A history of evolution...

1844

Founded as a construction company

1920s

Moved into the publishing industry

A history of evolution…

1920s

1844

1990s

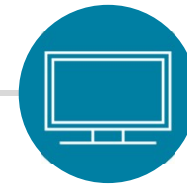
Founded as a construction company

Moved into the publishing industry

Expanded into television, broadcasting, and more

A history of evolution…

1990s

1920s

2000s

Moved into the publishing industry

Expanded into television, broadcasting, and more

Shifted focus to education

A history of evolution...

2000s

1990s

Expanded into television, broadcasting, and more

Shifted focus to education

With history comes

Locally created applications
As the organization evolved and products changed

Highly customized solutions
Based on market and organizational needs of the time

Technical Debt
Long-term consequences of remaining on legacy software applications and/or monolithic, restrictive design choices

Tech debt is a business problem

" Where do we have revenue risk due to systems nearing end-of-life?

" Where does risk exist, especially from a security and resiliency perspective?

" Where do we have duplication where we can realize efficiencies?

" Which applications could we modernize to free up engineers' time?

A tech debt solution capturing

Maintainability
effort required to change functionality, fix bugs, and ensure high-quality service

Changeability
version of software and hardware being used

Reliability
incidents over specified timeframes

Security Coverage
percentage of security tool scanning

Vulnerabilities
detected vulnerabilities captured by security tools

Security Exemptions
number of exceptions needed

PII Data
amount of PII data captured in the system

Hosting
cloud or in data centers

Operating System
phase of life of the operating system

Duplication
number of applications or tools that perform the same purpose

Revenue Growth
growing, steady, or decreasing revenue from application

Revenue Dependence
scale of revenue that is dependent on applications

Tech Debt Dashboard

Technologists and business leaders across Pearson have access to view:

Summary of Tech Debt Scores & Scoring Drivers

Security-Specific Tech Debt Insights (e.g., PII, Vulnerabilities)

Tech Debt Reduction Plans & Impact Summary

Filterable by dimensions such as Application Number, Division, Vice President, and Department.

The outcome

55% Decrease in apps with high tech debt

58% Reduction in incidents year-over-year

37% Decrease in end-of-life operating systems

27% Increase in ability to maintain systems

20% Decrease in duplicative technologies

2023 Most stable back to school period in 4+ years

Lessons learned

▶ Start from a firm foundation of knowledge of your technology assets

▶ Create solutions from existing processes & technology

▶ Orient tech debt as a business problem and educate where and how tech debt occurs

▶ Measure it and reference it in business decisions

All through the support of…

Technology and business leaders across Pearson

Thank you & keep learning!

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