

State of Hawaii
Department of Education

Enterprise Resource Planning (ERP)
Feasibility Study Report
Informational Briefing

THE HOUSE OF REPRESENTATIVES
THE TWENTY-FIFTH LEGISLATURE
REGULAR SESSION OF 2009
COMMITTEE ON EDUCATION

28 January 2009



Gartner

Agenda

Gartner Feasibility Study Methodology

What is Enterprise Resource Planning (ERP)?

Why Do We Need ERP?

Business Case

What Do Public Sector ERPs Offer?

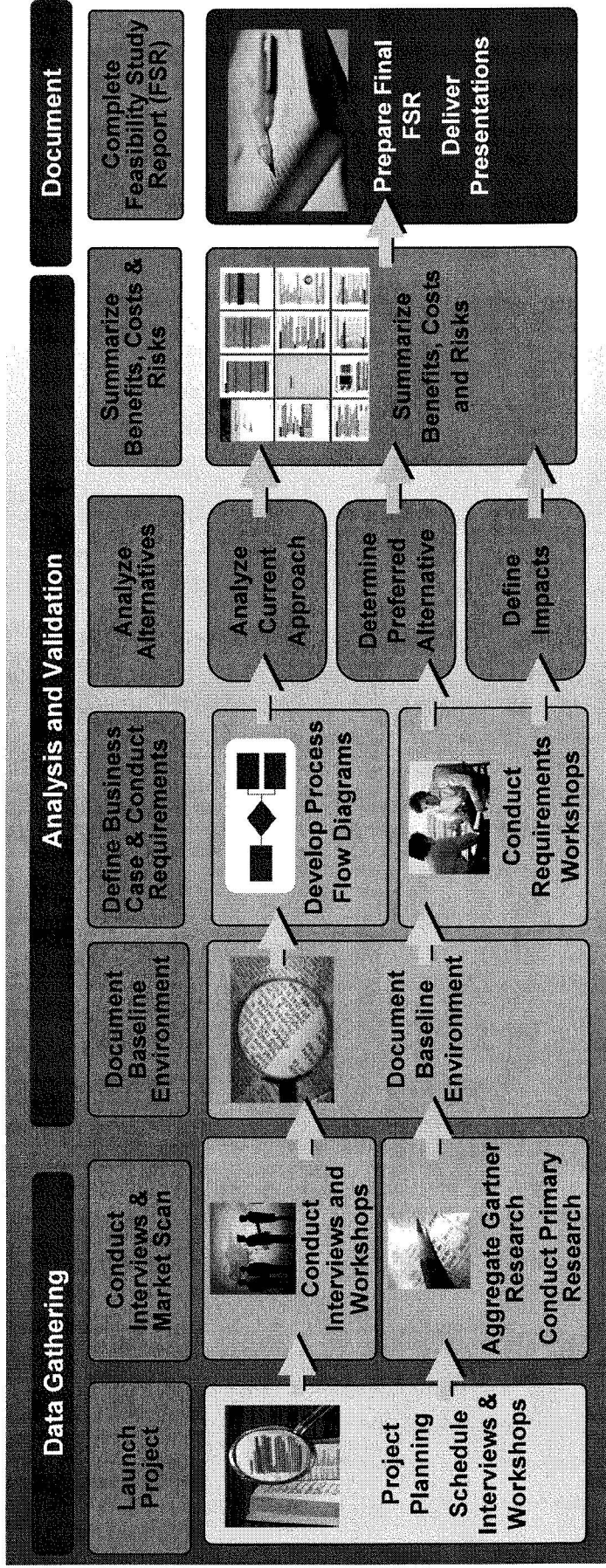
K-12 Example Project: Hillsborough County School District

Alternatives Analysis

Preferred Alternative

Next Steps

Gartner Feasibility Study Methodology



■ ■ ■ ■ ■ What is ERP?

Enterprise Resource Planning (ERP)

E = Enterprise (*organization-wide*)

R = Resource (*people, money and things*)

P = Planning (*and control*)

■ ■ ■ ■ ■ Why do we need ERP?

Business Case

Business Problems

1

Current operations are heavily reliant on manual processes, disparate systems, and institutional knowledge.

- ❑ Limitations of the current systems and the lack of integration between multiple systems result in process inefficiencies.
 - Significant, labor-intensive reconciliation efforts are required between systems.
 - Redundant data entry results in inefficient utilization of staff for non-value added activities.
- ❑ Knowledge of the existing disparate systems is held by only a few individuals with a lack of detailed documentation.

2

The DOE cannot easily obtain its current financial status information from the existing Financial Management System in a timely manner which impacts the ability to effectively manage budgets.

- ❑ Delays in expenditure visibility at schools impact ability to make decisions.
- ❑ Difficult for schools to monitor their payroll "spend" due to:
 - Processing of payroll via an antiquated State payroll system at the Department of Accounting and General Services (DAGS).
 - State payroll lags and other factors causing delays in timing of posting payroll data to the existing financial management system.
 - Reporting difficulties due to payroll budgets residing in central salary accounts, but payroll charges are recorded in detailed school accounts, thereby resulting in negative report balances.

Business Case

Business Problems

3

Revenue and expenditure details are not easily accessible and difficult to report.

