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Membership matters.

Avoiding Technology Ping-Pong

Finding the Right Place on the Ed Tech Continuum

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AGENDA

- Review the EdTech Continuum
- Discuss the drivers and impacts of technology selection along the continuum
- Explore proposed approach to inform technology selection
- View examples of how the proposed solution may help technology evaluation and selection



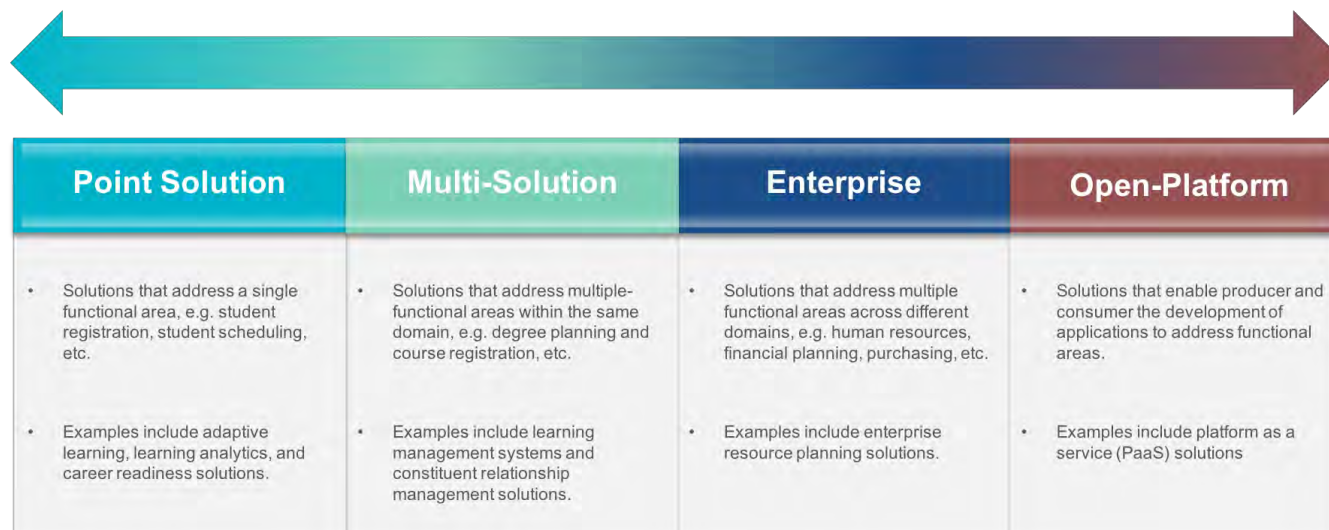
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EdTech Continuum



