ERP Modernization Project

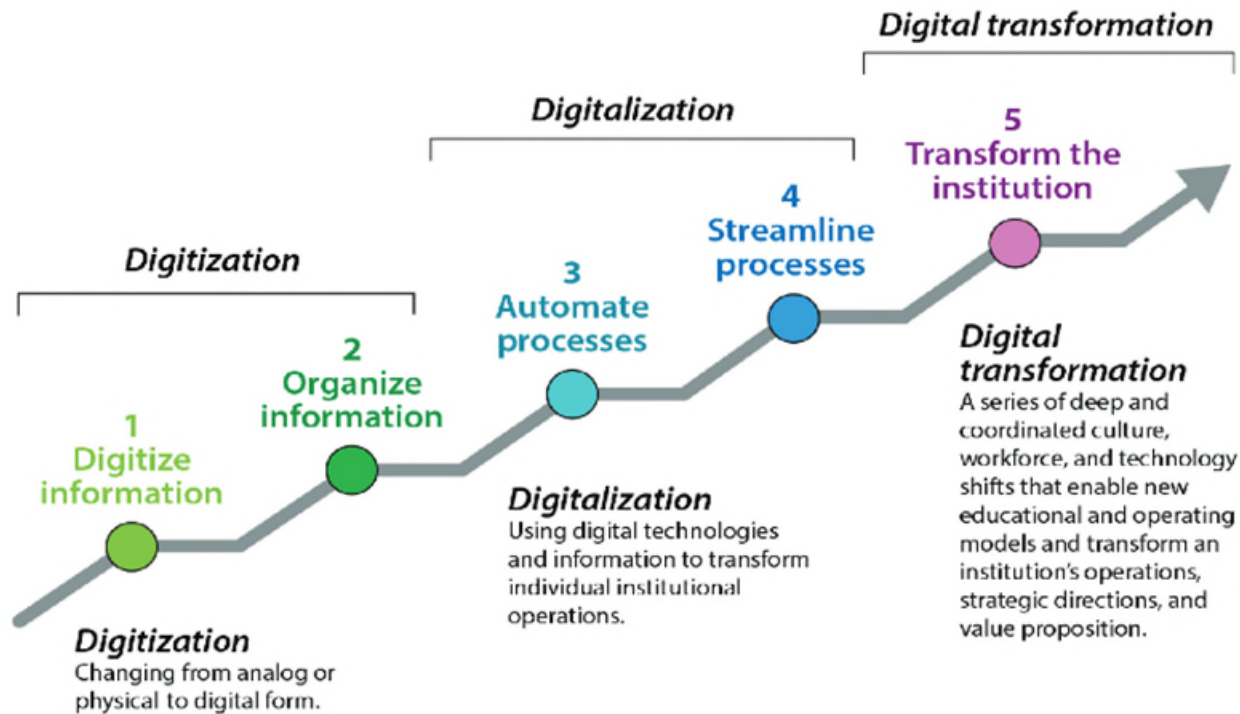December 5, 2022

Digital Transformation

Figure 1. Digital transformation in context

D. Christopher Brooks and Mark McCormack. *Driving Digital Transformation in Higher Education.*
ECAR Research Report. Louisville, CO: ECAR, June 2020.

2020 Technology Master Plan

CMU identified digital transformation as a key technology trend that must continue to be advanced.

Digital transformation is not one technology project or process-improvement initiative; it is a comprehensive change that focuses on the end user and going about business differently.

Goal 1B: Implement web-based administrative platforms and <u>modernize the University's Enterprise Resource Planning (ERP) system</u> to improve services. (Supports CMU's Strategic Plan Goal 3, Objective 3.)

