

CHRIST THE REDEEMER CATHOLIC SCHOOLS

High-Level Optimization Review of IT Plan & Evergreen Strategy

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Process

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Staff Interviews

Interviews with Executive Team, all Technology Team Staff, and key stakeholder groups across sectors

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Review of Documentation

Current IT Strategic Plan, Inventory, Service Desk Reports, Policies, Budget Forecasts and other documents

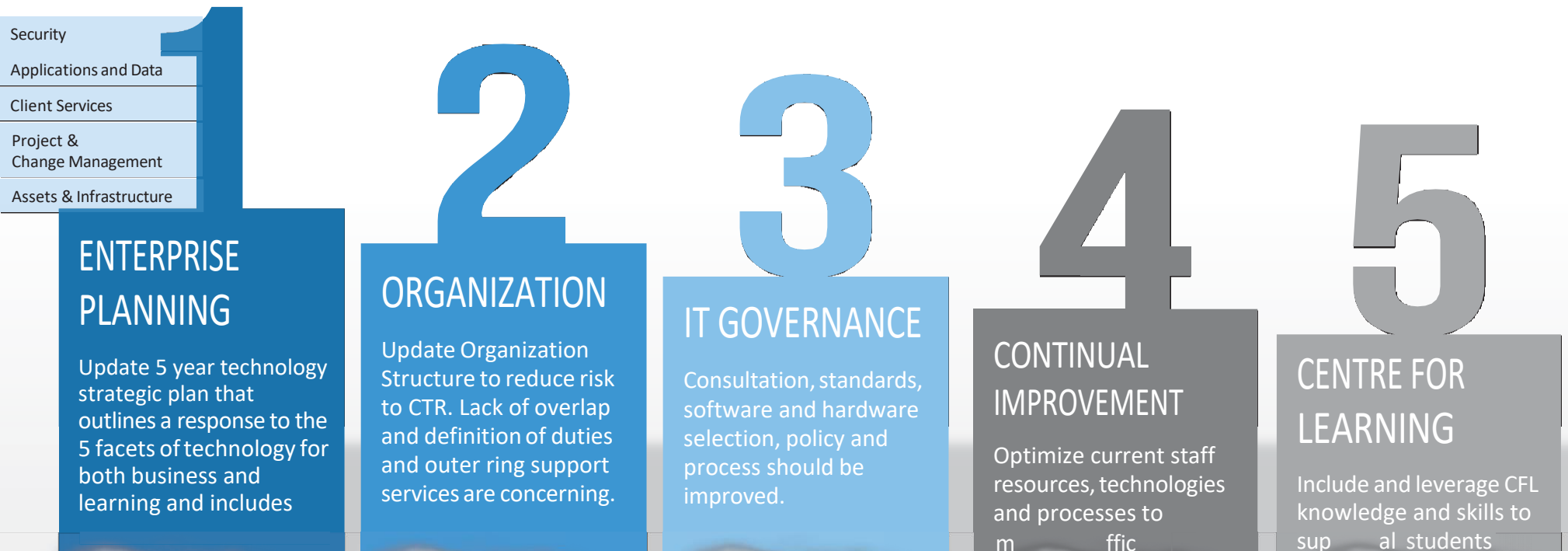
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Comparisons to Similar Districts in Alberta and the rest of Canada

Organization Structures, Data Focus, Applications Support and Other Areas

Improvement Recommendations

Success Critical



STRATEGIC PLANNING

CTR Technology Team



Strategic Planning

- A well-developed Strategic Plan that binds the resources to the priorities generates an ability to manage workload. It also provides a means to determine governance in advance of additional decision-making.
- Strategic planning should include consultation with a steering committee {Education} and with input from each business unit. This process ensures decisions are made in alignment with both business and education priorities.
- The Strategic Plan, once collaboratively created, will inform decision-making throughout the organization through timely and accurate communication.
- Organizations that are leading practice have well understood 3 to 5 year plans that are budgeted and resourced appropriately and build governance processes directly into the planning including standards around device selection, application selection and security.
- Strategic Plans may include implementation plans that provide scope and sequence as well as an understanding of workload or other resources required to meet project demands.
- Strategic Plans address Continual Improvement.

