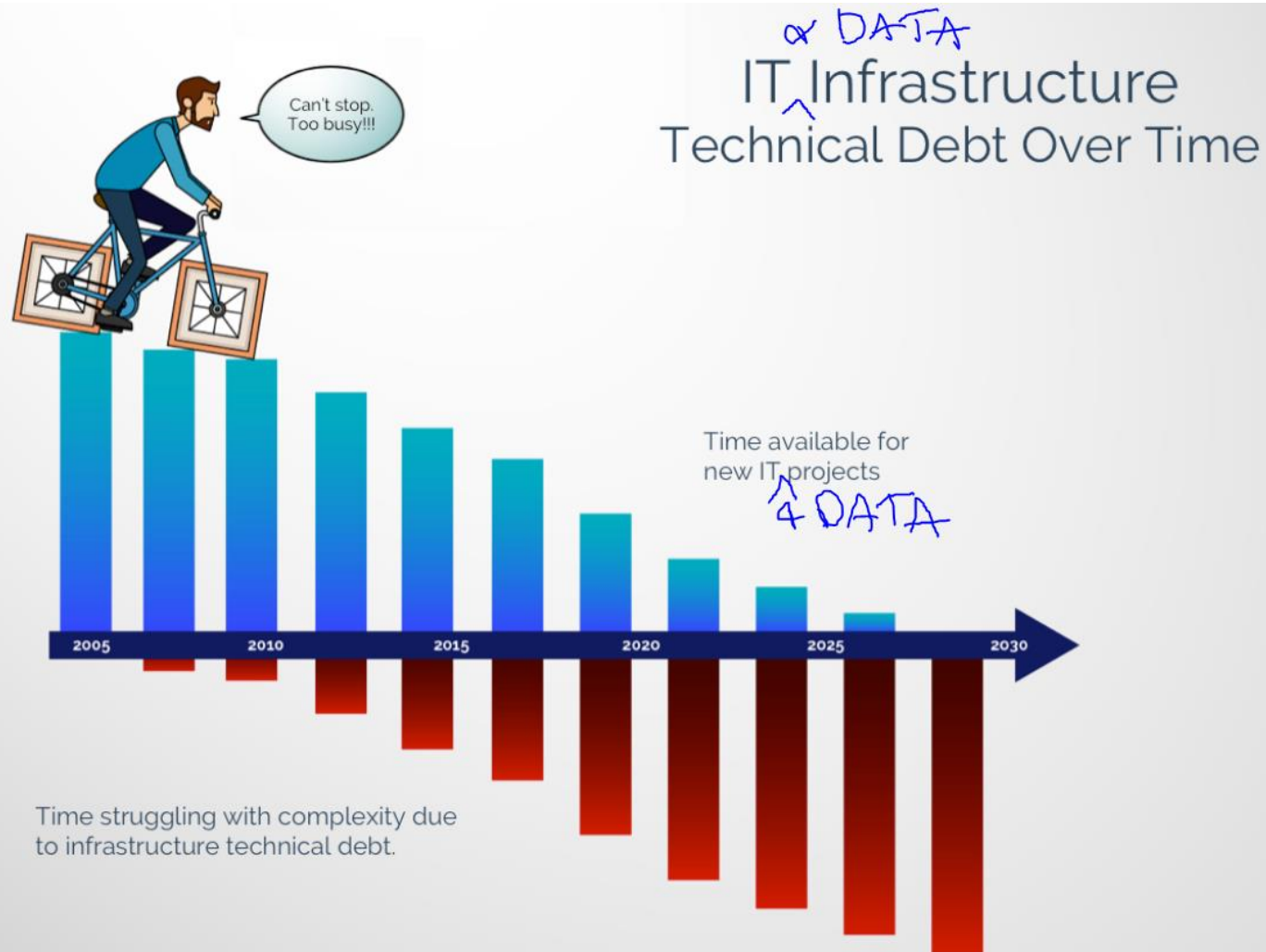


AOE Testimony: Education Data Management

Testimony To: House Committee on Education
Respectfully Submitted by: Wendy I. Geller, Ph.D., Division Director, Data
Analysis & Management and Kevin Viani, IT Director at AOE, Agency of
Digital Services
Date: January 15, 2020

What is Technical Debt?



DEVICE42

Figure: image of a man on a bike with square wheels trying to go down a longitudinal bar chart depicting time available for new IT and Data projects versus time struggling with complexity due to infrastructure technical debt. Image: <https://www.device42.com/blog/wp-content/uploads/2019/05/V.5-Blog-image-tech-Debt-May-14-2019.png>