Student/Business Outcomes
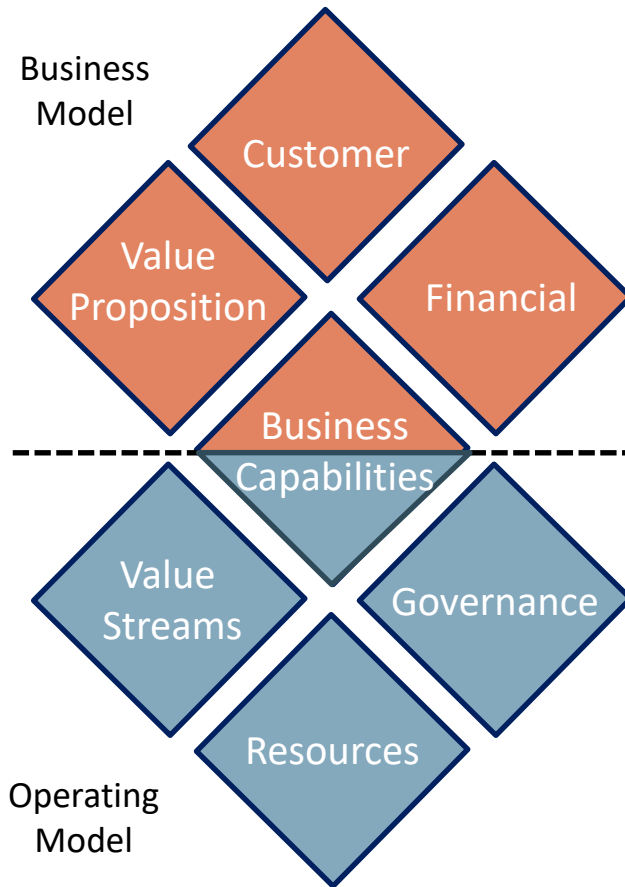
Student/Business Outcomes
- Innovate business practices to best serve students
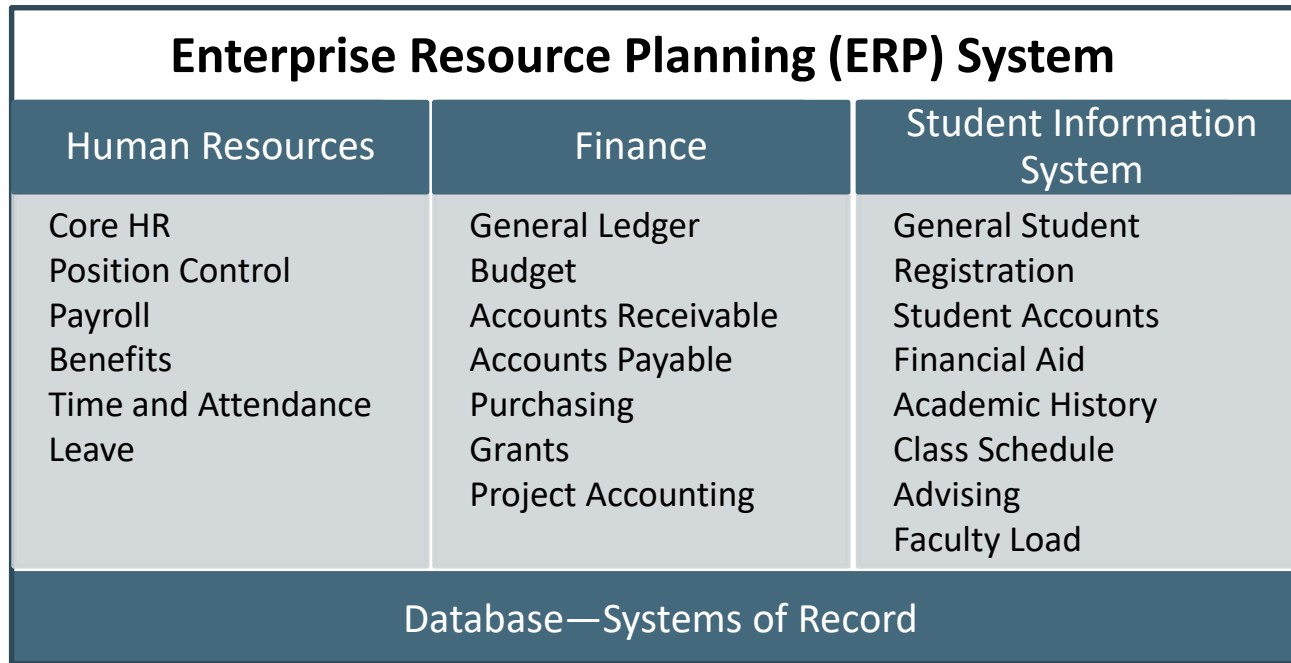- Drive efficiency
- Lower the costs of a higher degree