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EDTECH CONTINUUM



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Drivers and Impact

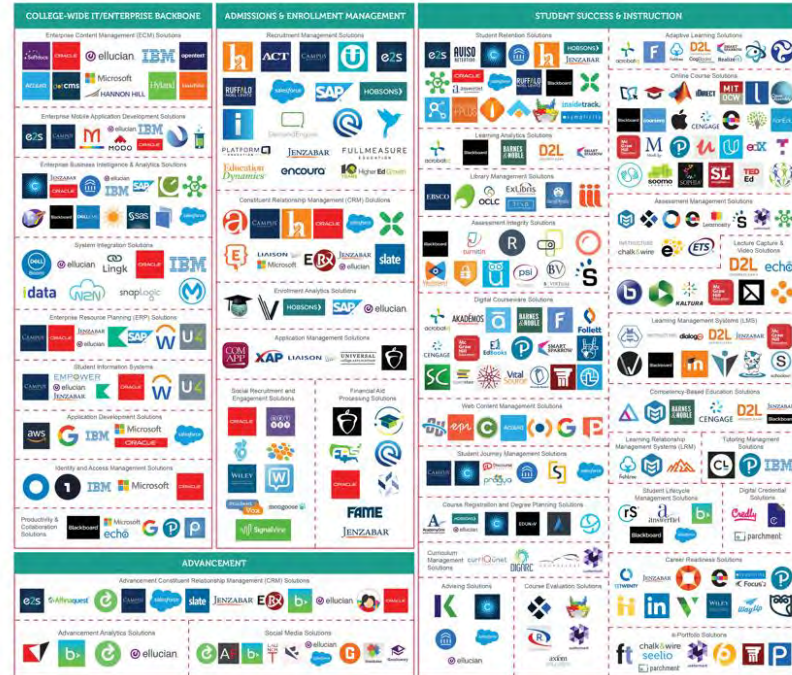


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DRIVERS: NOISY MARKETPLACE

2019 HIGHER EDUCATION TECHNOLOGY LANDSCAPE A CATEGORIZATION OF TECHNOLOGY PROVIDERS

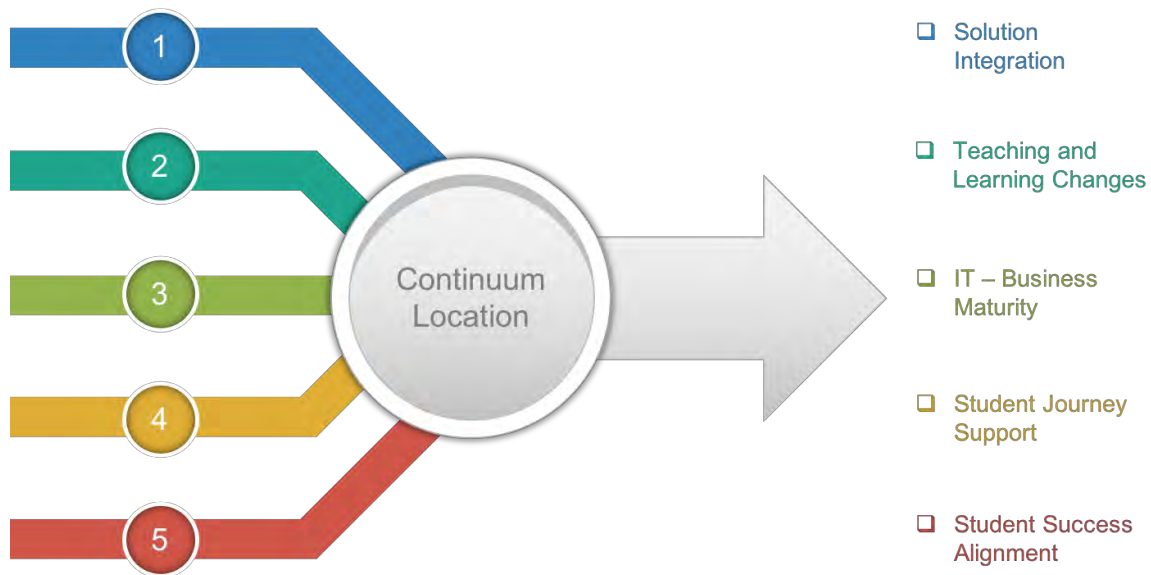
encoura Eduventures Research



Updated May 2019
Questions, additions, or feedback? Want to have your product in the landscape? Contact us at info@encoura.com

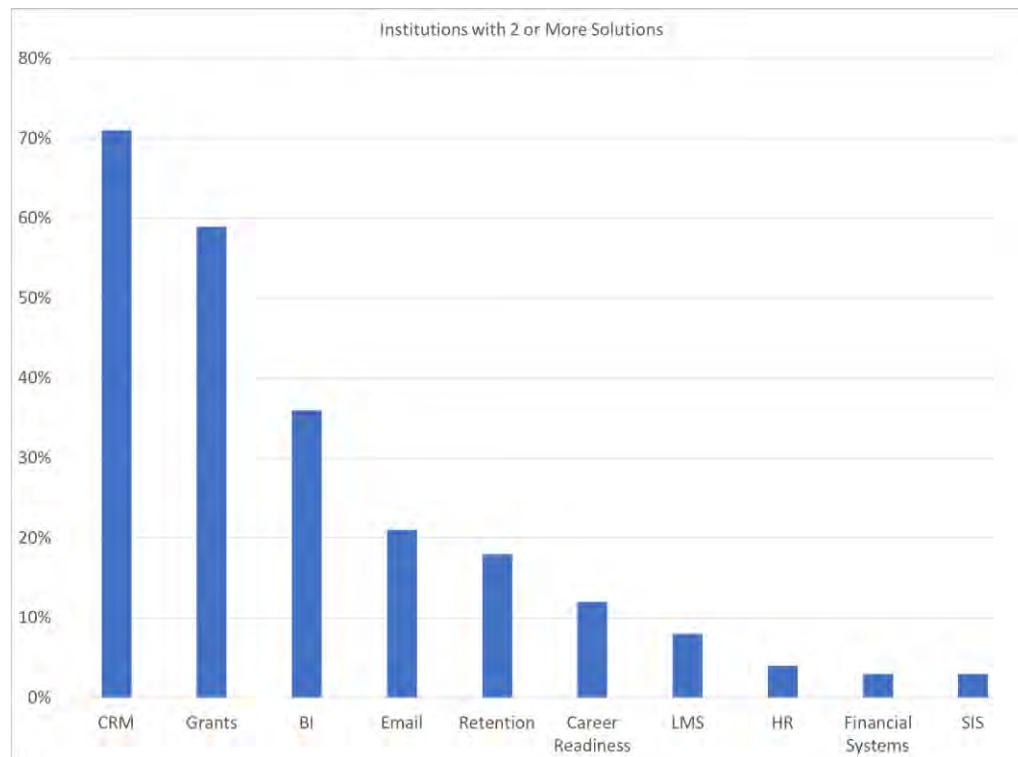
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DRIVERS: OTHERS