Recommendations

Strategic Planning

- Consult with stakeholders to determine if device offerings are meeting their needs.
- Ensure device selection strategy provides efficacy of effort by end users particularly in business roles and in highly technical courses.
- Assess connectivity to facilities building and determine if alternatives are available as bandwidth is creating inefficiencies {consider point-to-point wireless}.
- Review printer usage as the number and diversity of convenience printers is creating hidden costs in power, toner and support {details to follow}.
- Update the Strategic Technology Plan on an annual basis to align with changes in population, end user needs, emerging technologies and best practices.
- Assess the bandwidth requirements and Access Point tolerance throughout the school division:
 - Canadian school districts have or are already moving to one Access Point per classroom
 - The province of Ontario is standardizing on 5 Mbps/User for internet bandwidth

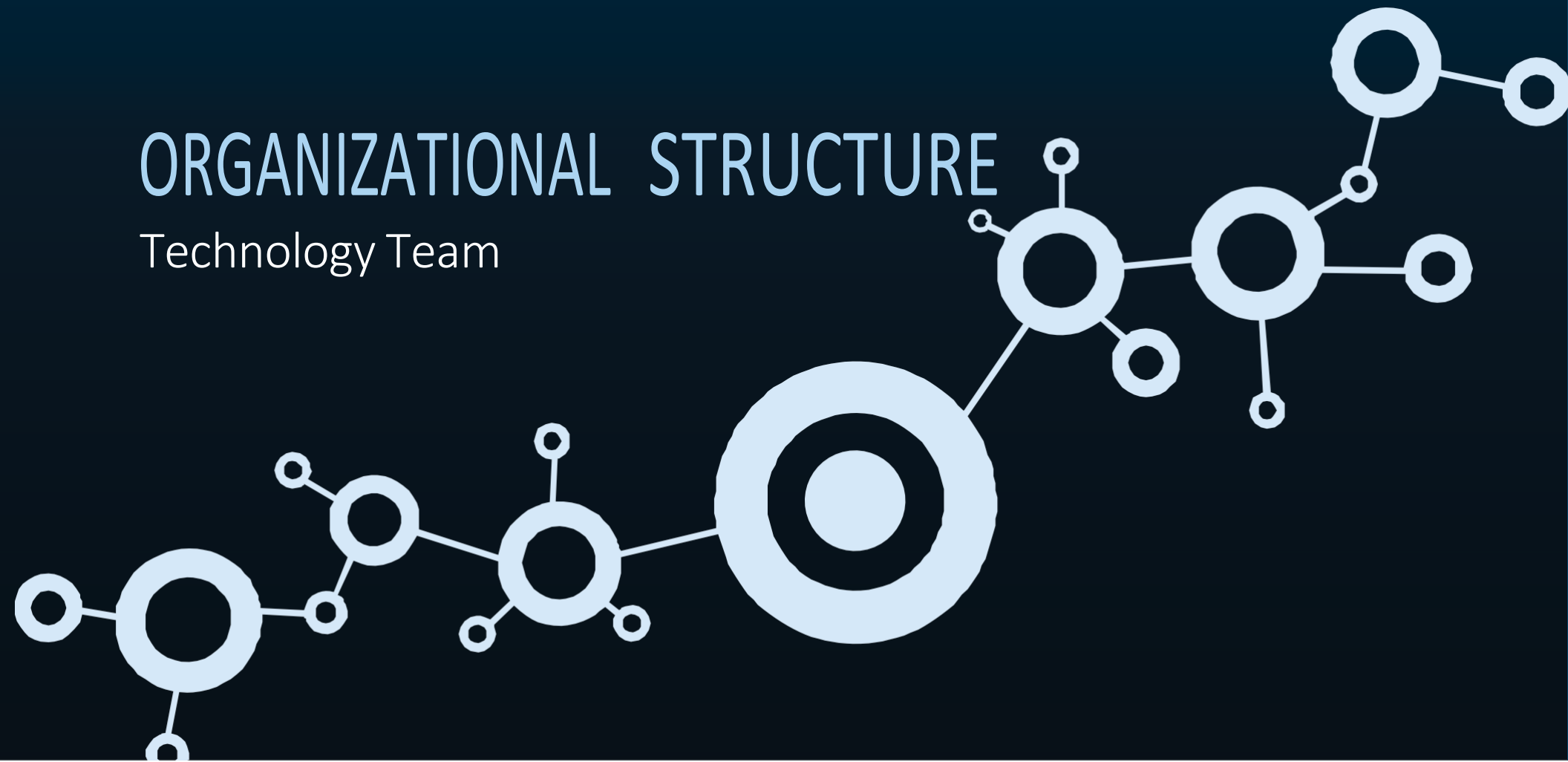
Recommendations

Strategic Planning

- Formalize project management processes and at a minimum, create a scope and sequence to determine the overall timing and workload associated with completing the Strategic Technology Plan.
- Determine required resources to meet suggested scope and sequence, and risk remediation.
- Solutions sets should be reduced as much as possible to lower cost of ownership, support and maintenance. Printers and display devices are prime examples.
- Create project charters for all major implementations with priority given to:
 - Security Improvements
 - Data Management
 - Internet bandwidth and Connectivity
- One-time complex projects should be considered for contracted services to reduce workload and create efficient implementation.