- ❑ Key financial data is not readily obtainable from the current system to support DOE efforts to pro-actively and effectively manage budgets (e.g. "Dashboards").
- ❑ DOE's financial management capabilities are negatively impacted by the system's limited ability to readily access specific revenue and expenditure line-item details.

4

The current Financial Management System is inflexible and is difficult to accommodate new and changing requirements (e.g. meeting reporting requirements based on Complex Areas versus Districts).

- ❑ Organizational changes cannot be reflected in the chart of accounts without major modifications to the current financial system.

5

The current Financial Management System does not support efficient business processes.

- ❑ Built-in business rules, which would guide and support department-wide compliance with State of Hawaii procurement rules, are not available in the current system.
- ❑ Workflow, which would facilitate the efficiency and timeliness of decentralized procurement processes, is not available in the current system.
- ❑ Purchases and approvals are currently done on hard-copy documents; however, electronic automation can be implemented with proper segregation of duties.
- ❑ Reconciliation of procurement-card (P-card) transactions is primarily manual and labor-intensive.

Business Case

Business Problems

6

The current mainframe does not meet current business needs.

- ❑ The system is very slow particularly during peak periods where response times can be up to several minutes (an upgrade would significantly increase licensing costs to all state agencies on the mainframe).
- ❑ The system is only "open" for use from 7:15 am to 6:00 pm weekdays and alternate Saturdays (DOE staff cannot come in early or stay late to catch up on workload).
- ❑ Queries fail on vendor information with greater than 500 records.
- ❑ The risk of continuing to support and maintain the current system is escalating as scarce resources with knowledge of antiquated technologies are increasingly difficult to hire and are very expensive to contract.

Business Case

Business Opportunities

1

DOE can capture the appropriate financial information to calculate important metrics to enhance decision making.

2

DOE can leverage increased reporting capabilities to enhance decision support and transparency.

3

DOE staff can transition from inefficient processes and manual tasks to higher value responsibilities.

4

DOE can refine the procurement process to take advantage of volume pricing and to facilitate compliance with procurement policies and rules.

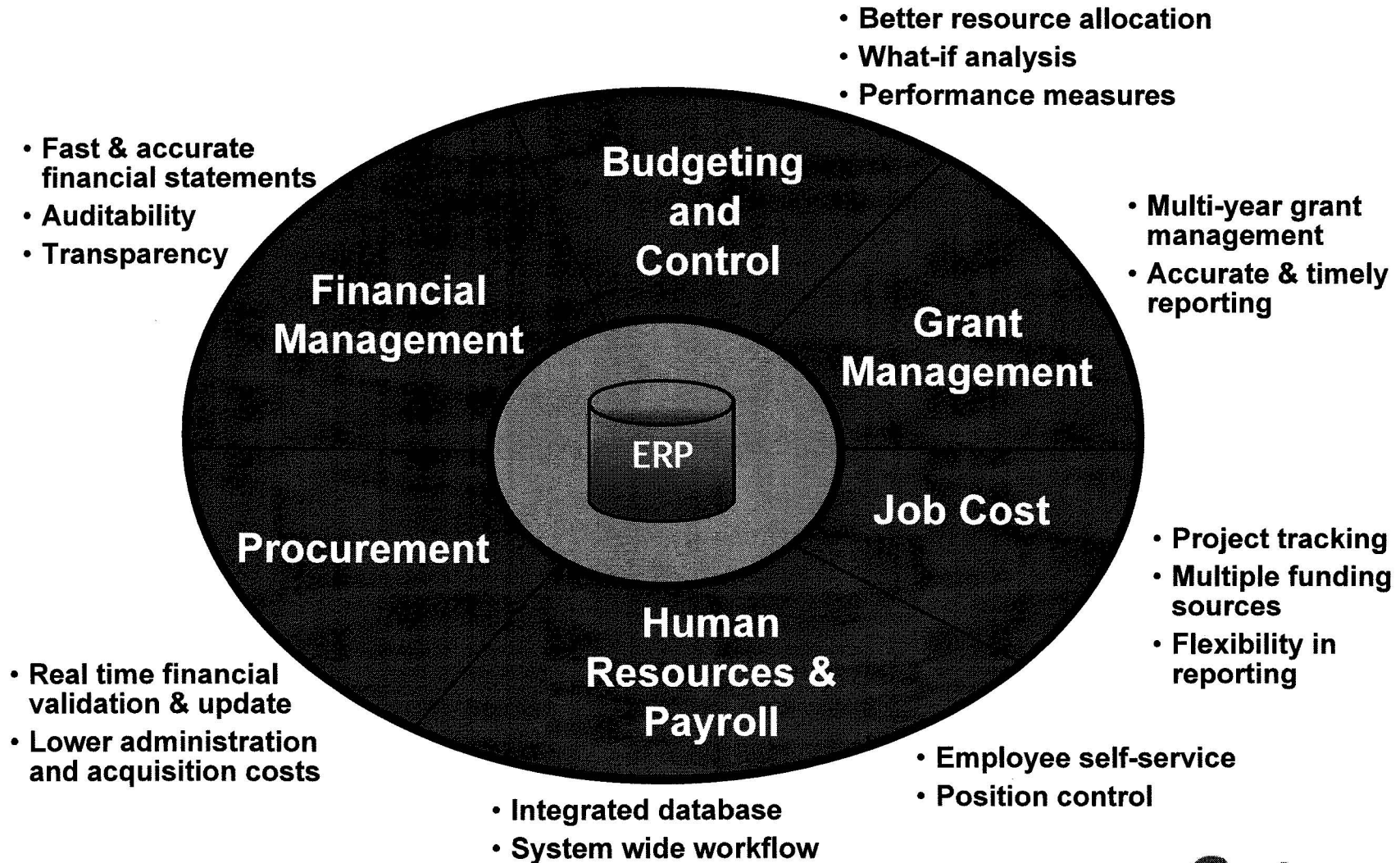
5

DOE has the opportunity to better manage personnel and resource costs through an integrated human resource and payroll system.

