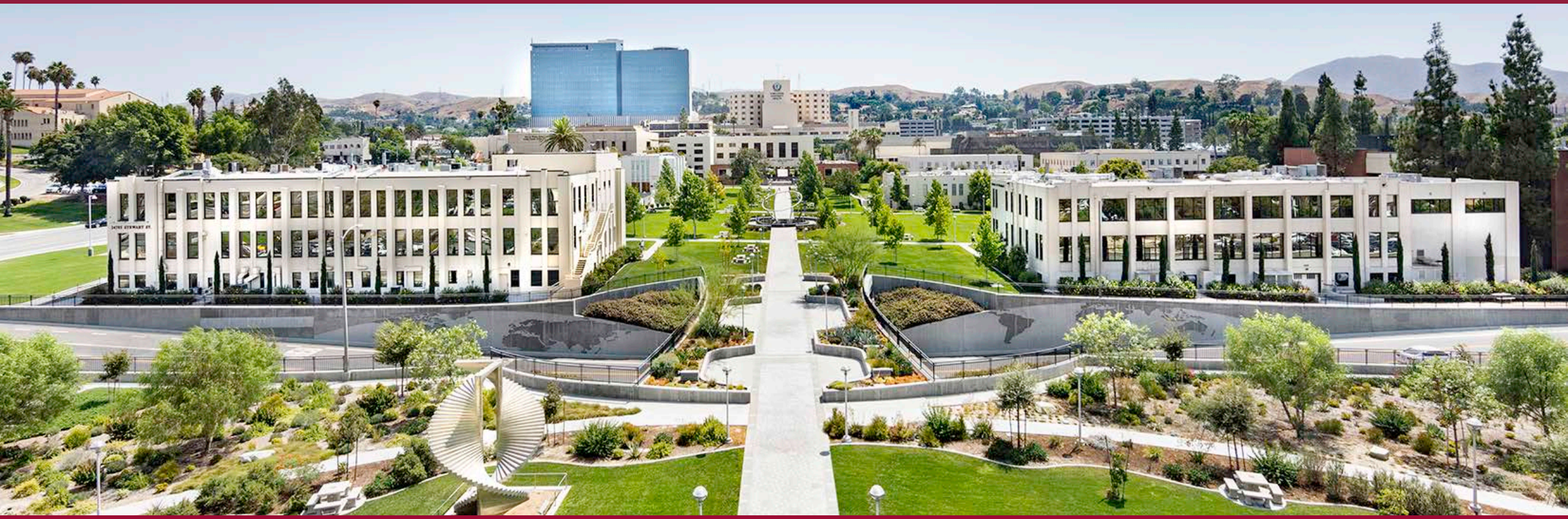
Conversations in Leadership and Management

Prioritizing and Staffing Hospital IT Projects



LOMA LINDA UNIVERSITY HEALTH

Many Strengths.
One Mission.

Presenters

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Learning Objectives:

At the end of this session attendees will be able to:

- Identify key components of a IT system.
- Identify the different staffing models for optimum IT Support
- Understand the business drivers which will lead to different staffing models
- Identify key elements of a core staffing and sourcing documents

Process, People and Technology

There are 3 key components of an automation system:

People	Frontline workers and those supporting those supporting front line workers
Process	The steps taken to do the work; the workflow.
Technology	The digital components to enable efficiency of a process • will not fix process problems • will not fix people problems • will enable consistency and speed

Automating broken processes just enables the broken processes to run faster ☺

LET'S NOT DO THAT!

Business Needs

Business Drivers

- What value will the investment provide the business?
  - ~ Commodity vs. Transformational
    - Run standard business operations, e.g. payroll, student management, billing
    - Transform the business to virtual digital processes, e.g. self-schedule and touchless pay for service
  - ~ Key question - what value does the business need to generate?
    - Focusing on solutions that create value to the business is the purpose of investing in automation
  - ~ Considerations:
    - What is the competition doing?
    - Is the value maintaining and optimizing existing capability
      - ~ Demonstrated by a specific benchmark, e.g.,% of overall OPEX
    - Is the value needed to grow or develop a new market
      - ~ Attract new demographic of customers

Business Drivers - Staffing

- Consider the types of skills needed to achieve the value
- Labor Market considerations for obtaining needed skills
  - ~Sourcing from outside
  - ~Hiring
  - ~Developing internally
  - ~Balancing the two models
- Considerations for retaining the skills based on the options

Retaining/Sourcing Focus	External	Hire	Develop Pipelines
Compensation	High	High	Moderate
Growth	Low	High	High
Personal	Moderate	High	High