Digital Capabilities

ERP Strategy
- Increase business agility
- Leverage the latest technologies
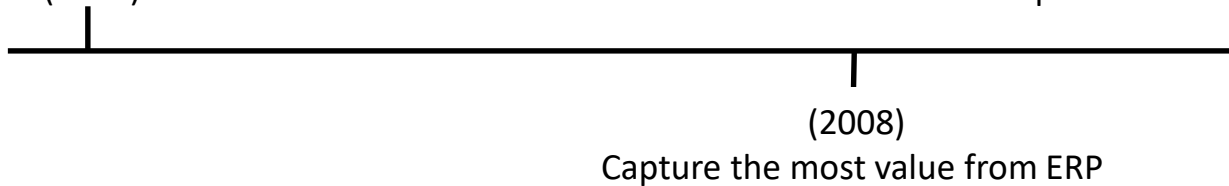- Deliver business capabilities
- Transform the user experience

Source: Gartner

Modern ERP (1990s)

Enterprise Resource Planning (ERP) System

Human Resources	Finance	Student Information System
Core HR Position Control Payroll Benefits Time and Attendance Leave	General Ledger Budget Accounts Receivable Accounts Payable Purchasing Grants Project Accounting	General Student Registration Student Accounts Financial Aid Academic History Class Schedule Advising Faculty Load

Database—Systems of Record

Monolithic ERP
(1990)

Add-on point solutions /
Re-implemented ERP modules

(2008)
Capture the most value from ERP

Postmodern ERP (today)

Postmodern ERP—Example: Finance

Finance

eCommerce

Bookstore

eProcurement

Travel & Expense

General Ledger
Budget
Accounts Receivable
Accounts Payable
Purchasing
Grants
Project Accounting

Scholarships

Reporting

Parking

Budget Forecasting
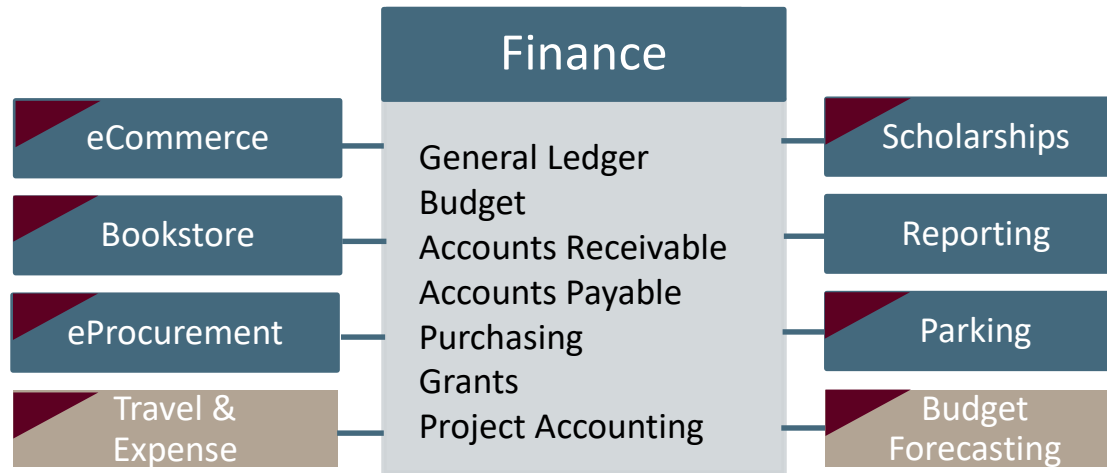
Business Application   Future Application

