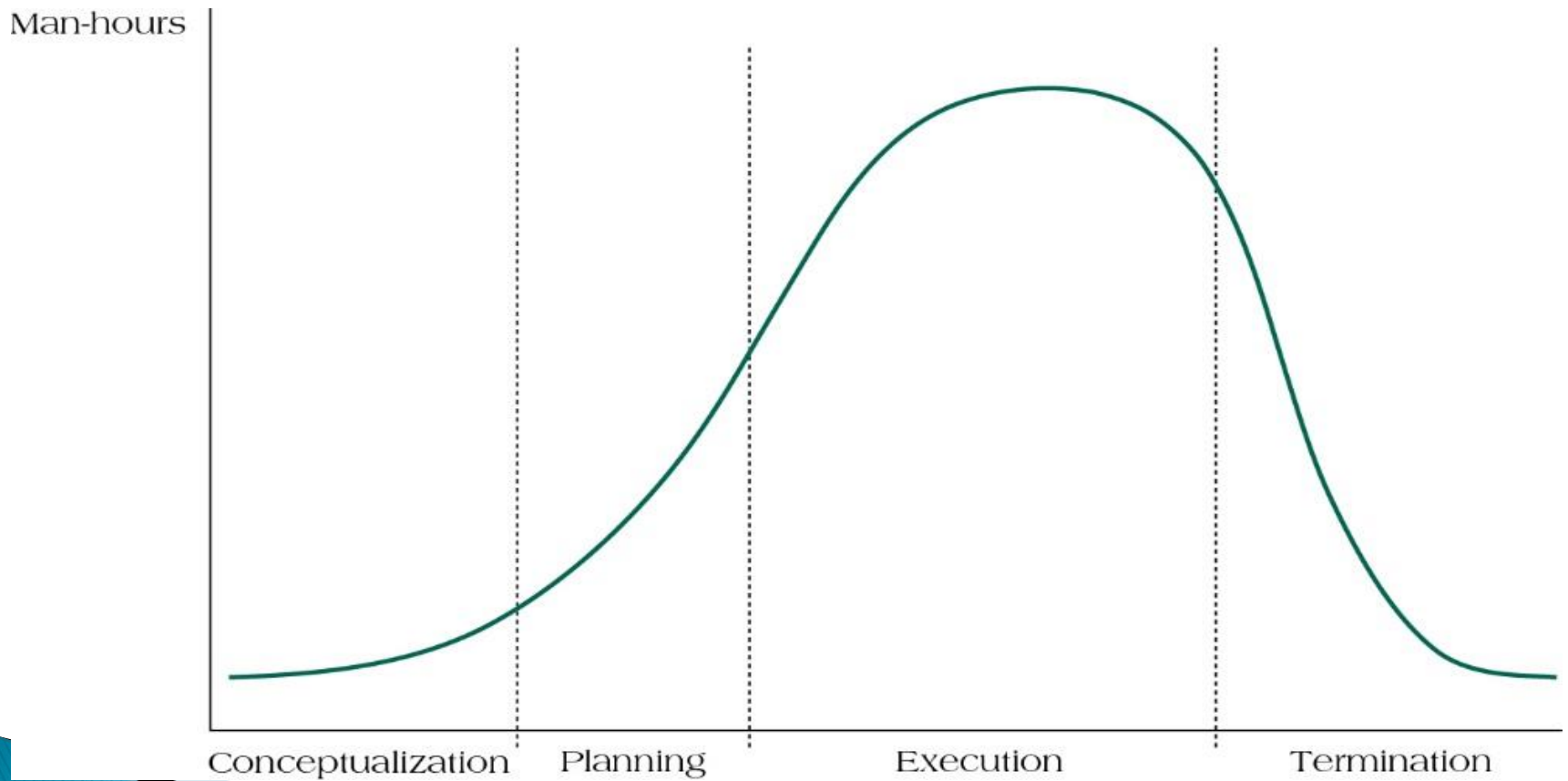
Project Success Rates

- ▶ Software & hardware projects *fail at a 65%* rate.
- ▶ *Over half* of all IT projects become *runaways*.
- ▶ *Only 30%* of technology-based projects and programs are a success.
- ▶ Ten major government contracts have *over \$16 billion in cost overruns* and are a combined *38 years behind schedule*.
- ▶ Only *2.5%* of global businesses achieve 100% *project success* and over *50%* of global business *projects fail*.
- ▶ More than *\$8 billion of \$53 billion* the Pentagon spent on Iraqi reconstruction projects was lost due to fraud, waste, and abuse.

Why are projects important?