6

DOE can reduce the manual intervention required to support the system and improve responsiveness to changing business needs.

What Do Public Sector ERPs Offer?



K-12 Example Project:

Hillsborough County School District

Environment Overview

Student Population: 192,000+
Employees: 30,000+
Sites: 350
Schools: 220
Budget: \$2.5B

ERP System Overview

Financials: Lawson – live in 2003.
Procurement: Lawson – live in 2003.
Budgeting: Lawson budget module for budget entry – live in 2003. Performs some salary projections using custom code which is fully supported by Lawson.
Human Resources/Payroll: Lawson for Payroll and HR – live in 2005. Currently piloting Employee Self-Service in Lawson. (AON manages open enrollment and benefits.)



Hillsborough County
PUBLIC SCHOOLS
Excellence in Education

Business Case for System

- Provide State with detailed accurate financial data.
- Control of budget allocations will save resources.
- Requirement to incorporate business rules into a system to support succession planning.

Key Benefits

- Added a much higher-level of accountability.
- Human Resources/Payroll and Finance interface has streamlined processes.
- Able to find historical information for a personnel file.
- Lawson has worked with Hillsborough to evolve the application to meet the needs of a K-12 environment.

Alternatives Analysis

Overview

Gartner identified the following four alternatives:

Alternative 1 – Maintain the status quo. No changes to the current applications.

Alternative 2 – Enhance the current Financial Management System (FMS) to accommodate new functional requirements.

Alternative 3 – Procure and implement a new Financial Management System to replace FMS. Develop interfaces to other applications (e.g. Kronos system, CHAP system).

Alternative 4 – Procure and implement an ERP solution. Implement the Financials module in the beginning and maintain the option to implement Human Resources (HR) and Payroll modules.

Alternatives Analysis

Evaluation Model Summary

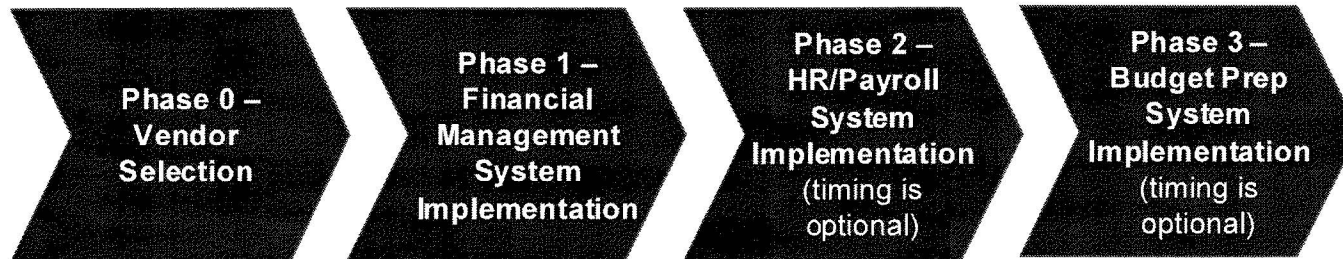
Criteria	Alternative 1 Status Quo	Alternative 2 Modify current FMS	Alternative 3 Procure and Implement a New Financial Management System	Alternative 4 Procure and Implement a New ERP System
Business Benefits	NOT VIABLE	NOT VIABLE	<ul style="list-style-type: none"> ■ Will meet financial, budget, and procurement functional requirements. ■ Will achieve efficiencies in financial processes. 	<ul style="list-style-type: none"> ■ Will meet financial, budget, procurement and HR/Payroll functional requirements. ■ Will achieve efficiencies across many processes.
Total Cost of Ownership			<ul style="list-style-type: none"> ■ Lower implementation costs (less functionality). ■ Higher maintenance costs due to interfaces that must be maintained. 	<ul style="list-style-type: none"> ■ Higher implementation costs (greater functionality). ■ Lower maintenance costs. ■ Lower procurement process costs using a single contract.
Time			<ul style="list-style-type: none"> ■ Faster to complete implementation (less functionality). 	<ul style="list-style-type: none"> ■ Longer time to complete implementation (greater functionality).
Project Risks			<ul style="list-style-type: none"> ■ Higher integration risks due to number of interfaces required. ■ Higher operational risks due to possible number of break points. 	<ul style="list-style-type: none"> ■ Lower integration risks. ■ Change management risks.
Technical Solution			Multiple technologies and databases. Many interfaces.	<ul style="list-style-type: none"> ■ Single platform. ■ Single, logical data source. ■ Fewer interfaces.

Alternative 4 is the Preferred Alternative.