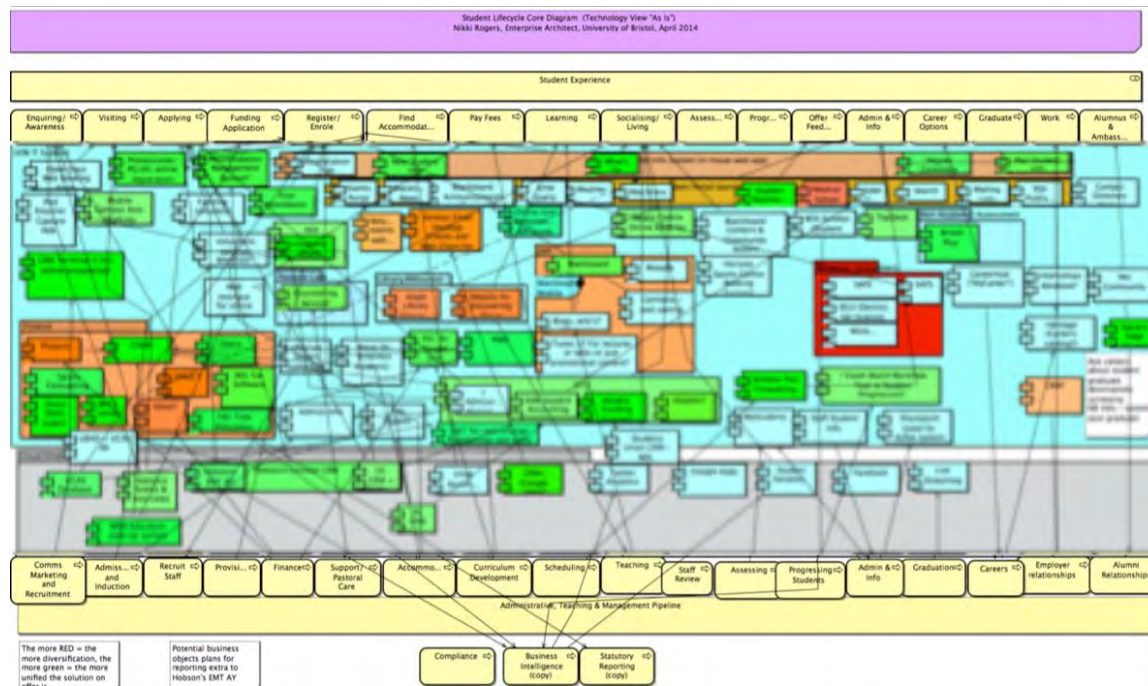
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IMPACT: MULTIPLE SOLUTIONS



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IMPACT: CHAOTIC ECOSYSTEM



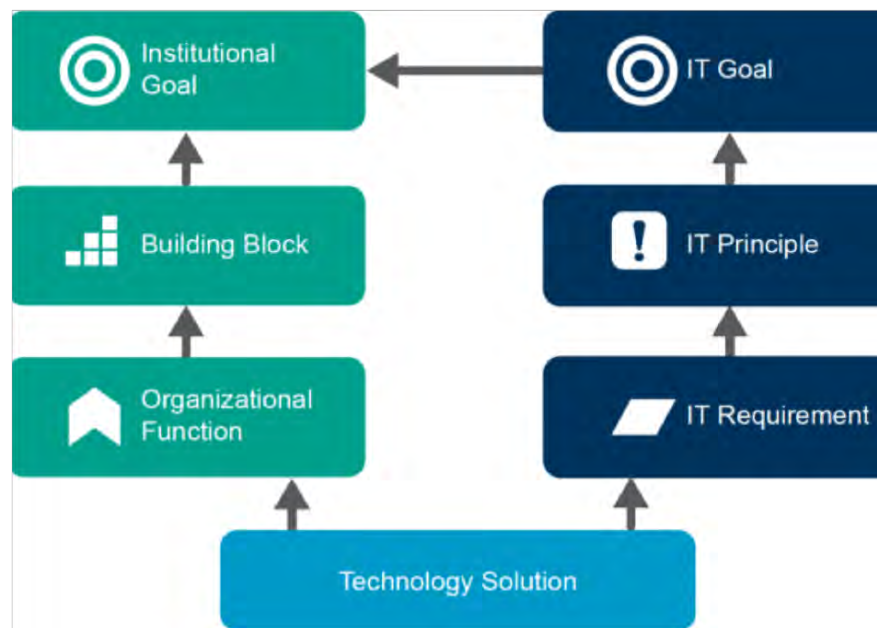
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Proposed Solution



