

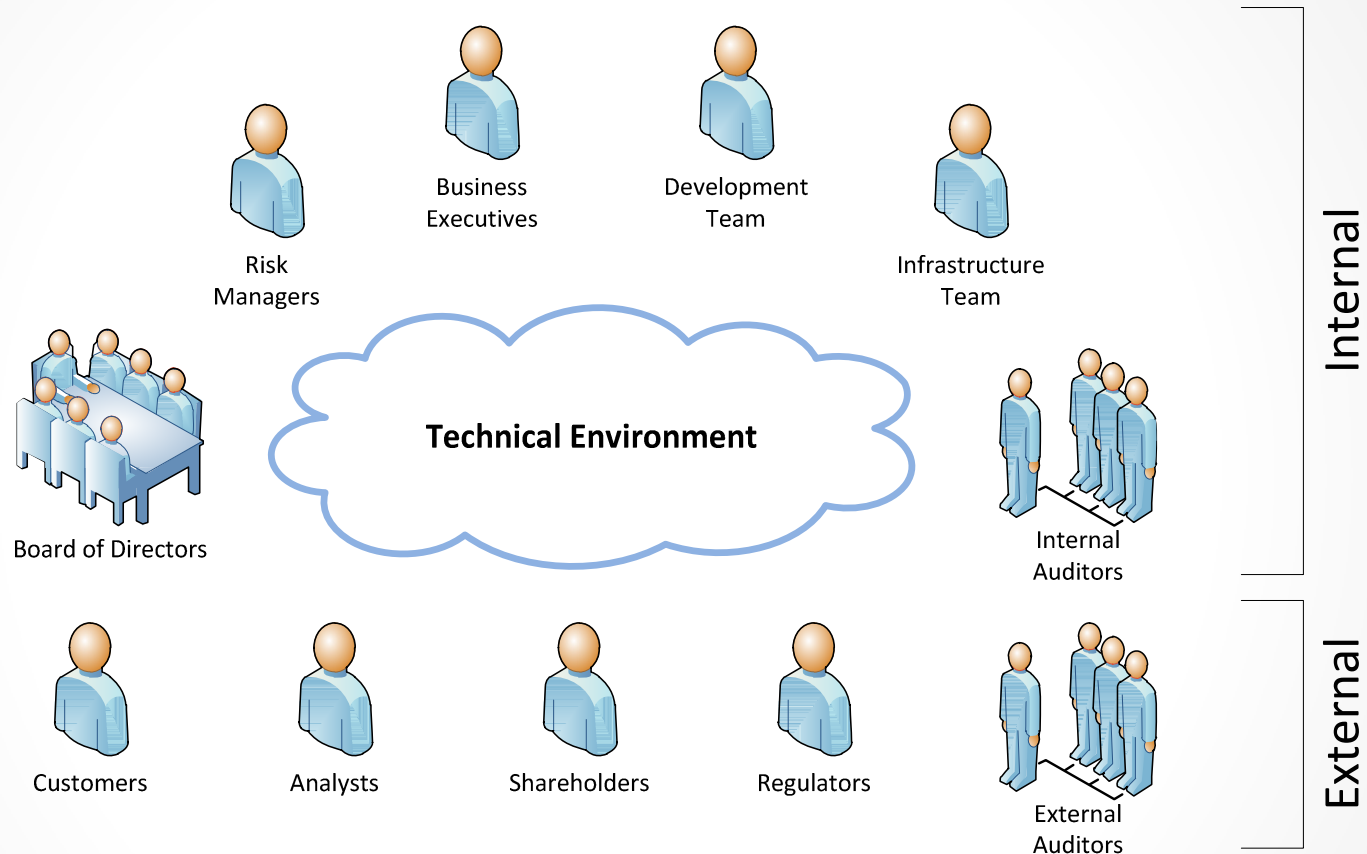
Technical Debt from the Stakeholder Perspective

Ted Theodoropoulos, Mark Hofberg,
Daniel Kern

Team Introduction

Ted Theodoropoulos	<ul style="list-style-type: none">•President of Acrowire<ul style="list-style-type: none">•IT Consulting•Application Development•Business Process Improvement•ALM/Tech debt assessments•Programming since 1982<ul style="list-style-type: none">•TI-99/4a using BASIC•Microsoft SQL Server Support Team•10 years at Bank of America<ul style="list-style-type: none">•Development Team Manager•IT Auditor•Senior VP in Operational Risk•Undergrad in Mathematics & MBA from UNC•Six Sigma Black Belt/CSM/MCSD
Daniel Kern	<ul style="list-style-type: none">•Operational Risk Executive•Six Sigma Master Black Belt•Undergrad/MS/PhD in Engineering from MIT
Mark Hofberg	<ul style="list-style-type: none">•Technology Risk Manager•CISA – Certified Information Systems Auditor•CRISC – Certified in Risk and Information Systems Control•Undergrad in Computer Science from NC State

Technology Stakeholders



Stakeholders need **better transparency and engagement** around issues affecting quality in the technical environment.