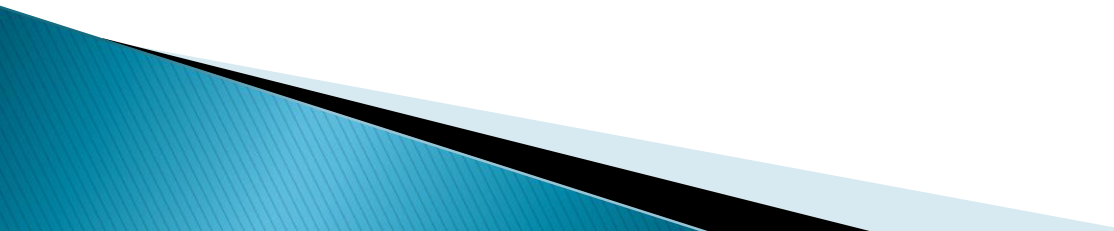
1. Shortened product life cycles
 2. Narrow product launch windows
 3. Increasingly complex and technical products
 4. Emergence of global markets
 5. An economic period marked by low inflation
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PROJECT LIFE CYCLES



Project Life Cycles

A *project life cycle* refers to the stages in a project's development and are divided into four distinct phases:

- ▶ *Conceptualization* – development of the initial goal and technical specifications of the project. Key *stakeholders* are identified and signed on at this phase.
 - ▶ *Planning* – all detailed specifications, schedules, schematics, and plans are developed.
 - ▶ *Execution* – the actual “work” of the project is performed.
 - ▶ *Termination* – project is transferred to the customer, resources reassigned, project is closed out.
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Change during project life cycle