Preferred Alternative

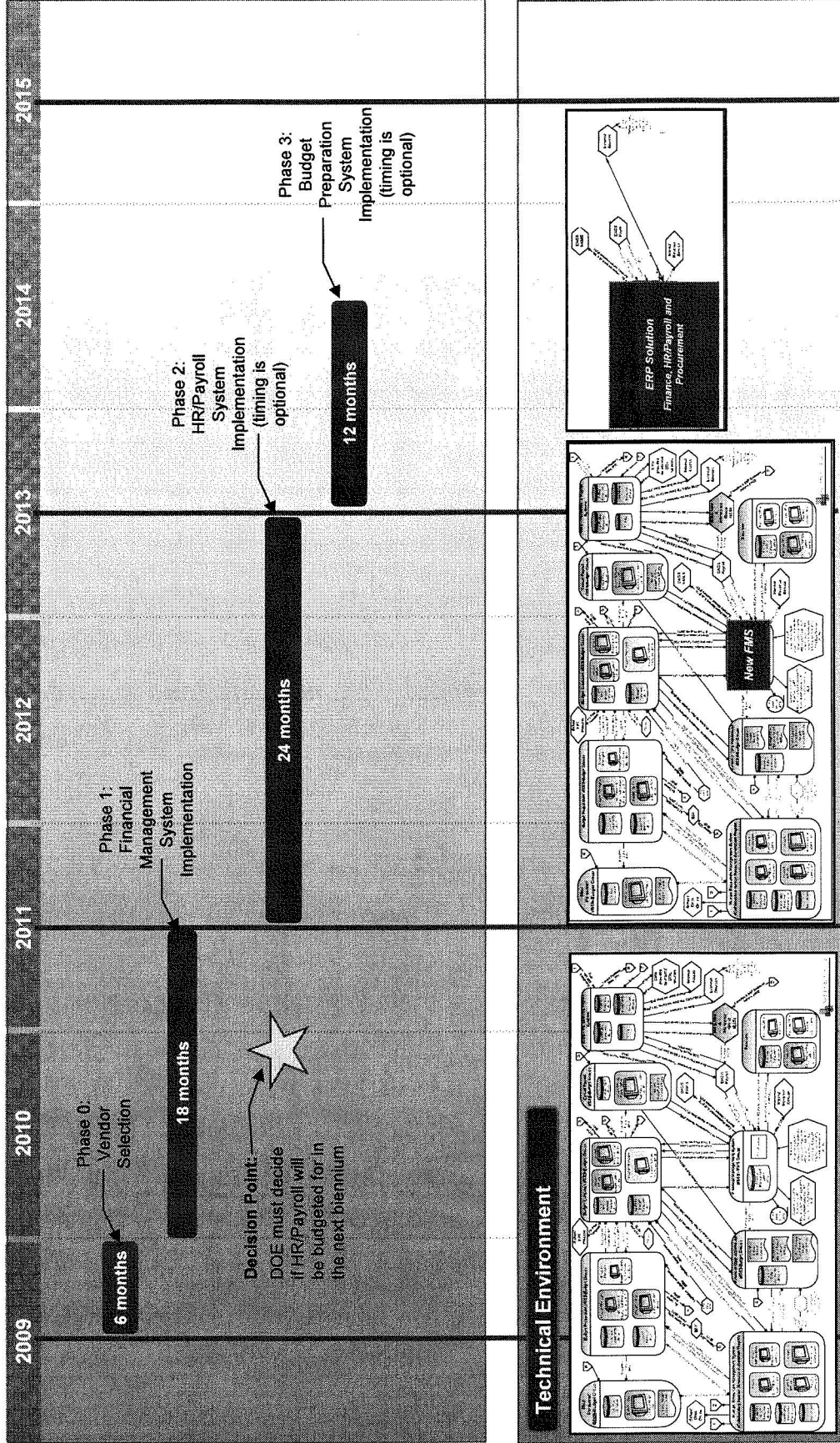
Project Management Plan

- The project management plan includes a procurement phase and three high-level implementation phases. The phases are depicted in the graphic below:



- Actual phasing will be market driven which will include input from the selected vendor while optimizing the benefits to be achieved by DOE.
- Funding for Phase 1 of this project will be in place by the conclusion of Phase 0.
- Timing of Phases 1 - 3 could possibly overlap.
- Time of Phases 2 and 3 can be executed at DOE's option.
 - If the DOE defers the decision, the Financial Management System configuration may need to be modified in Phase 2 to accommodate the HR/Payroll modules.
 - If it is known that Phase 2 will not be performed in the subsequent biennium, the DOE can execute Phase 3 immediately following Phase 1.