Quality Interdependence



- Gaps in **extrinsic quality** can create gaps in **intrinsic quality** and vice versa
- Technology teams can **provide valuable insight** into these interdependencies
- Managing quality holistically aligns with **agile and TQM principals**
- Doing it right, doing it quick, and doing it later **all have financial implications** that deserve equal consideration

Extrinsic Affecting Intrinsic

In this example, we are building an customer relationship management (CRM) system. The team is up against a tight deadline and certain functionality must be deferred. To accommodate this, the product owner has chosen to postpone the following features.

- Validation logic to prevent incorrect tax identification numbers and duplicate entries
- Integration with ERP system to pull existing customer information



- Will likely result in data quality issues impacting the accuracy of the system
- Additional technical debt will accrue in the form of work arounds in ETL
- Integration challenges will also likely manifest themselves

Proposed Definitional Framework

“Technical debt is any gap within the technology infrastructure, or its implementation, which has a material impact on the required level of quality.”

Issue: Concept Fragmentation

Pairing Debt

Quality Debt

Documentation Debt

Vendor Support Debt

Configuration Management Debt

Testing Debt

SEO Debt

Legacy Debt

Access Control Debt

Refactoring Debt

Platform Experience Debt

Data Quality Debt

Design Debt

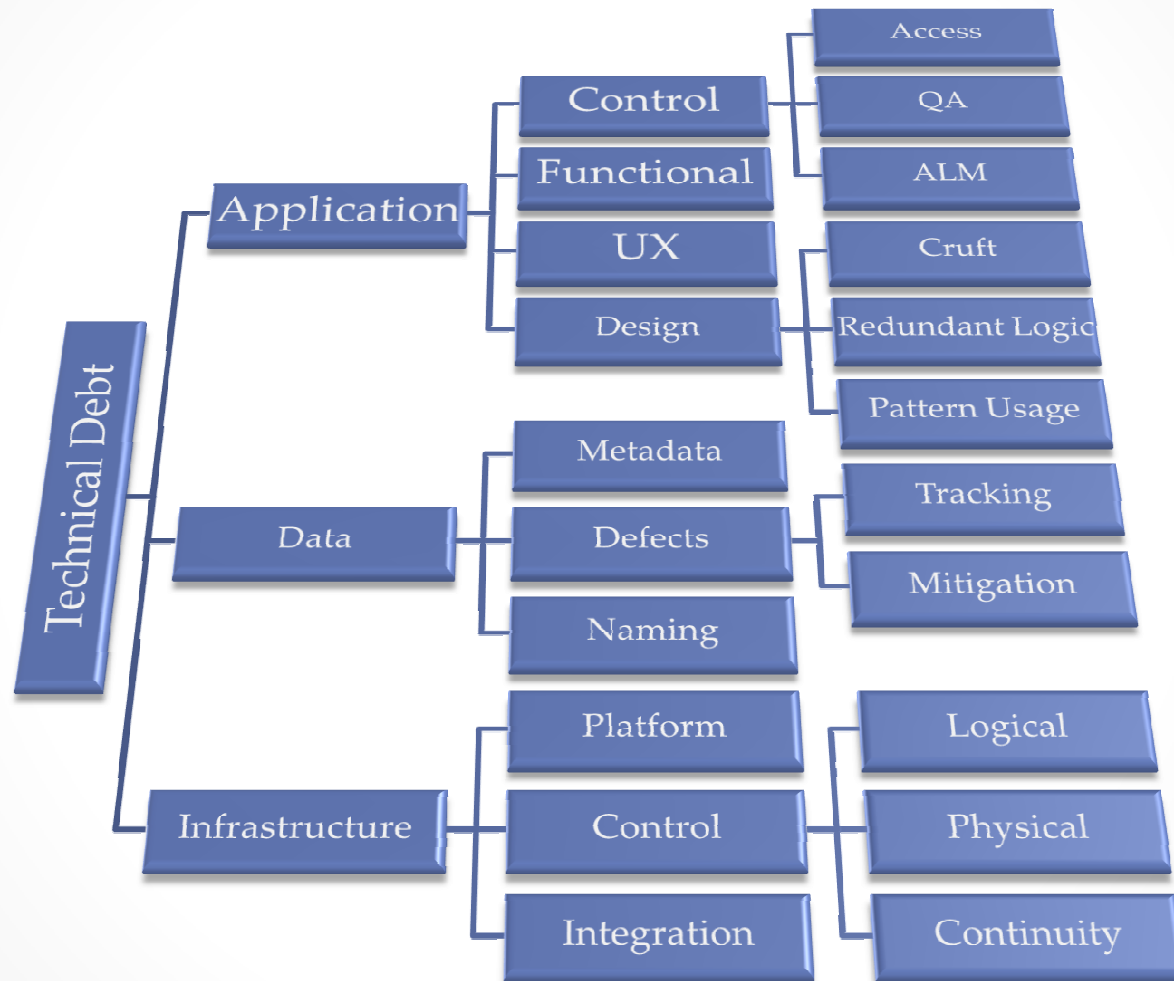
"Cruft is technical debt!"

-Ted Theodoropoulos

"Cruft isn't technical debt"

-Uncle Bob Martin

Question: How to Build a Conceptual Model?



Q&A