Data Integration   Cloud-delivered

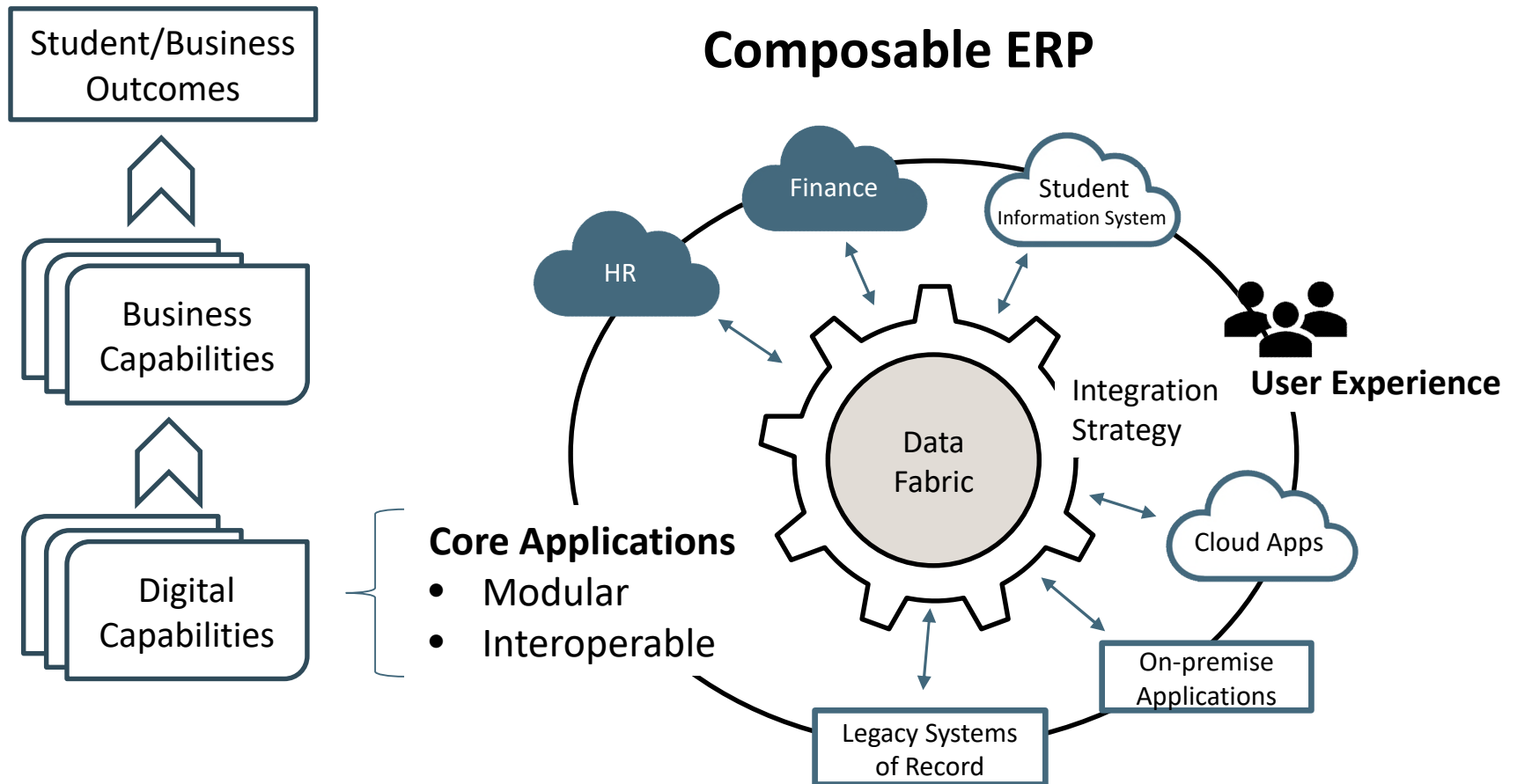Two-thirds of CMU's Enterprise Applications are Cloud-based (today)

ERP Modernization Strategy

Develop a composable ERP—an adaptive technology strategy that defines a core of applications that are configurable and interoperable—with defined data management, integration, and user experience strategies.

Business Capabilities

Enabling CMU's ERP and business applications to provide the digital capabilities to keep pace with the rate of business change.

ERP Modernization

Composable ERP

Student/Business Outcomes

↑

Business Capabilities

↑

Digital Capabilities

Core Applications
- Modular
- Interoperable

Finance

Student Information System

HR

Data Fabric

Integration Strategy

User Experience

Cloud Apps

On-premise Applications

Legacy Systems of Record

ERP Modernization Objectives

1. Implement cloud software-as-a-service (SaaS) HR and Finance systems capable of leveraging the latest, ever-evolving technologies to reimagine and develop business capabilities that deliver on student and business outcomes.

FROM	TO	BECAUSE
Mostly manual tracking and reporting of personnel hiring practices	Embedded analytical tools to help target underrepresented groups in the job market	Advance recruitment tools in support of diversity and inclusion goals
Predominate use of spreadsheets and e-forms for budget submissions	Integrated budget building tools and approval processes	Expand financial planning and analysis capabilities to enable continuous financial forecasting and budget modeling

ERP Modernization Objectives

2. Develop comprehensive data management and data integration strategies to enable the deployment of more loosely coupled enterprise applications, improving business agility.