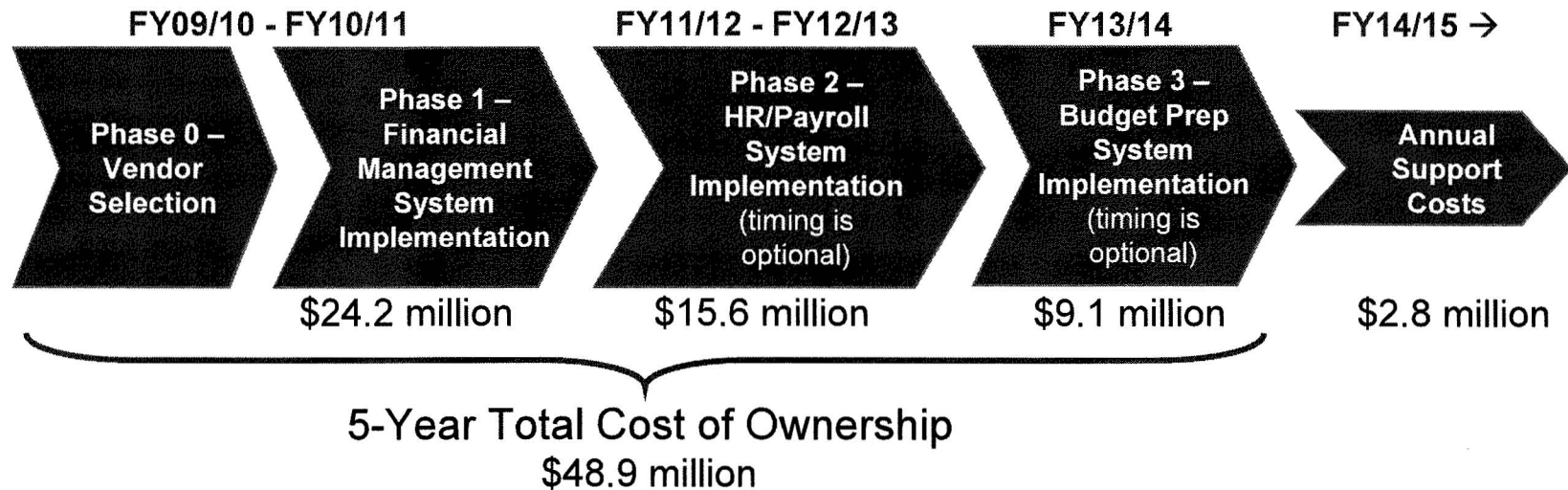
Preferred Alternative Project Timeline



Preferred Alternative

Project Cost Summary

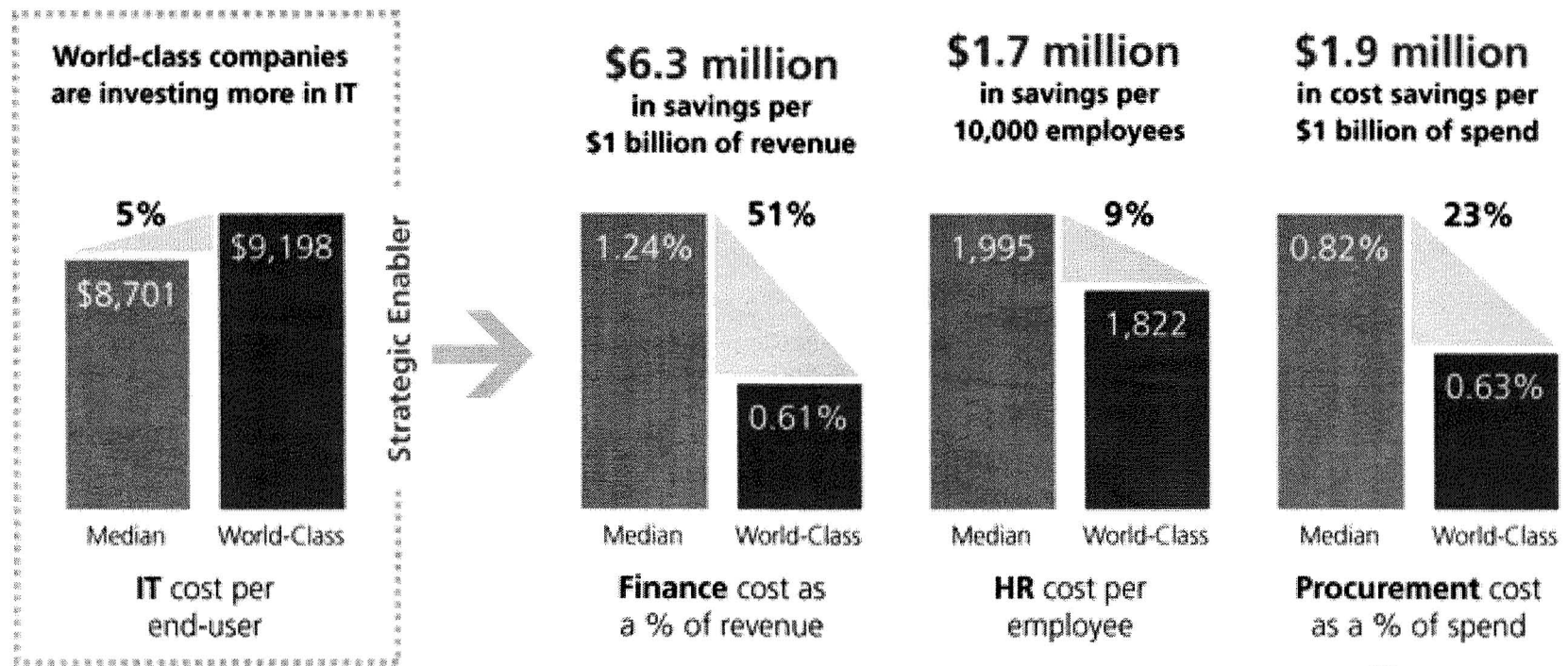
- DOE is exploring the option of funding the initial costs of **\$24.2 million** for Phases 0 & 1 through Certificates of Participation (financing).