ORGANIZATIONAL STRUCTURE

Technology Team



Organizational Structure

Applications and Data

The primary responsibilities of this group include multiple functions and activities including:

- conceptualizing,
- costing,
- designing,
- developing and
- maintaining solutions for Business Applications and Schools & Programs.

This work is required to be completed in line with operational and technical requirements. Additionally, this group installs, implements, administers and supports critical system applications. This group reports to the Director of Technology.



Organizational Structure

Client Services

The primary responsibilities of client services is to provide support service for all end users. This agile team is responsive to the end user and works diligently to ensure both the business and education sides of learning are provided a simple, solid and enjoyable end user experience. This team is responsible for incident management and request fulfilment activities handled by the Service Desk.

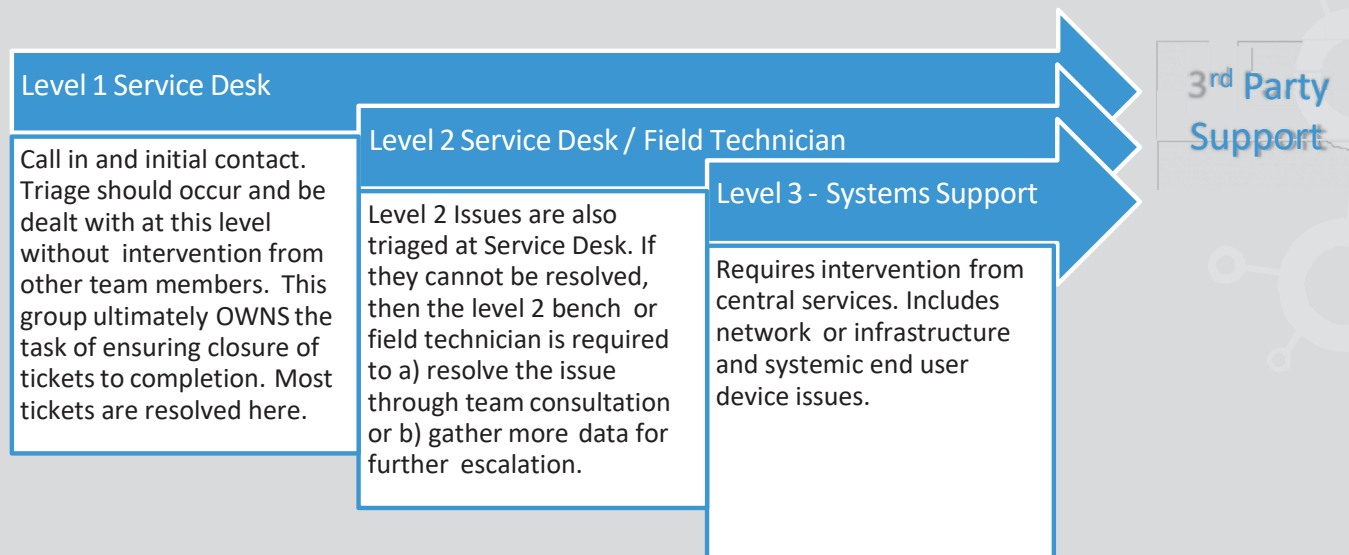
Their work extends to the provisioning of support and training to enhance corporate end user capacity.

The need for training is an imperative for successful implementation of any technology and should be considered as an embedded part of strategic planning.



Client Services

What is the escalation process?



Organizational Structure

Security & Authentication and Assets & Infrastructure

The primary responsibilities of this group are security, identity and access management, asset management and installation and maintenance of infrastructure.

Assets and Inventory Control - Asset management includes the evaluation, procurement and distribution, set up and removal of assets and the related inventory management of those assets.

Infrastructure- The responsibility includes the installation, optimization, maintenance, and monitoring of systems includes data centers, firewalls, telephone systems, DR/BCP, Back ups

Cloud Services - Azure Services, Google for Education, Office 365 and other services hosted in the cloud will be the responsibilities of this sub-team.

Networking - Responsible for the procurement, deployment, maintenance and support of networking equipment.

Security and Authentication - Ensures security standards and assurances are maintained while managing controlled and simplified access to networked systems.