Client
Interest

Project
Stake

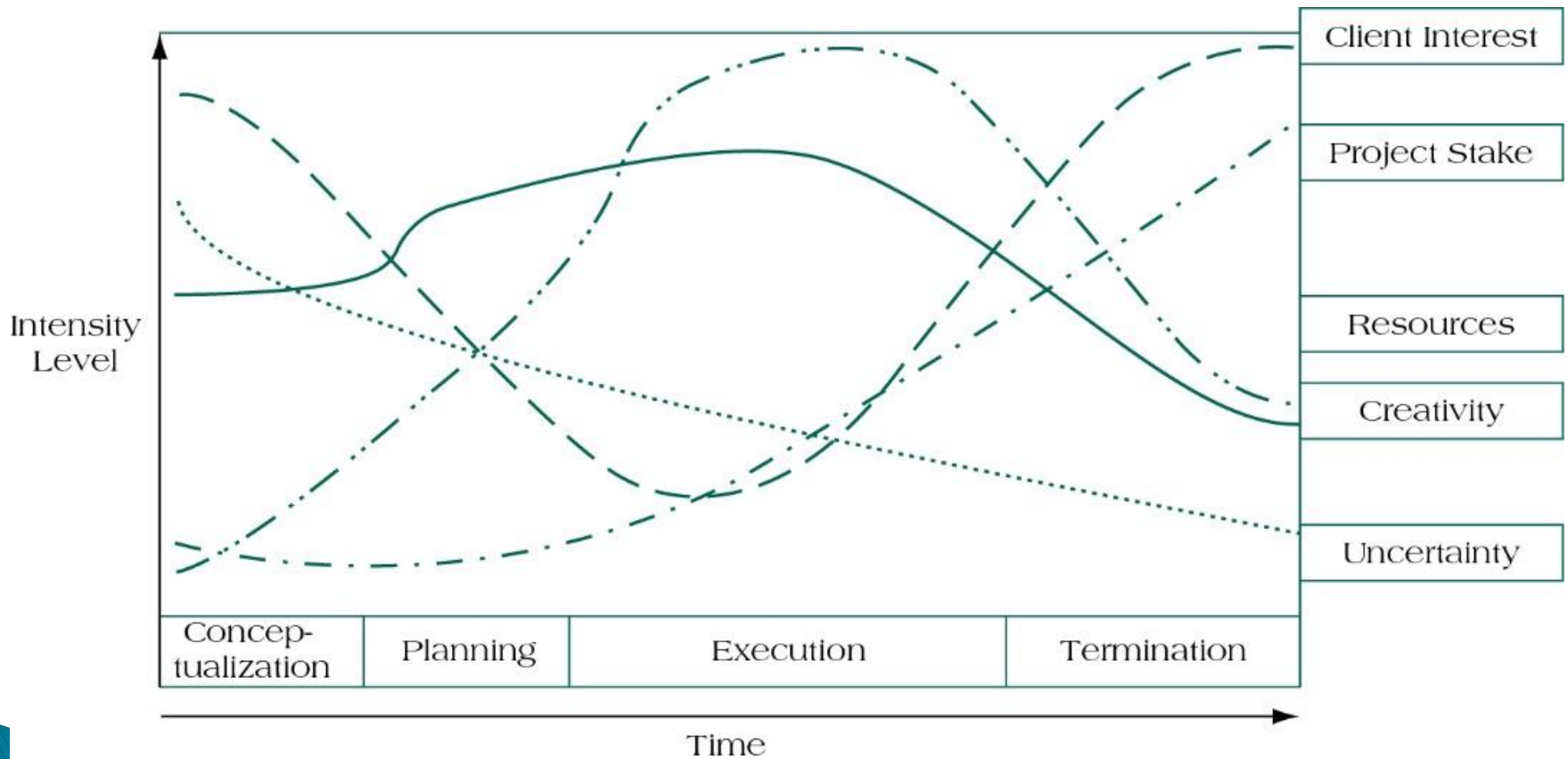
Resources

Creativity

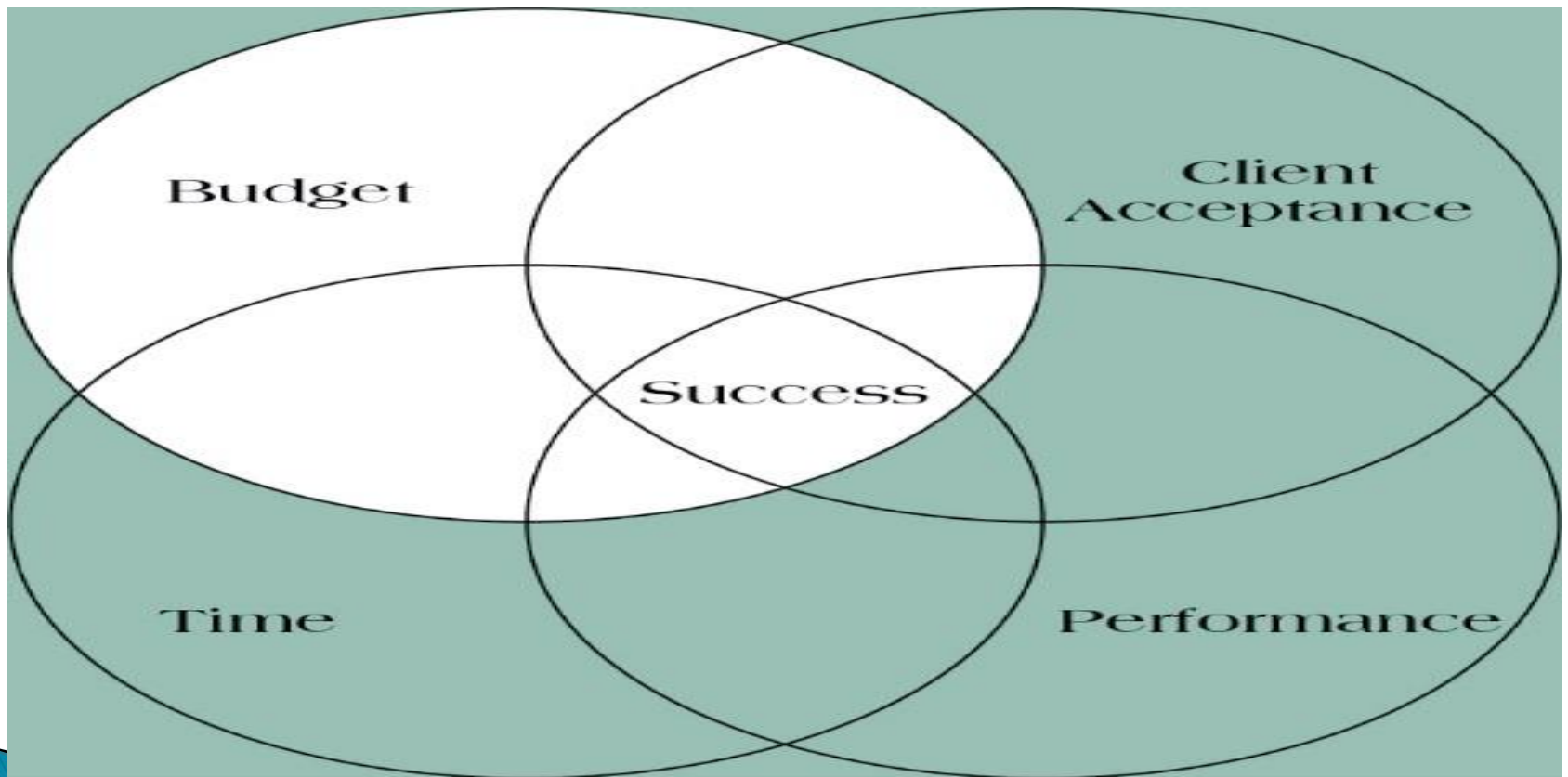
Uncertainty



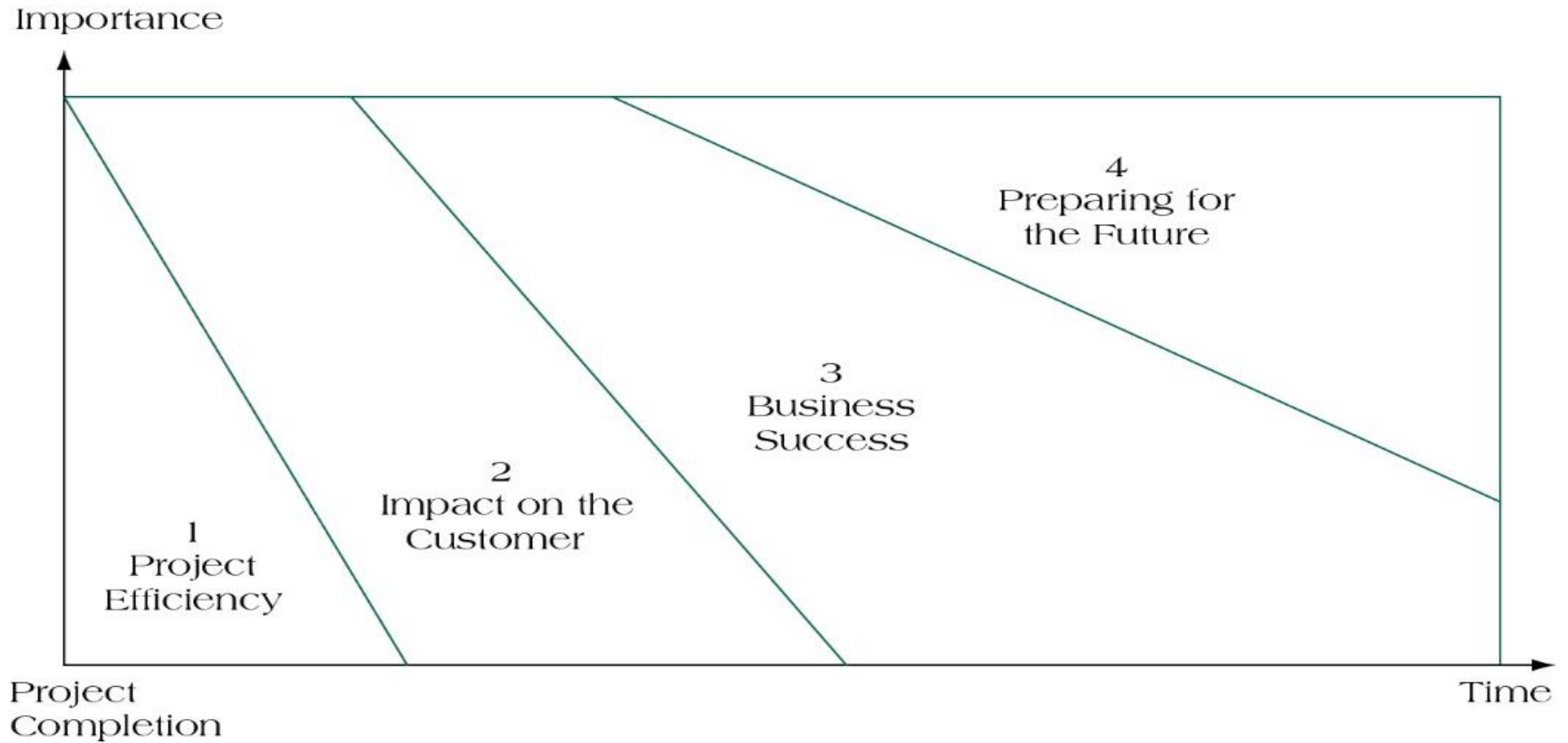
Project life cycle and their effects



Quadruple constraint of project success



Four dimension of project success



Understanding success criteria

Iron Triangle	Information System	Benefits (Organization)	Benefits (Stakeholders)
Cost	Maintainability	Improved efficiency	Satisfied users
Quality	Reliability	Improved effectiveness	Social and environmental impact
Time	Validity	Increased profits	Personal development
	Information quality	Strategic goals	Professional learning, contractors' profits
	Use	Organization learning Reduced waste	Capital suppliers, content Project team, economic impact to surrounding community