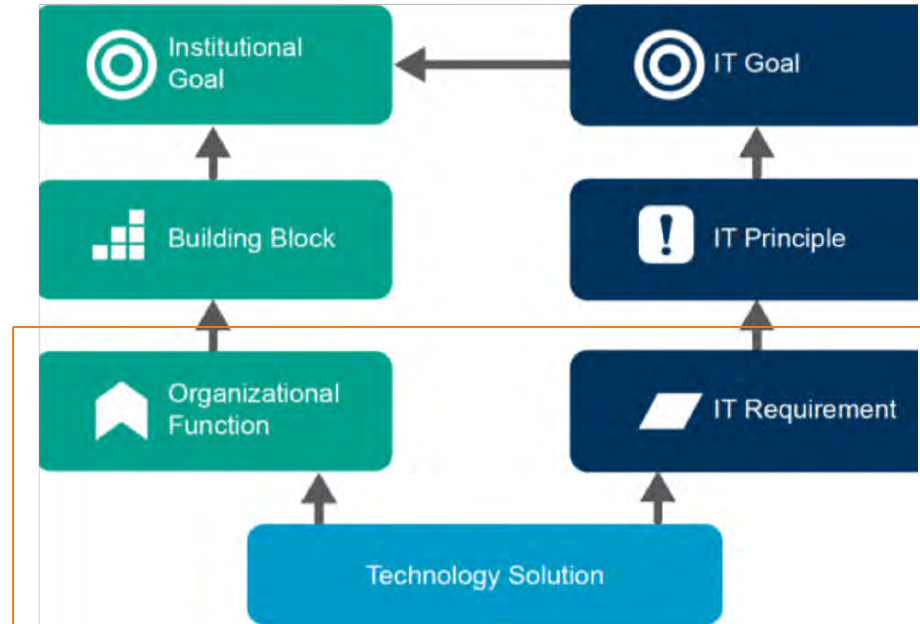
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PROPOSED SOLUTION



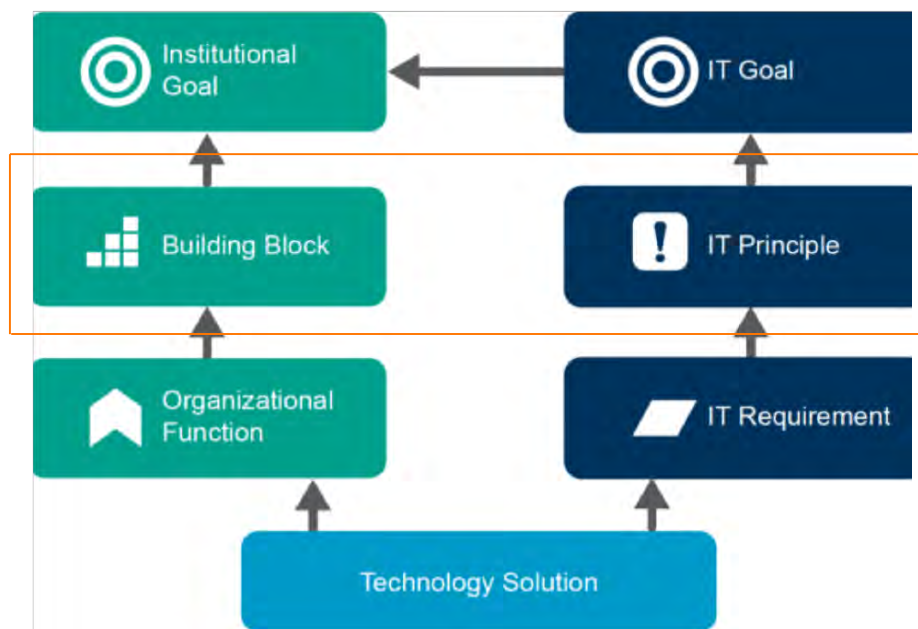
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PROPOSED SOLUTION