This unit shares responsibility in data assurance and generating reports from the data warehouse that support data-driven decisions for district and school leaders.

In most districts across Canada there has been a significant shift AWAY from in-house development with an increased focus on 3rd party applications and data mining.

Organizational Structure

Project and Change Management

1. Project Management - initiation, planning, progression and tracking, completion, documentation and reporting.
2. Change Management - Chairing of the change management committee, development and adherence to process, change management response - normal and emergency. Members of this committee must sign off on all change management requests.
3. Formal processes for Project Approval, Change Advisory Boards and Project approvals are vetted through this group.

Complex projects in IT demand rigor in terms of project management. SIS, ERP/HRIS, Finance and Payroll are mission critical services. Proper planning, resourcing, scoping and sequencing are all important aspects that require attention.

GOVERNANCE

CTR Technology Team



Governance

- Decision-making is tied to a strong cyclical process.
- Decisions take into consideration available resources:
 - Workforce - right people doing the right work
 - Funding - determined in advance
 - Timelines - mapped out and adhered to
 - 3rd party contracting - leveraged to meet timelines or fill in lack of expertise
- Governance includes Policy, Procedures and Guidelines in the support and management of technology.
- Governance is built into Strategic Planning.
- Governance provides the guidelines necessary to optimize systems for both the business of education and the learning environments that are served.

Enterprise print

Efficiencies and Benefits

- Cost per page is lower
- Less paper
- All devices are duplex by default
- Software does not automatically release print jobs
- Causes the examination of school print practices and supports implementation best practices
- Byproducts of implementing Enterprise print
 - Less hardware to support, Less power used
 - FOIP compliance by default