Preferred Alternative

World-Class Organizations

- Operate more effectively with significantly lower operating costs.
- Use technology to enable getting higher-level people into more strategic roles in their organizations which drives benefits achievement.
- Operate with 46% fewer suppliers than typical organizations and concentrate 80% of their spending on just 5.9% of their suppliers.



Preferred Alternative

Project Mission Statement

The purpose of the DOE ERP Project is to implement an integrated system to support student achievement through:

- ❑ Improved efficiencies of DOE operations,
- ❑ Greater accountability and transparency in the use of public funds, and
- ❑ Improved reporting for decision makers and stakeholders at all levels.

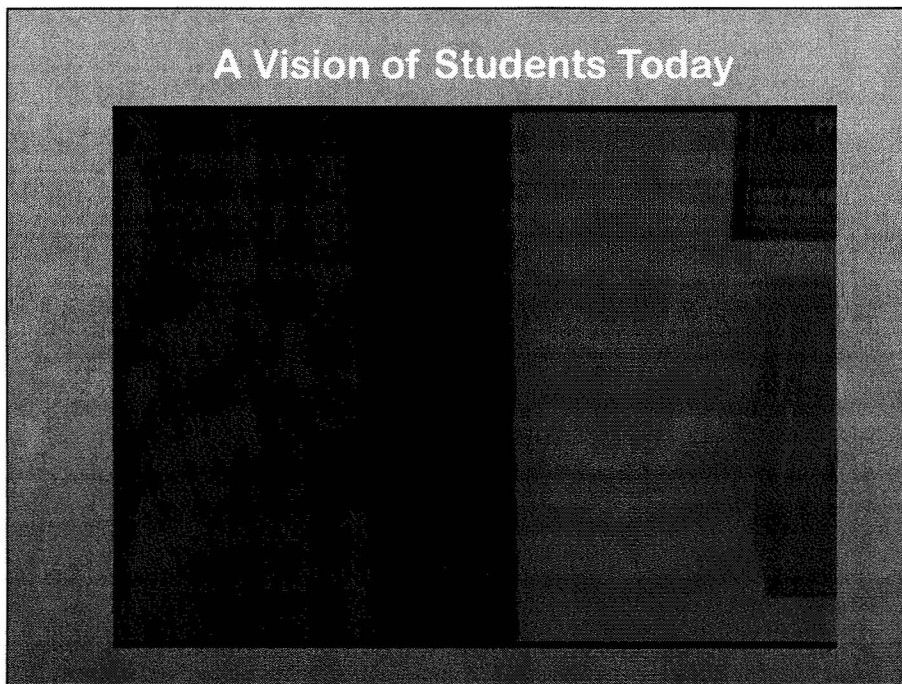
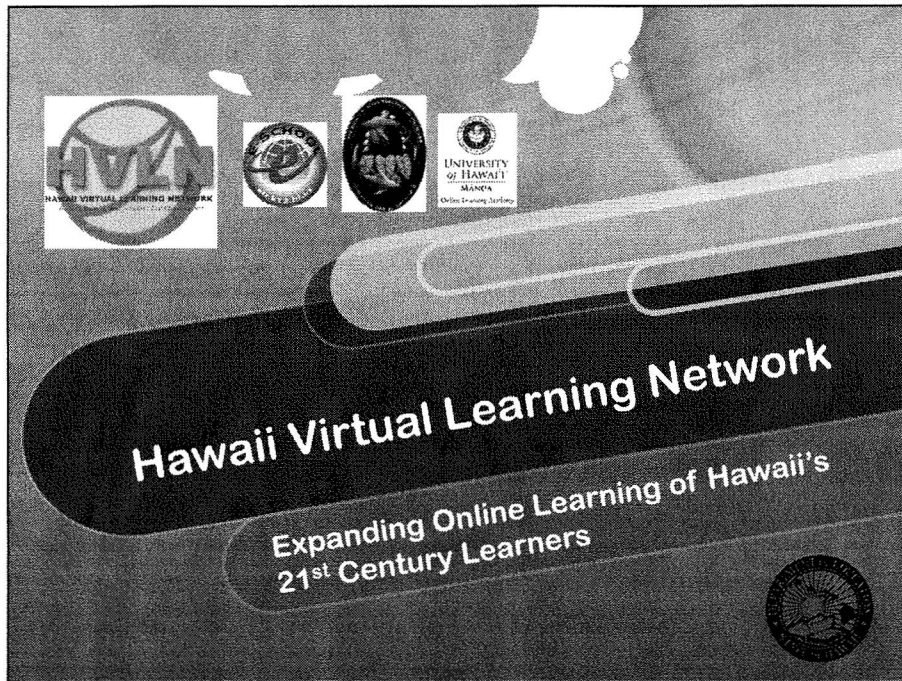
Next Steps

- Answer Legislature questions
- Obtain Legislature support for the project
- Explore funding alternatives



Gartner Contact

Rosy Spraker
Engagement Manager
(808) 206-9405 (office)
(808) 388-0818 (cell)
rosemary.spraker@gartner.com



The Future



By 2018, it is estimated that 50% of students will earn their high school diploma online.

Ian Bremmer, Keynote Presentation

School of the Future World Summit 2008

The Plan



To revise the current graduation requirements to require at least one online learning course before graduating beginning with the 2011-2012 school year.