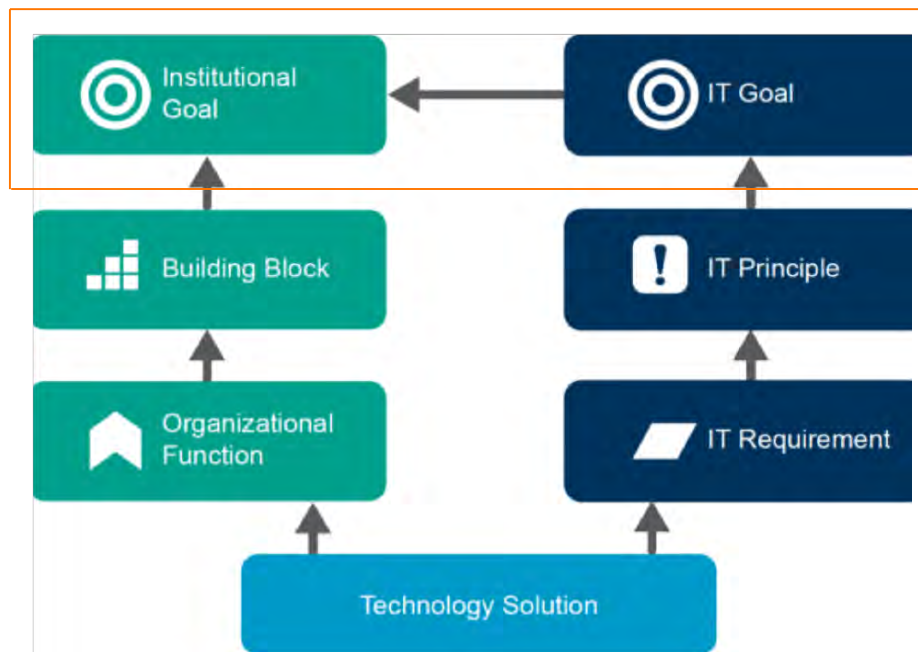
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PROPOSED SOLUTION



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PROPOSED SOLUTION



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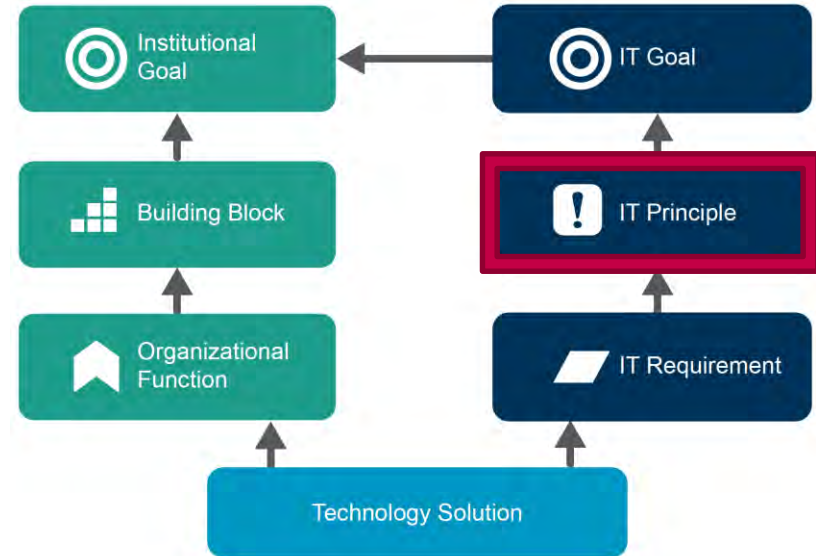
Proposed Solution: IT Principles



