Technical and Data Debt

Tech Leaders Connect Dinner co-hosted by Assured Insights
September 2025, The Ivy, Manchester

Technical Debt and Data Debt: The Silent Killers of Business Agility

At a recent CIO/CTO dinner, we explored how technical debt and data debt are shaping business performance, often invisibly, until it s too late. A few clear lessons emerged:

Debt is Not Always an Accident

- Some debt is planned (a necessary trade-off to ship faster).
- Some is unplanned (weak governance, bad hires, forgotten systems).

The latter is far more dangerous. Ignoring it isn t an option; you can t work around" debt. It must be addressed head-on.

The Business Blind Spot
Most companies invest more in their finance team than their data team. Yet, poor-quality data:

- Erodes trust in reports
- Increases risk exposure
- Raises the cost of change
- And fuels competition fade (sliding backwards against peers)

The Six Dimensions of Data Quality are very important
Accuracy | Completeness | Uniqueness | Consistency | Timeliness | Validity

- If your data fails on any of these, your systems, reports, and AI models are all compromised.

- Messy data + new technology = expensive disappointment!

Changing Behaviour
Technical and data debt comes down to people:

- Weak governance creates data vagrancy” (shadow spreadsheets, duplicate systems)
- The wrong people in the wrong jobs creates poorly designed processes & systems
- A lack of accountability means there s no reason to care

Some firms are experimenting with gamification or even tying bonuses to data quality KPIs (e.g. CRM accuracy). It may feel radical – but it works.

AI Raises the Stakes
AI appetite is growing fast, but:

- Garbage in = Garbage out still holds true!
- AI amplifies bad data through feedback loops
- Weak access controls when using AI can deliver exposed data rights at scale

AI is only as good as the quality, governance, and security of the data behind it.

What CIOs/CTOs Can Do

- Take ownership of data and always champion it throughout the business and most importantly at Board/Exec level
- Define single sources of truth and a data catalogue
- Build empathy across teams; decisions in one area ripple everywhere
- Keep the golden thread” visible; show how one change affects many
- Dedicate budget: 20% of project costs or ~1 in 4 sprints on debt remediation
- Test DR/BCP and incident plans with technical and data debt in mind

The Takeaway
Technical and data debt are not just IT issues. They re business risks, they raise costs, reduce agility, and put reputations on the line.

CIOs and CTOs must become the translators: making debt visible, framing it in business terms, and securing investment to address it. Unchecked debt doesn t just slow you down – it compounds.

How is *your* organisation tackling technical and data debt?