Hawaii Virtual Learning Network (HVLN)

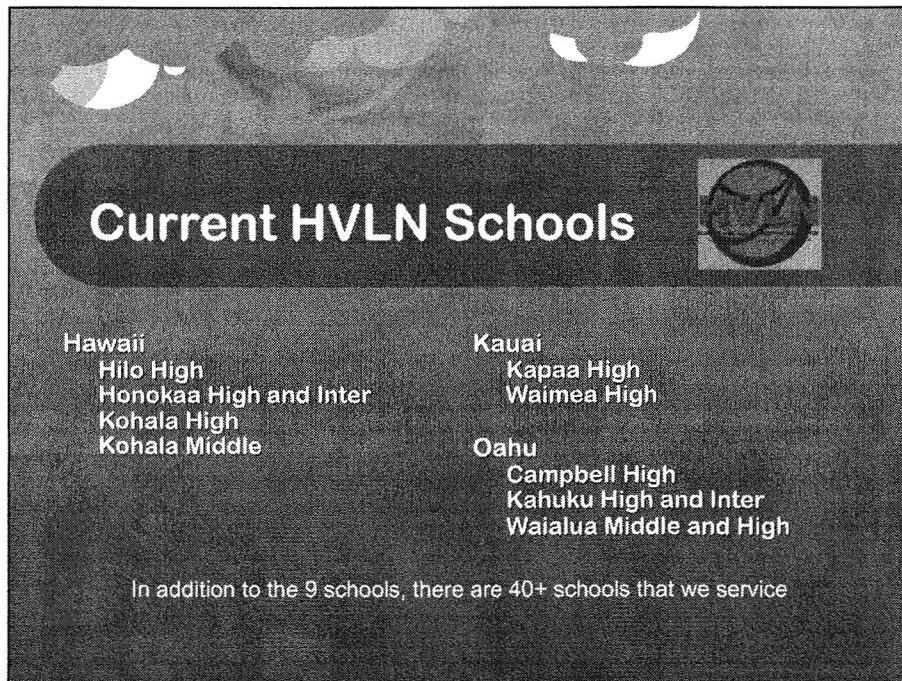


- ◊ Hawaii Online Task Force Act 275 (SLH 2007), Act 152 (SLH 2008)
- ◊ Completed:
 - ◊ Development of a state-wide plan
 - ◊ Increased online course offerings
 - ◊ Increased student enrollment

HVLN Charter Group



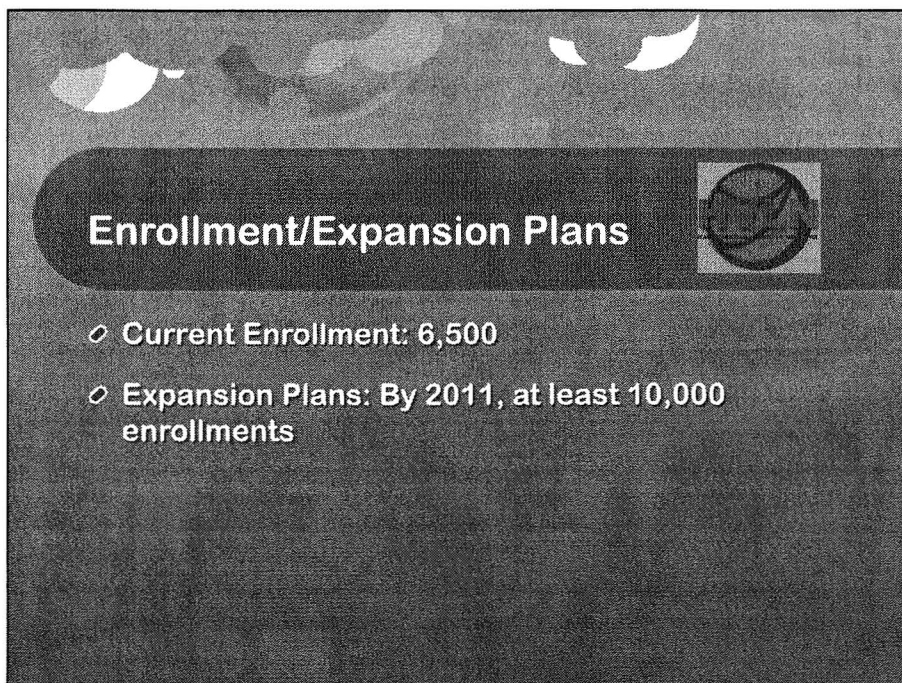
- ◊ Hawaii Department of Education, E-School
- ◊ Myron B. Thompson Academy
- ◊ University of Hawaii Online Learning Academy



Current HVLN Schools

Hawaii Hilo High Honokaa High and Inter Kohala High Kohala Middle	Kauai Kapaa High Waimea High
	Oahu Campbell High Kahuku High and Inter Waialua Middle and High

In addition to the 9 schools, there are 40+ schools that we service



Enrollment/Expansion Plans

- o Current Enrollment: 6,500
- o Expansion Plans: By 2011, at least 10,000 enrollments