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OVERVIEW OF IT PRINCIPLES

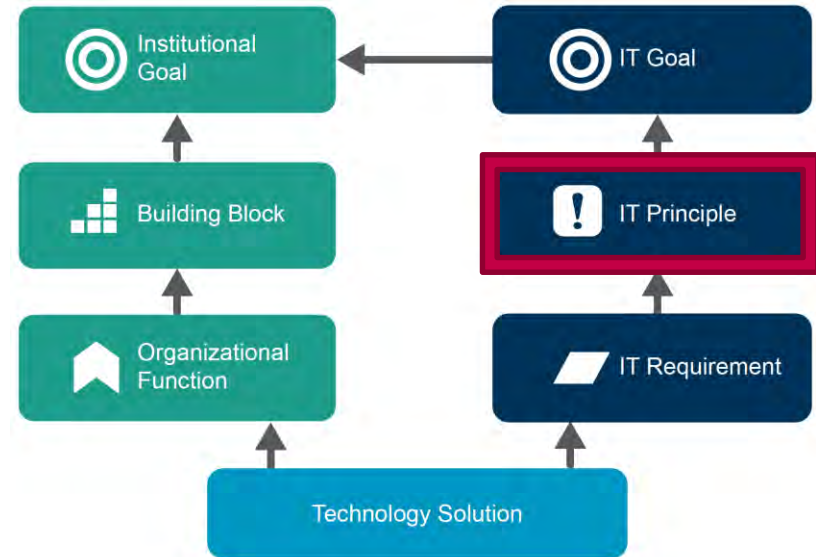
- Overall, principles are general rules and guidelines that inform and support the way in which an institution seeks to fulfil its mission
- Likewise, they may be subject to adjustments as the enterprise refocuses its objectives and mission
- They are, however, intended to be enduring and not subject to frequent changes



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OVERVIEW OF IT PRINCIPLES

- Provide a context to support explicit, evidence- based decision-making
- Help establish relevant evaluation criteria
- Assist in defining the functional requirements of products and technology ecosystems
- Allow for a rationale for justifying activities around products and technology ecosystems
- Provide valuable inputs to future transition initiatives and planning activities
- Support information technology governance activities



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PRINCIPLES

Principle	Statement	Rationale	Impact
Compliance	❖ Data and information management processes comply with all relevant internal and external laws, policies, and regulations	❖ Policy is to abide by laws, policies, and regulations	<ul style="list-style-type: none"> ❖ Continual training on regulations ❖ Awareness of changes in regulations (GDPR, etc.)
Maximum Benefit	❖ Information management decisions are made to provide maximum benefit to the institution as a whole	❖ Greater long-term value and ROI of decisions made from an enterprise-wide perspective than decisions made from the perspective of a department	<ul style="list-style-type: none"> ❖ Development of governance approach ❖ Executive buy-in
Common Use Applications	❖ Solutions that can be applied across the institution are preferred to solutions which are only provided to a single department	❖ Storing data in different solutions is time-consuming and inefficient	<ul style="list-style-type: none"> ❖ Reviewing solutions across departments ❖ Identifying applications by use



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PRINCIPLES

Principle	Statement	Rationale	Impact
Data Security	<ul style="list-style-type: none"> ❖ Protecting all confidential, sensitive or personal data from unauthorized use and disclosure 	<ul style="list-style-type: none"> ❖ Restricting availability, while considering open sharing and release of information 	<ul style="list-style-type: none"> ❖ Developing the classification of and release policies for data ❖ Identifying security needs at the application and data levels
Data as an Enterprise Asset	<ul style="list-style-type: none"> ❖ Data is an asset that has value to the institution and is managed accordingly ❖ Data is shareable and accessible to all 	<ul style="list-style-type: none"> ❖ Data is the foundation of institutional decision-making ❖ Institution must ensure that it knows where it is, can rely upon its accuracy, and can obtain it when and where it is needed 	<ul style="list-style-type: none"> ❖ Cultural shift from “ownership” to “stewardship” ❖ Executive buy-in ❖ Data dictionary
Data Trustee	<ul style="list-style-type: none"> ❖ Each data element has a trustee accountable for data quality 	<ul style="list-style-type: none"> ❖ Eliminating redundant human effort and data storage resources 	<ul style="list-style-type: none"> ❖ Determining data quality dimensions



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PRINCIPLES

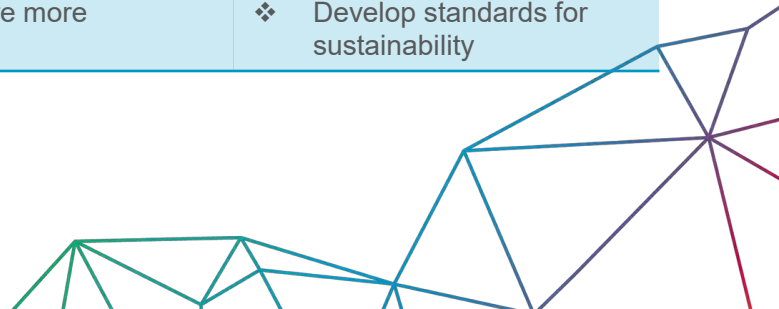
Principle	Statement	Rationale	Impact
Data will be Analyzable	<ul style="list-style-type: none"> ❖ Allows institutional teams to perform decision-making 	<ul style="list-style-type: none"> ❖ Aids sound decisions, by allowing access to quality data, presented in the most appropriate way 	<ul style="list-style-type: none"> ❖ Possibly developing a centralized data repository ❖ Identifying the repeatable data needs of teams
Control Technical Diversity	<ul style="list-style-type: none"> ❖ Minimizing the cost of maintaining expertise in and connectivity between multiple solutions 	<ul style="list-style-type: none"> ❖ Limiting the number of supported solutions will simplify maintainability and reduce costs 	<ul style="list-style-type: none"> ❖ Develop policies and standards ❖ Determine how to maintain flexibility to accommodate technological changes
Requirements-Based Change	<ul style="list-style-type: none"> ❖ Changes to applications, data, and technology are only made in response to business needs 	<ul style="list-style-type: none"> ❖ Minimizing the impact on the institution by IT changes and vice versa 	<ul style="list-style-type: none"> ❖ Developing impact analyses