Six criteria for it project success

System
Quality

Information
Quality

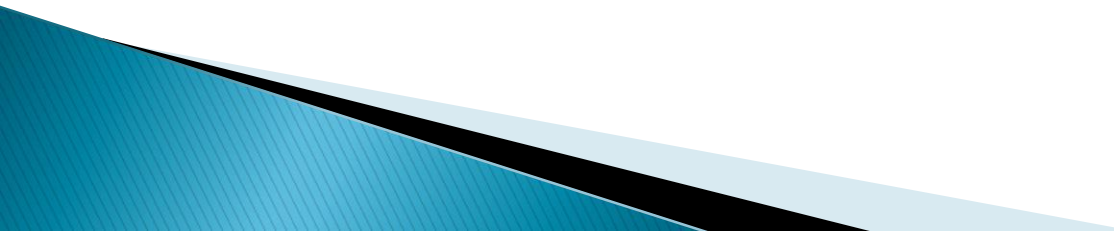
Use

User
Satisfaction

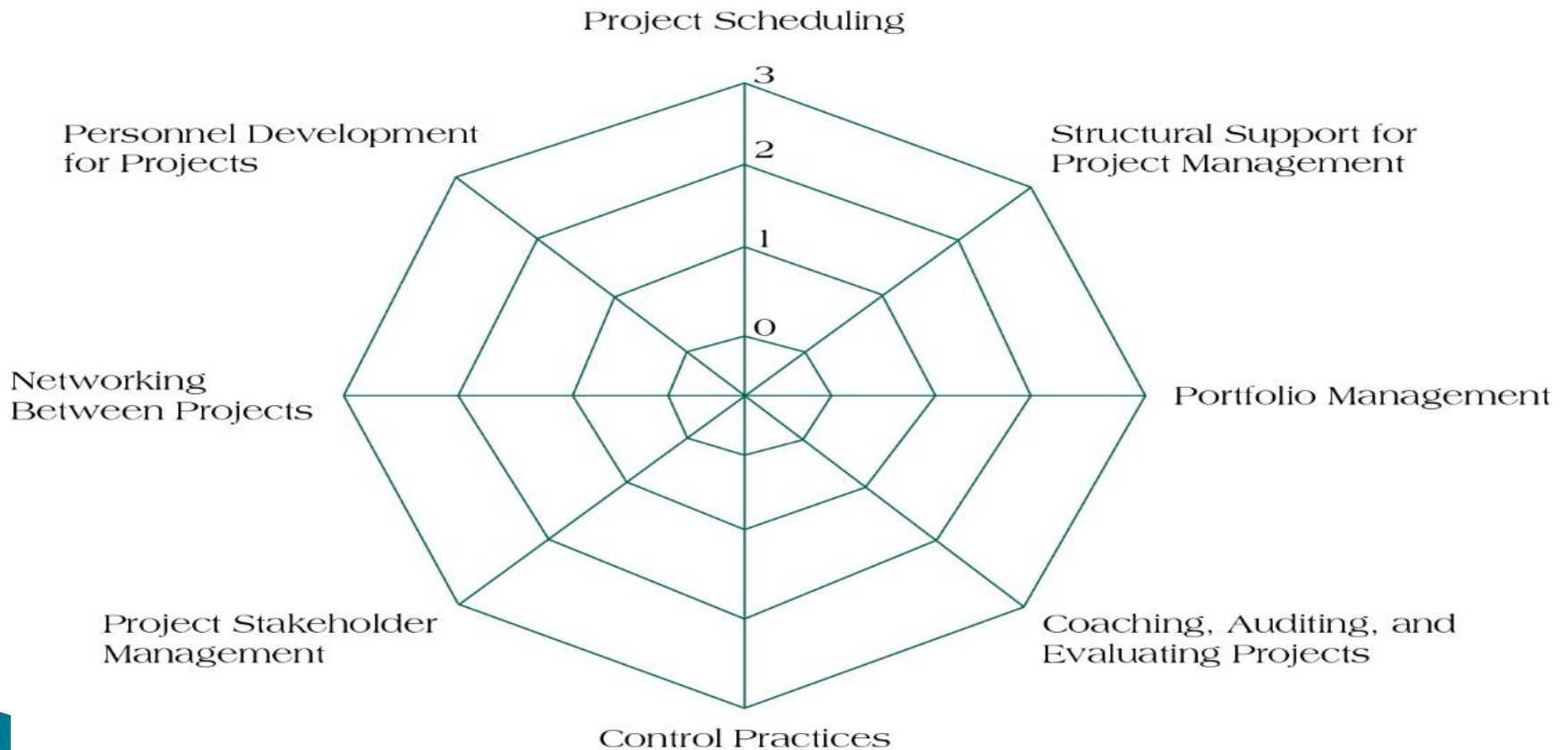
Individual
Impact

Organization
al
Impact

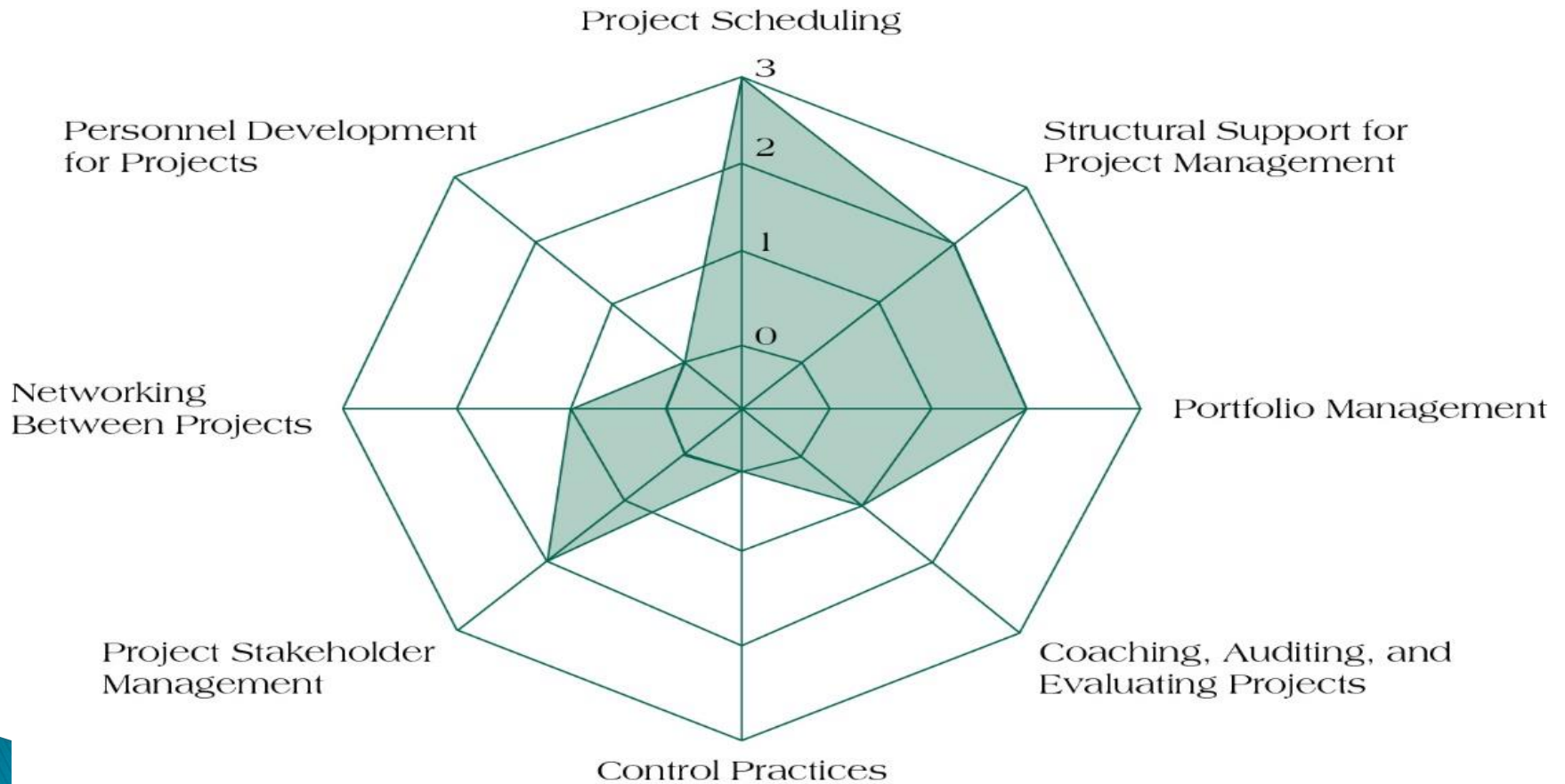
Project management maturity

- ▶ *Project management maturity (PMM) models* are used to allow organizations to benchmark the best practices of successful project management firms.
 - ▶ *Benchmarking* is the practice of systematically managing the process improvements of project delivery by a single organization of a period of time.
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Spider web diagram