Technical Debt, Efficiency, and Cost

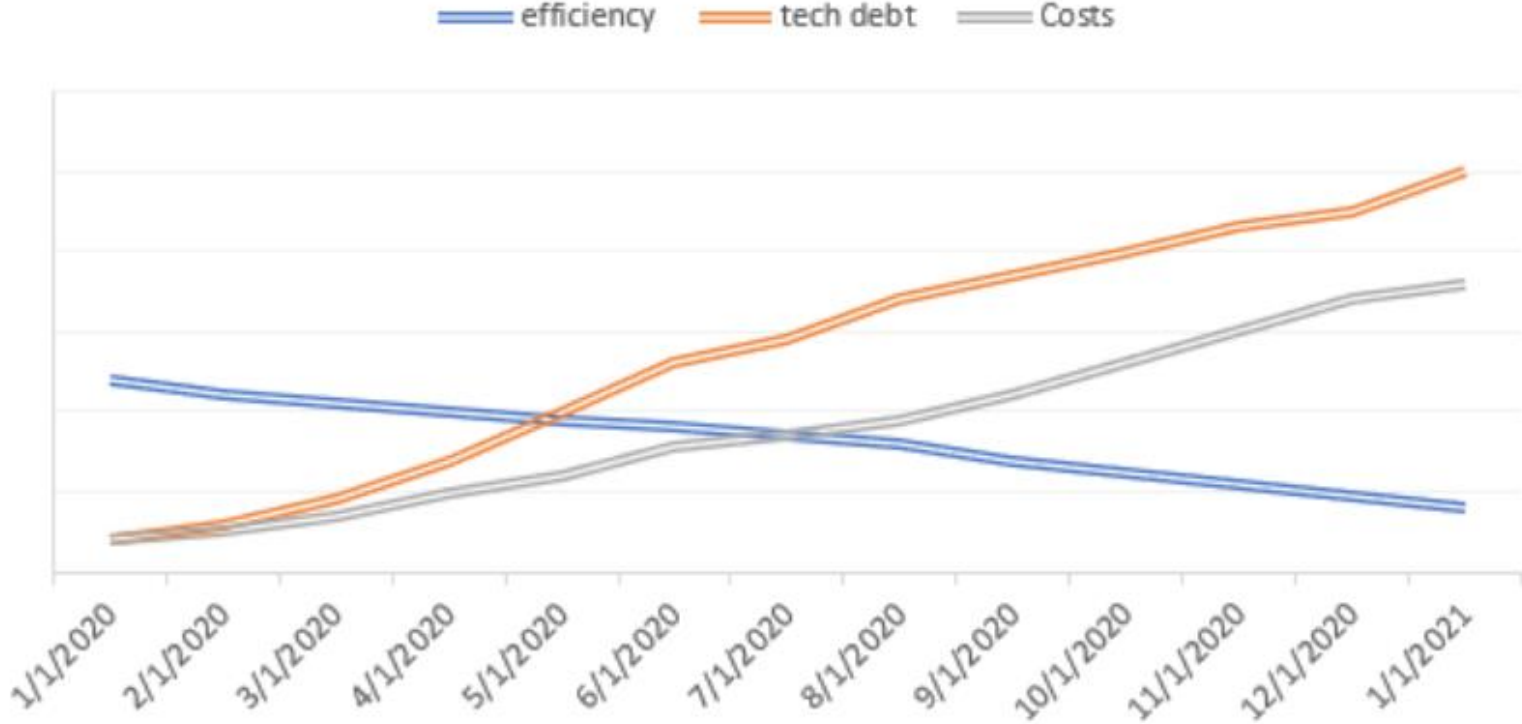


Figure: image of a line graph showing how as technical debt increases, efficiency decreases, and costs increase. Image from <https://www.impactmakers.com/insights/avoid-technical-debt-in-aws/>

The last 14 months...

- **October 2018** – DMAD created
- **March 2019** – SLDS project leadership transition, in-depth project team interviews take place
- **March 2019** – DMAD begins to deploy regional intensive trainings on-the-ground training with the field (avg. 3 per month), in-depth project team interviews continue
- **April 2019** – Kevin begins IT Director role
- **Summer 2019** – Project closure, Lessons Learned survey deployed
- **August 2019** – Wendy and Kevin hold introduction and conversation session at “Pizza IT” conference
- **September 2019** – Wendy and Kevin present to State Board of Education
- **October 2019** – Wendy writes Leadership Blog Post reflecting on current state and work ahead
- **November 2019** – Wendy and Kevin hold conversation session at VTFest
- **December 2019** – Wendy and Kevin invited to Essex Westford SD to repeat VTFest conversation session
- **Target - January 2020** – Monthly READ_ME communication will be launched
- **Target - Q1 2020** – Data Town Meeting will launch

Areas of Focus

- **Communication and Leadership:** We need to quickly improve stakeholder engagement. Improved quality and quantity of communication, both internally and externally to partners in the field (e.g. additional directions, guidance, training, technical support) is necessary.
- **Project Management Practices:** We need to institute PM best practices to manage such a large-scale project. Attention to scope, schedules, and budgets (including time, staff, and technical resources) is necessary to manage the work more effectively.
- **Infrastructure:** We need appropriate tools and infrastructure. We need to be able to integrate such large pieces of data infrastructure for actual operational use. Current infrastructure not up to the task.
- **Skills Gaps and Training Needs:** We need targeted, sustained professional development and training to effectively operate systems. Technical documentation as well as more standardized approach to operations is necessary. Very high variation across districts made accomplishing this work extremely difficult for both the field and state project team. Inability to scale approaches hobbled the field and state project team alike.

Questions?
Conversation?