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PRINCIPLES

Principle	Statement	Rationale	Impact
Business Continuity	❖ Institutional operations are maintained despite technology interruptions	❖ Consider the reliability of solutions throughout their design and use	❖ Develop SLA's ❖ Determine dependencies between solutions
IT Responsibility	❖ IT is responsible and accountable for owning and implementing all IT processes and infrastructure to meet business-defined requirements	❖ IT is best suited to align expectations with business requirements, so that all projects are cost-effective and can be completed in a timely manner	❖ Define processes to manage business expectations and priorities
Buy over Build	❖ Applications shall, as much as possible, be purchased off the shelf	❖ Commercial products provide a greater longevity, supportability and are therefore more sustainable	❖ Deliver formal training for users ❖ Develop standards for sustainability



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PRINCIPLES

Principle	Statement	Rationale	Impact
Ease of Use	<ul style="list-style-type: none"> ❖ Solutions should not require deep understanding of technology and should be easy to use 	<ul style="list-style-type: none"> ❖ The more institutional users need understand the underlying technology, the less productive they are 	<ul style="list-style-type: none"> ❖ Dictate common look and feel for all solutions ❖ Vendors should have User Acceptance Testing/quality documentation



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Role of IT Principles



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EDTECH CONTINUUM: ROLE OF IT PRINCIPLES



Point Solution	Multi-Solution	Enterprise	Open-Platform
<ul style="list-style-type: none"> Solutions that address a single functional area, e.g. student registration, student scheduling, etc. Examples include adaptive learning, learning analytics, and career readiness solutions. 	<ul style="list-style-type: none"> Solutions that address multiple functional areas within the same domain, e.g. degree planning and course registration, etc. Examples include learning management systems and constituent relationship management solutions. 	<ul style="list-style-type: none"> Solutions that address multiple functional areas across different domains, e.g. human resources, financial planning, purchasing, etc. Examples include enterprise resource planning solutions. 	<ul style="list-style-type: none"> Solutions that enable producer and consumer the development of applications to address functional areas. Examples include platform as a service (PaaS) solutions