Spider web with embedded organizational evaluation

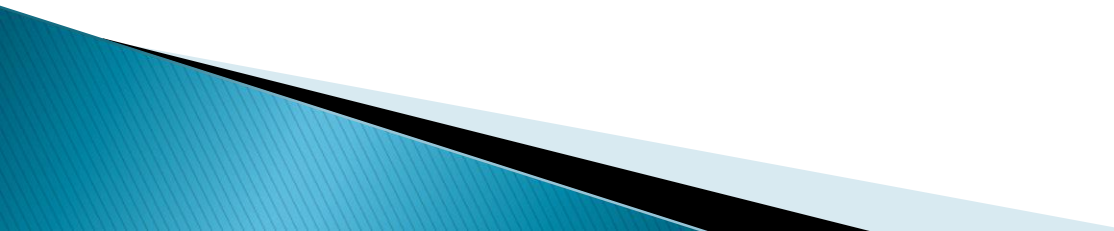


Project Management Maturity Generic Model



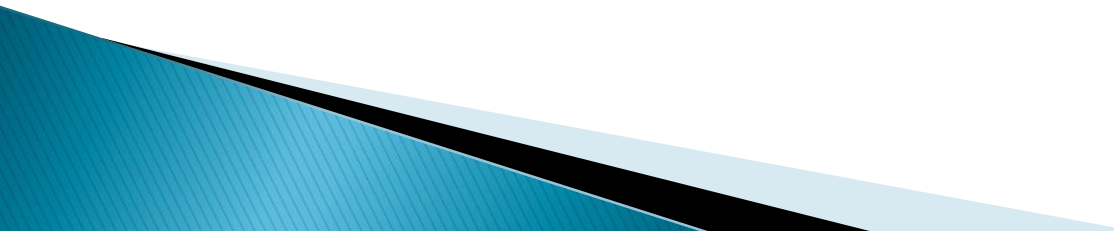
Developing Project Management Maturity

Project Management Maturity (PMM) Models

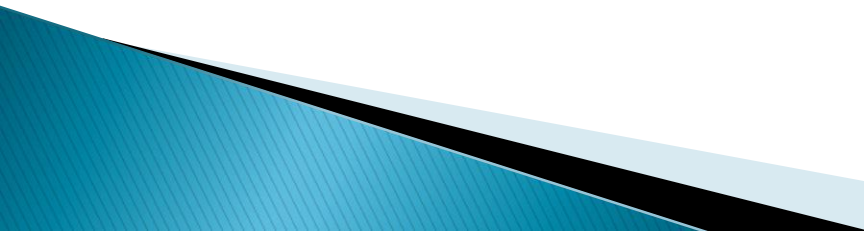
- Center for Business Practices
 - Kerzner's Project Management Maturity Model
 - ESI International's Project Framework
 - SEI's Capability Maturity Model Integration
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Center for Business Practices

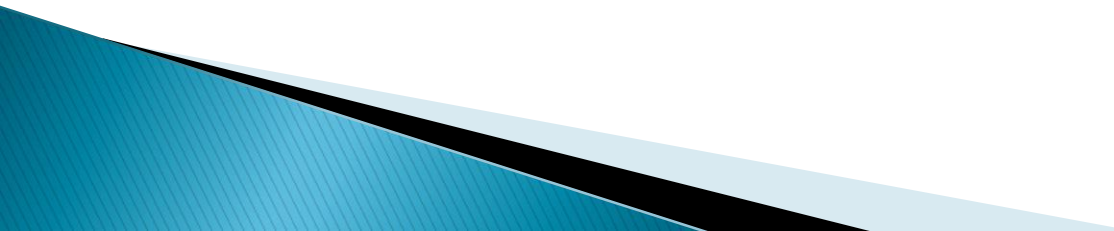
PMM

- ▶ Level 1: Initial Phase
 - ▶ Level 2: Structure, Process, and Standards
 - ▶ Level 3: Institutionalized Project Management
 - ▶ Level 4: Managed
 - ▶ Level 5: Optimizing
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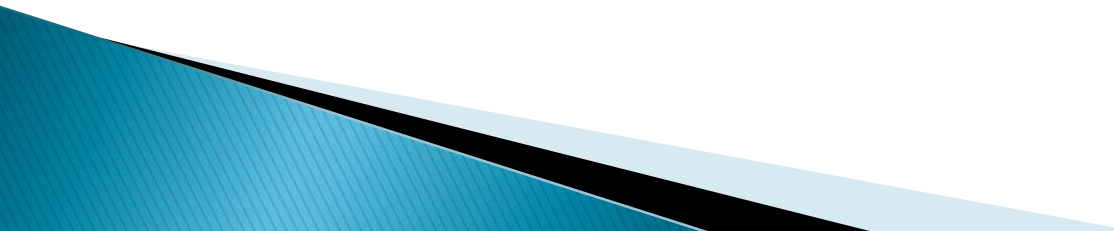
KERZNER'S PMM MODEL