Business Drivers – Internal Considerations

- Corporate Culture
- Managerial Preferences
- Leadership Priorities

Key components an Information System

- **Infrastructure**
  - ~ Network
  - ~ Servers and Storage
  - ~ IS Security
  - ~ Desktop
- **Administrative Systems**
  - ~ General Accounting
  - ~ Communication and Office Automation

Specialized Components for Healthcare

- **Administrative Systems**
  - Registration and Patient Records
  - Patient Billing
  - Inventory
- **Clinical Systems**
  - Electronic Medical Records
  - Lab Systems
  - Pharmacy Labs
  - Radiology Systems
- **Infrastructure**
  - Network
  - Servers and Storage
  - IS Security
  - Desktop

Specialized Components for Education

- **Administrative Systems**
  - Registration and Student Records
  - Student Accounting Billing
- **Learning Management System**
  - Content Management
  - Exam and Testing
  - Video Recordings
  - Interactive Technologies
- **Infrastructure**
  - Network
  - Servers and Storage
  - IS Security
  - Desktop

Emerging Opportunities

Healthcare

- Tele-health
  - Remote Patient Visits
    - Patients to Provider (remote doctor visits)
    - Provider to Patients (remote home visit)
  - Access to Patient Records
  - Patient Education

- Protection of Patient Information
  - Security at Source
  - Security in Transmission
  - Security in Storage

Education

- Tele-education
  - Remote learning
    - Instructor to student
    - Student to instructor
  - Access to Learning Content
  - Continuous Education

IT Readiness

Are you ready?

	Area of greatest need
Knowledgeable IT Professionals	
Reliable Internet	
Dedicated Budget	
Consistent Power	
Documented Processes and Policies	
Engaged and Trained Frontline Staff	
Updated Equipment	

Are you ready?

	Area of greatest need
Knowledgeable IT Professionals	25
Reliable Internet	5
Dedicated Budget	8
Consistent Power	4
Documented Processes and Policies	3
Engaged and Trained Personnel	11
Updated Equipment	5

Software Acquisition Options

Acquisition Options

- Build / Buy Continuum
- Buy Options
  - ~ Vendor Product -- Off the shelf
  - ~ Vendor Product -- with Configurations
  - ~ Vendor Product -- with Customizations
- Build Options
  - ~ Open-source tool that you can customize
  - ~ Vendor tool that you can use to build
  - ~ Coding from scratch

Acquisition Options

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- **Buy Options**
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  - ~~~ Open-source tool that you can customize~~
  - ~~~ Vendor tool that you can use to build~~
  - ~~~ Coding from scratch~~

System Acquisition Stages

Vendor System Phases

- Phase 1 – Selection
  - ~ This discussion doesn't cover the traditional steps, but good article found here:
    - Requirements Development
    - Software Vendor Research and Request for Information
    - System Demonstrations
    - RFP & Vendor Selection
    - SOW and Contract
- Phase 2 – Implementation
- Phase 3 – Optimization
- Phase 4 – Maintenance

Lifecycle Phase 1 – Selection

- Business Requirements
  - Run standard business operations, e.g. payroll, student management
  - Transform the business to virtual digital processes, e.g. self-schedule and pay for service
  - Compete on cost or compete or consumer convenience
  - Sustain a market or develop a new one
- Value
  - Expense – The Investment – there is always a cost but what is the return
  - Benefits are the prize, the payoff but can they be quantified
    - Quality – Student satisfaction, outcome from a clinical procedure, they matter but what is worth?
    - Revenue – Will revenue increase from the investment, if not then incremental expense negative impact
    - Optimization – Go live date is not the end, it marks the beginning of continuous improvement
    - Common mistake to think when go live is done we move to maintaining the system

Selection continued

People-Process-Technology

» Labor Plan Considerations - People
  ~ Traditional Staffing – Hiring staff into your organization.
  ~ Contracting – Temporary contracts, typically project based.
  ~ Outsourcing – External vendor to manage most IT operations.
  ~ Volunteers – Expat volunteers or other well-meaning folk.