Enterprise printing

A Case Study

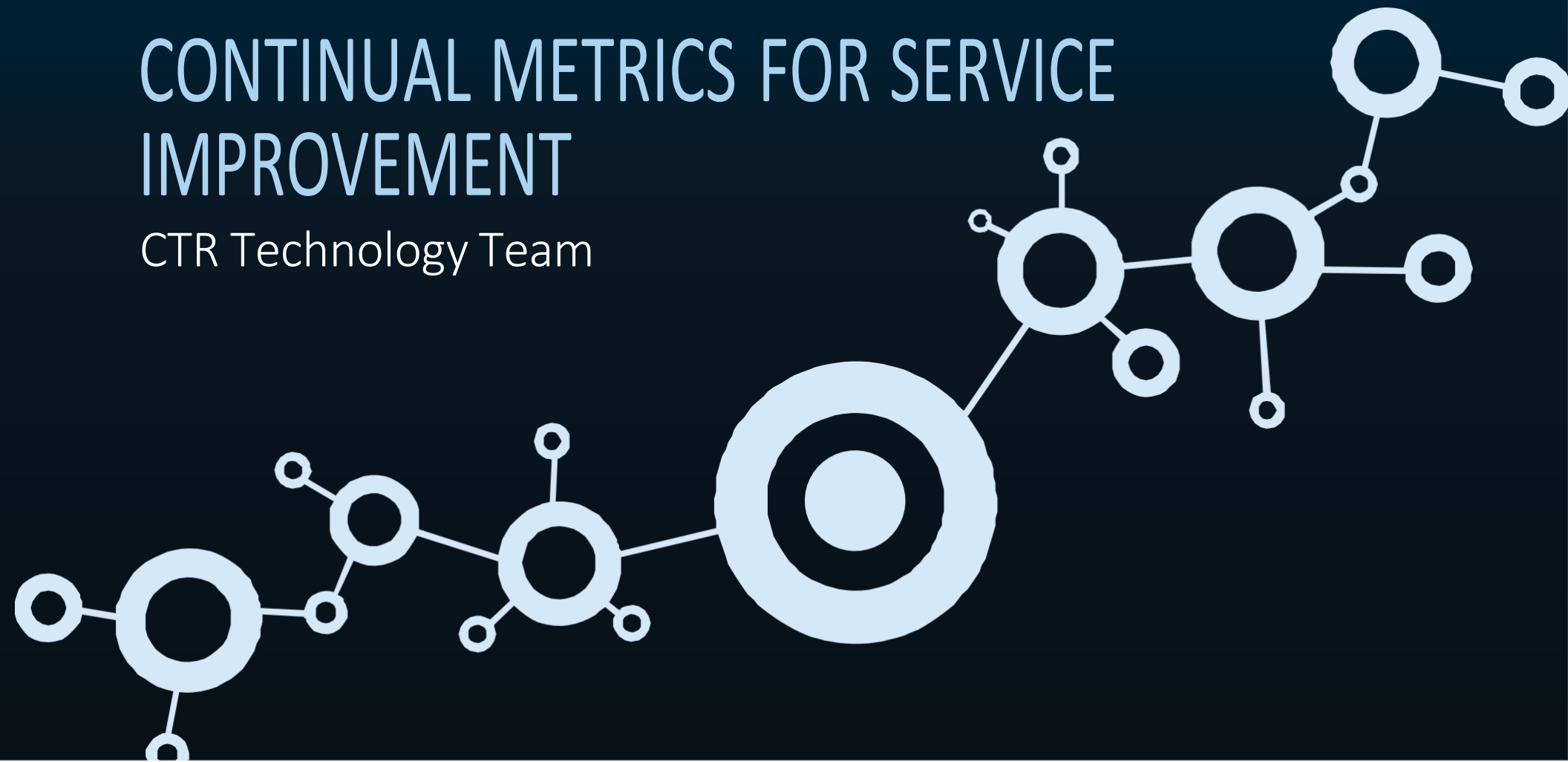
Sunny Horizons School - 350 students

- The total cost of ownership over 5 years {hardware, click charges, paper, staples and software) was \$125, 000 {\$25,000/year).
- 9 print machines, several were low volume/high costs per page, meters apart from each other.
- The cost per page on these machines ranged from \$0.05 to \$0.18
- After enterprise print implementation, including more robust and secure machines, cost per page consistently less than 0.03.
 - Year 1- 25% decrease {settings, supplies)
 - Year 2 - 25% decrease in print jobs due to education and a digital by default strategy



CONTINUAL METRICS FOR SERVICE IMPROVEMENT

CTR Technology Team



Metrics for Continual Service Improvement

Define and Apply Success Metrics

- "What gets measured gets done."
- What does success look like in each of the facets of IT Service?
 - Networks and Security
 - Assets and Infrastructure
 - Client Services
 - Applications and Data
 - Project and Change Management
- How do you measure it?
- How often and to whom is it reported?



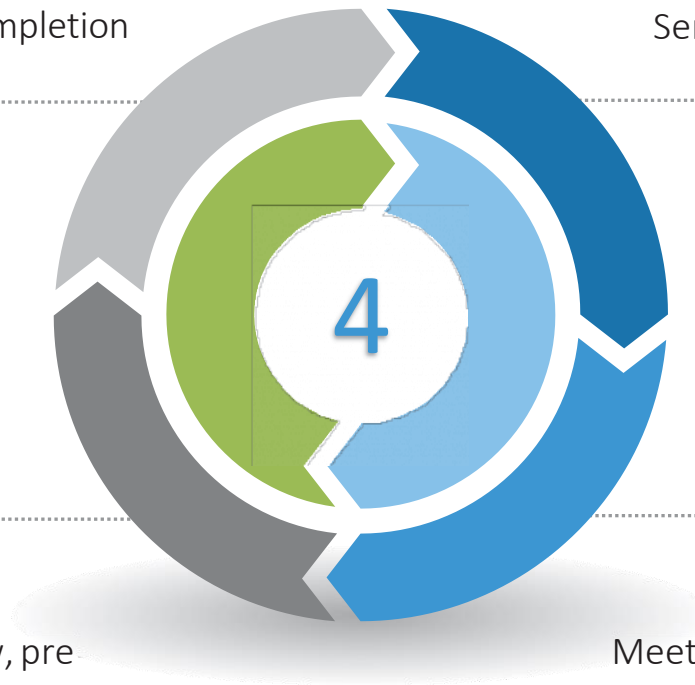
Continual Improvement

MAINTENANCE

Service Level Agreements, Project Completion Documentation and Evaluation

ONGOING SUPPORT

Service Level Agreements, Feedback from Stakeholders and Service Desk



EFFICACY

Efficacy brainstorming, process review, pre-determined success metrics

INFRASTRUCTURE UPGRADES

Meeting future demands in advance of need

Bold Steps

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Great People!

Celebrate and engage the great people you have that are willing to do anything in the support of kids!

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Realign Organization and Governance

Enhance the Strategic Technology Plan then reorganize IT personnel and improve governance to provide fair access to technology and service.

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Improve efficacy

Modify service practices, improve Internet and Wi-Fi to match increased number of IP connected devices, and leverage on-site skilled staff to bolster support services. Consider engagements like Information Technology Optimization Engagement; 10 Essential Practices for Security and Business Continuity Management.

THANK YOU

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