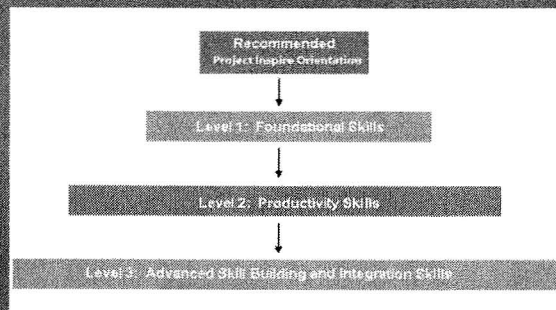
Online Learning for Teachers

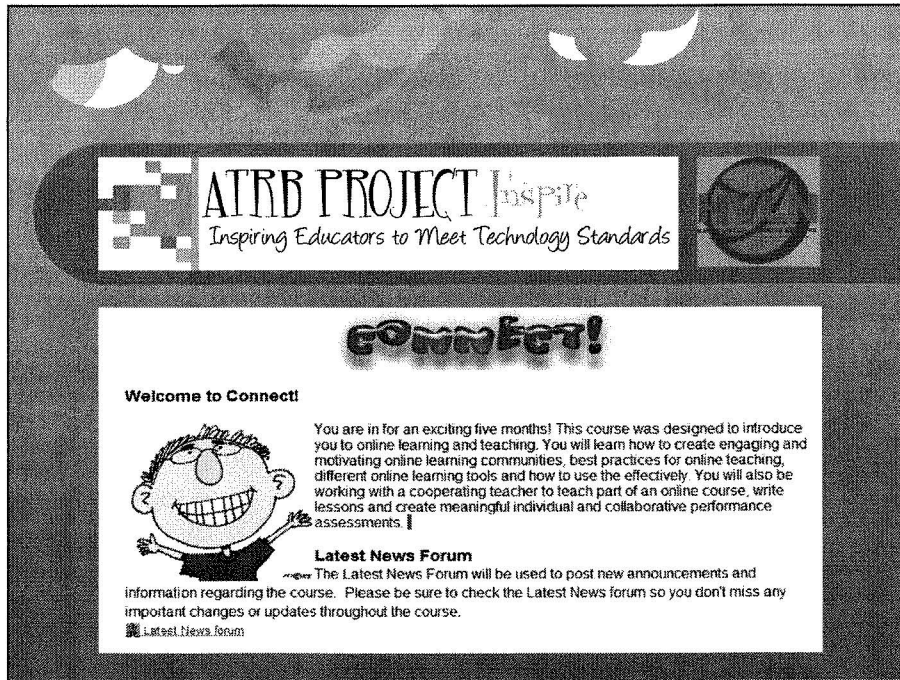


Project Inspire is a comprehensive online professional development program to assist teachers in integrating technology in teaching, learning and the curriculum




Three "levels" of courses






ATR PROJECT Inspire
Inspiring Educators to Meet Technology Standards



CONNECT!

Welcome to Connect!

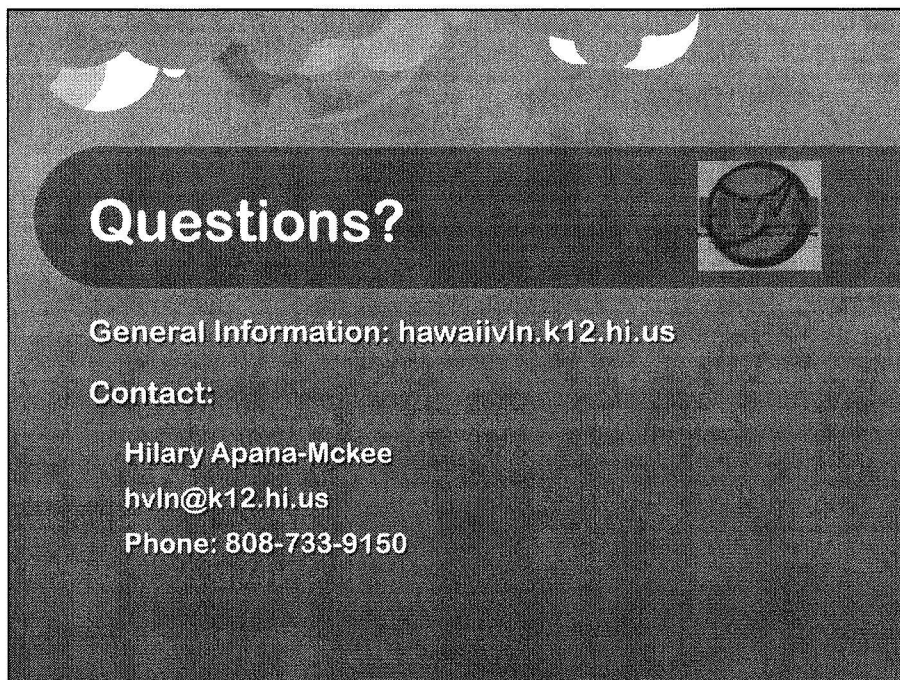


You are in for an exciting five months! This course was designed to introduce you to online learning and teaching. You will learn how to create engaging and motivating online learning communities, best practices for online teaching, different online learning tools and how to use them effectively. You will also be working with a cooperating teacher to teach part of an online course, write lessons and create meaningful individual and collaborative performance assessments. |


Latest News Forum

The Latest News Forum will be used to post new announcements and information regarding the course. Please be sure to check the Latest News forum so you don't miss any important changes or updates throughout the course.

Latest News Forum



Questions?



General Information: hawaii.vln.k12.hi.us

Contact:

Hilary Apana-McKee
hvln@k12.hi.us
Phone: 808-733-9150