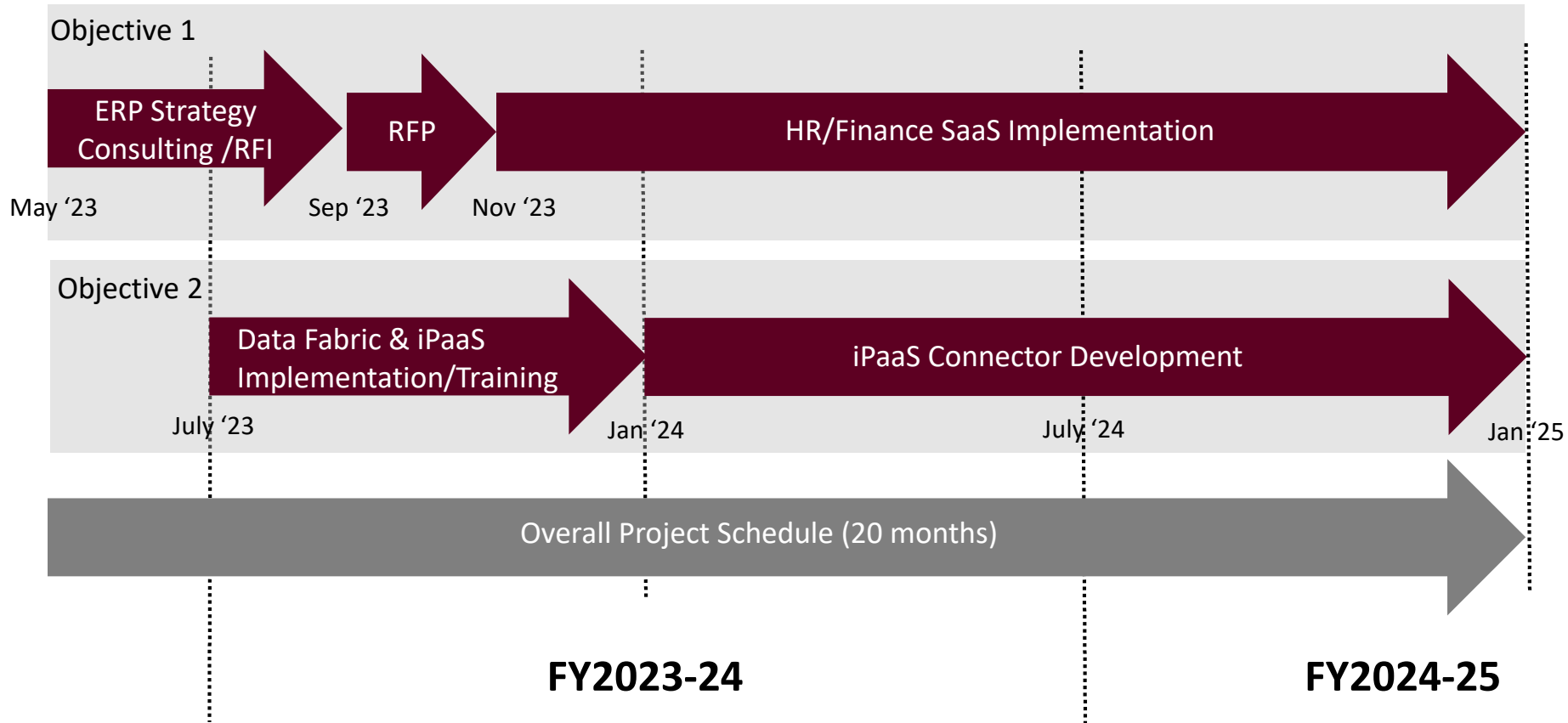| FROM	TO	BECAUSE
Classic methods of data integration such as flat file transfers and batch processing	Advanced integration tools like iPaaS platforms that leverage web services and APIs that span support across on-premise and cloud applications	Improve business agility when adding applications with less reliance on vendor-provided tools
Traditional data management tools (e.g., databases and reporting data repositories) managed solely by central IT	Modern data strategies that support analytic workloads, integrations, and data governance	Reduce time to value by delivering faster access to trusted data across distributed ecosystems and enable support for technologies like Machine Learning

Project Schedule

Objective 1

ERP Strategy Consulting /RFI → RFP → HR/Finance SaaS Implementation

May '23 — Sep '23 — Nov '23

Objective 2

Data Fabric & iPaaS Implementation/Training → iPaaS Connector Development

July '23 — Jan '24 — July '24 — Jan '25

Overall Project Schedule (20 months)

FY2023-24 **FY2024-25**

Final Comments

Opportunity for change that focuses on the end user and going about business differently.

Collaborating with other Institutions of Higher Ed
- Participating on monthly ERP project calls
- Integration Platform as a Service (iPaaS)

Implementation challenges
- Business unit workload
- Hiring temporary staffing

Annual Operating Savings: $238,307

Thank you

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VP for Information Technology