» Process – Simply the steps to complete a given task – workflow
  ~ Goal is to automate as many of the steps in a workflow as possible
  ~ Labor cost is incurred for steps that can't be automated
  ~ Taking time to clearly identify current state and planned state
    • Doing this well can be difference between obtain value and create inefficiencies

» Technology – Functionality of the technology enables workflow automation…or not
  ~ Viability of the supplier is a major consideration – how long in market
  ~ Compatibility with standards
  ~ Flexibility is proportional to complexity and cost

Lifecycle Phase 2 – Implementation

- Solution has been selected now time to implement
- Executive Sponsor is essential to drive towards business value
- Finalize the plan for migration using a rigorous project management methodology
- Value realization should always be top of mind consideration
- Identify and adhere to guiding principles – focus on business value
- Proforma must be referenced to define scope of project
- Time costs money, increased expense impacts ROI
- Minimize workflow changes that don't provide value

Lifecycle Phase 3 – Optimization

- Go live is not the end, just the beginning of value realization
- This phase aligns business operations and IS Team continuous improvement
- Performance metrics are monitored, and improvement never ends
  - ~ KPI based
  - ~ Value is gained in this phase

Lifecycle Phase 4 – Maintenance

- Vendors release fixes and enhancements periodically
- Use of the system identifies bugs that were not anticipated
- Training of users to increase value realized
- Regulatory changes require updates to business rule
- This is considered commodity work and can be sourced outside the organization
- Systems may reach end of useful life and need to be replaced

Staffing Models

Identify the different staffing models for optimum IT Support

- Traditional Staffing – Hiring staff into your organization.
- Contracting – Temporary contracts, typically project based.
- Outsourcing – External vendor to manage most IT operations.

- Volunteers – Expat volunteers or other well-meaning folk.

	Vision	Plan	Management	Staff
Traditional	Yours	Yours	Yours	Yours
Contracted	Yours	Yours	Yours	3rd Party
Outsourced	Yours	Shared	3rd Party	3rd Party
Volunteers	Yours	Yours	External	External

Core tools for Internal Hires

- Staffing Model
  - Job Description
  - Compensation Pressures
    - External Equity
    - Internal Equity
    - Denominational Equity
    - Financial Realities

Core tools for Outsourcing models

- External Models (Managed Services / Outsourcing)
  - Master Agreement
    - Terms and Conditions
    - Scope
    - Statement of Work – Implementation
  - Service Level Agreement – On-going Support
    - Roles and Responsibilities / RACI
  - Cost
    - One-time and On-Going
    - Total Cost of Ownership
- Evaluations / Assessment
- Priority Setting

Case Study

Case Study Technical Readiness

Marin College is a 300-student college located in an urban-center. Marin specializes in training and preparing nurses and pastors for the local community. During the pandemic, they were forced to move much of their teaching online. Because the college doesn't have reliable internet, the faculty and the students were required to work from home or from a local internet café. The faculty-student interaction consisted of remote lectures via zoom, and assignments which were emailed back and forth. During this time, the college noted a 10% reduction in enrollment.

Emerging from the pandemic, the college administration wants to embark on a strategy to increase the number of online classes. Ultimately, they hope to take the pastoral education fully online, and the nursing education online except for clinicals. The students enjoy the flexibility of remote learning, the faculty are not excited about it at all.

» *What concerns exist in this case that suggest risks in the implementation?*

Case Study Operational Readiness

A rural clinic setting wants to increase the number of virtual visits to increase access and provide a consumer-friendly experience. There is an assumption that all that is needed is a computer with software that supports video visits. There was little regard to getting the full clinic workflow revised to support a virtual visit. All current workflows are based on the patient being at the clinic. These workflows include registration/check-in, assessment/vital signs, diagnostics, documentation, after visit instructions, billing, etc.

- What concerns exist in this case that suggest risks in the implementation?

Case Study Governance

Speiss International Hospital has recently embarked on a project to implement a comprehensive Hospital Information System. They have been using their current system for the past 10 years, but its functionality is limited to General Accounting and Patient Billing. The new system will include Accounting, Billing, and EHR. The implementation team has been working on the new system for four months now. Just before go-live, the CFO and chief accountant decide to leave and take another job in another city. As a board member, you have concerns about this new system going live without the financial leadership team. In talking to hospital financial personnel, they confirm your concerns.

» As a board member, what is your role in advising on this go-live decision?

Case Study Financial Considerations

The scientists and explorers of the Antarctic region have been given permission to form themselves in the Southern Antarctica Union Mission. They have recruited a pastor from Chile to be the president. They have not yet recruited a treasurer or a secretary. The president and a few of the scientists have dreams of taking the gospel to the various remote inhabitants of this remote island. They have been told that this can be done via internet or satellite. They have priced out the cost of the system and it is well beyond the money currently available to them. The pastor has been able to secure a donation from a company that is retiring 10-year-old equipment. One of the scientists has a daughter who is an expert in this technology. She is willing to fly out for a few weeks to help them set things up.

What are the advantages and concerns with having the young technology expert volunteer to set-up the system? What are the advantages and concerns with accepting this donated equipment? Is this system free like water is free, or is it free like kittens are free?