- ▶ Level 1: Common Language
 - ▶ Level 2: Common Processes
 - ▶ Level 3: Singular Methodology
 - ▶ Level 4: Benchmarking
 - ▶ Level 5: Continuous Improvement
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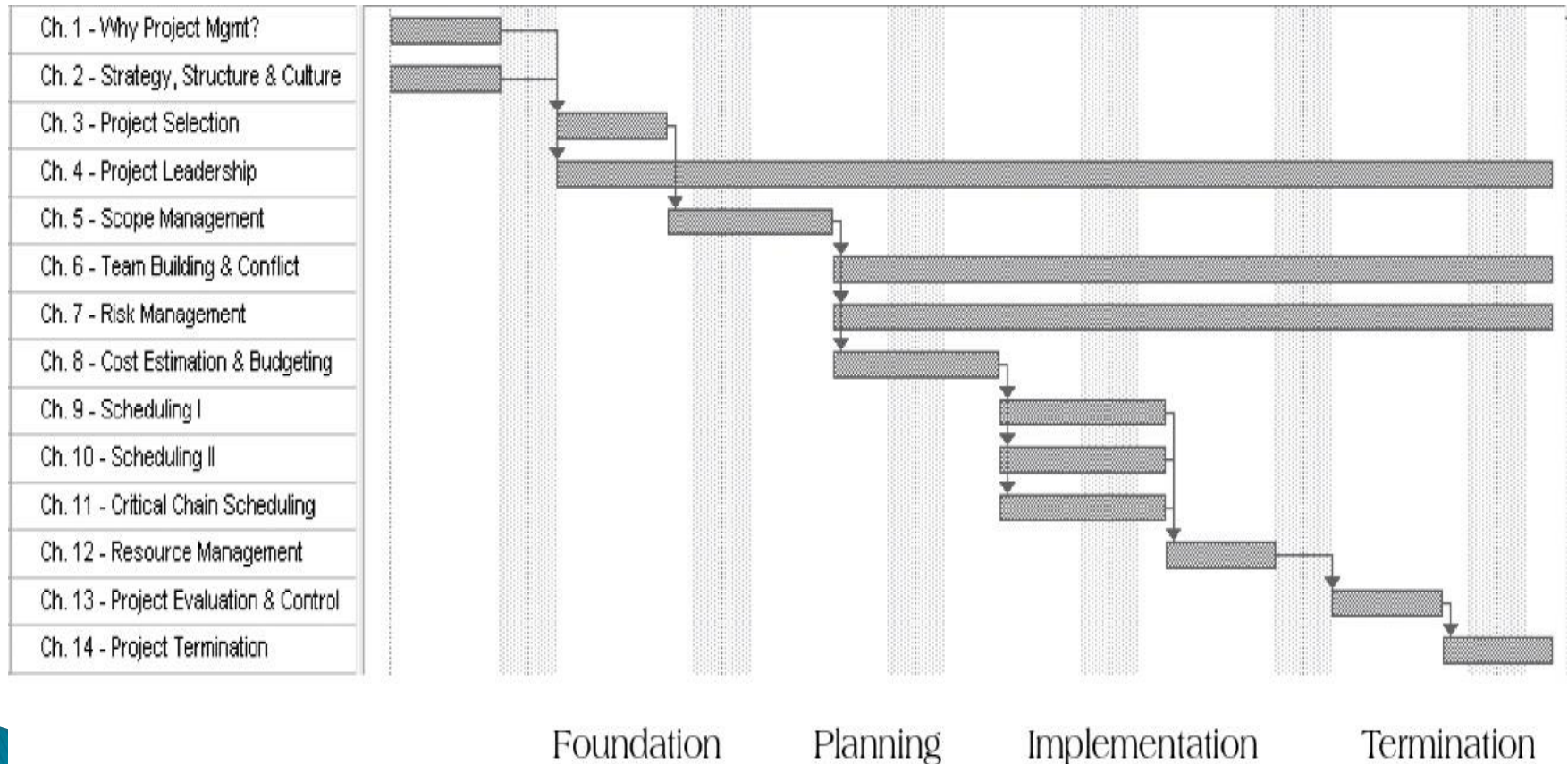
ESI INTERNATIONAL'S PROJECT FRAMEWORK

- ▶ Level 1: Ad Hoc
 - ▶ Level 2: Consistent
 - ▶ Level 3: Integrated
 - ▶ Level 4: Comprehensive
 - ▶ Level 5: Optimizing
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SEI'S CAPABILITY MATURITY MODEL INTEGRATION

- ▶ Level 1: Initial
 - ▶ Level 2: Managed
 - ▶ Level 3: Defined
 - ▶ Level 4: Quantitative Management
 - ▶ Level 5: Optimizing
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Project Elements and Text Organization



Project Manager Responsibilities

1. Selecting a team
 2. Developing project objectives and a plan for execution
 3. Performing risk management activities
 4. Cost estimating and budgeting
 5. Scheduling
 6. Managing resources
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OVERVIEW OF THE PROJECT MANAGEMENT INSTITUTE'S PMBOK KNOWLEDGE AREAS