Common Use Applications

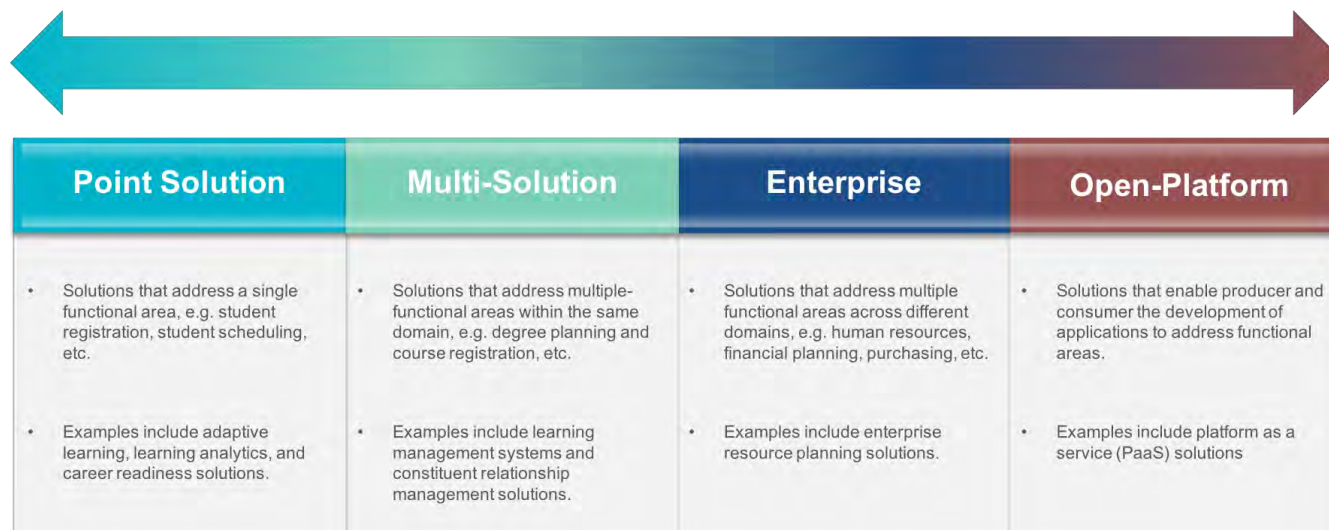


Common Use Applications

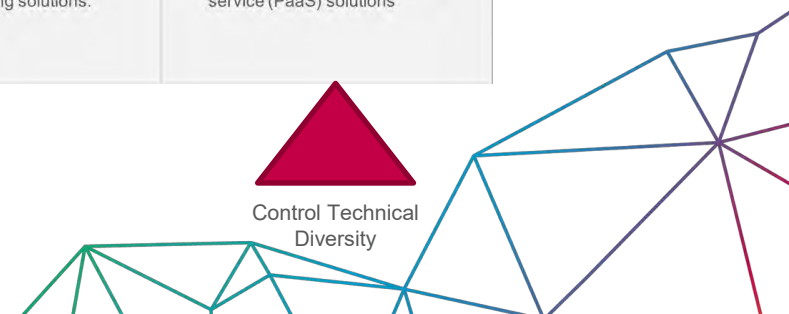


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EDTECH CONTINUUM: ROLE OF IT PRINCIPLES

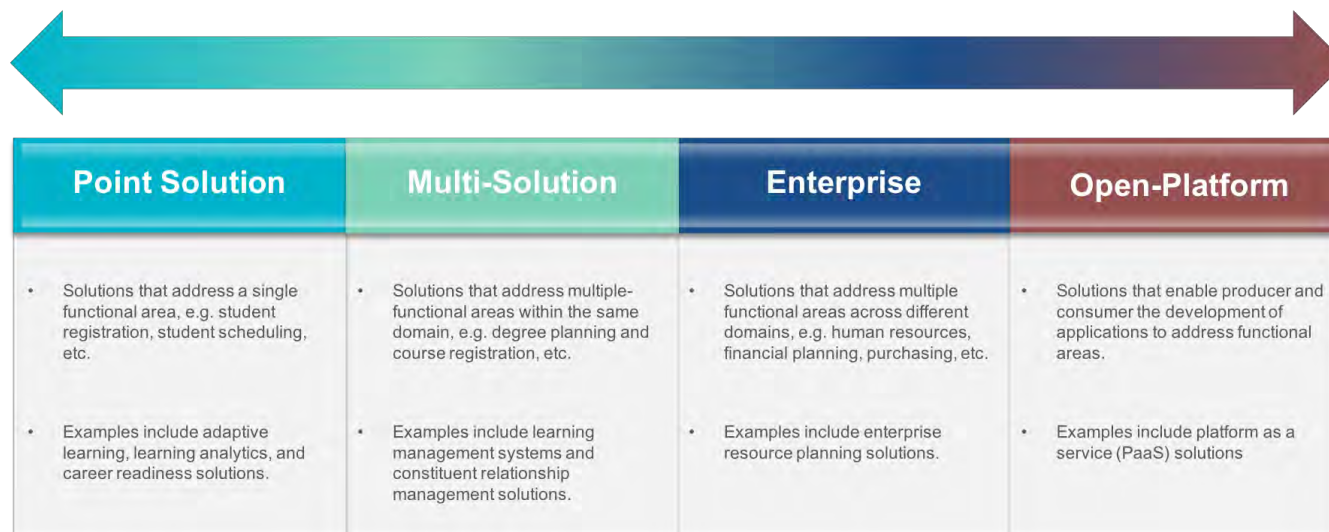


Control Technical Diversity



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EDTECH CONTINUUM: ROLE OF IT PRINCIPLES



Requirements-Based Change



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SUMMARY

Institutions

- Consider the role of IT principles in technology evaluation to avoid “ping pong” decision-making
- Recognize that IT principles are matters of policy

Vendors

- Consider how their products impact the technology-related policies at institutions
- Avoid simply focusing on functionality





Thank you.

For questions or briefings, please email Techlandscape@nrccua.org

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