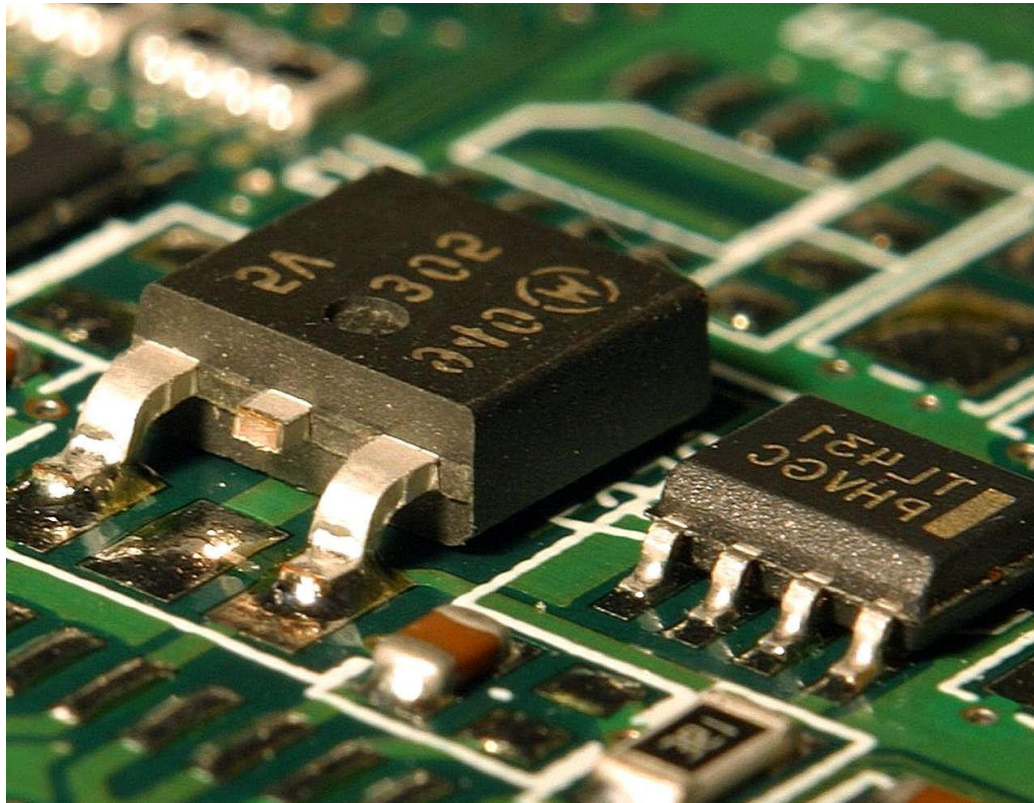


# Opportunities & Risks of Digital Innovation



**Neil Rae**

# Agenda

- Context – Acceleration of Innovation
- Context – Business Disruption by Technology
- Context – Examples of Disruptive Technology
- Demo Application
- Implications
- Discussion

# Timeline of IT Investment

1950s

1960s

1970s

1980s

1990s

2000s

2010s

**Market: Defence**  
**Cycle time: 10 yrs**

**Market: Enterprise**  
**Cycle time: 3-6 yrs**

**Market: Individual**  
**Cycle time: 18 mths**

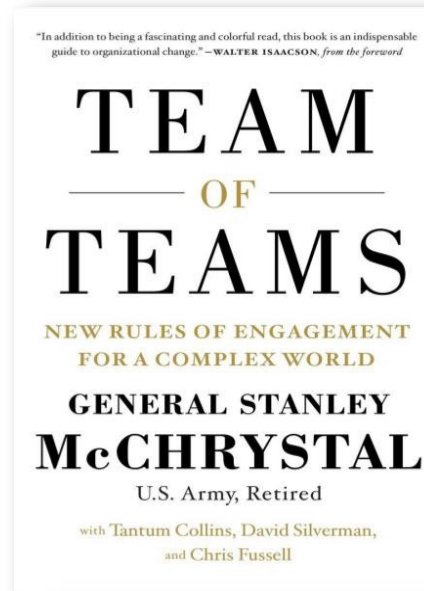
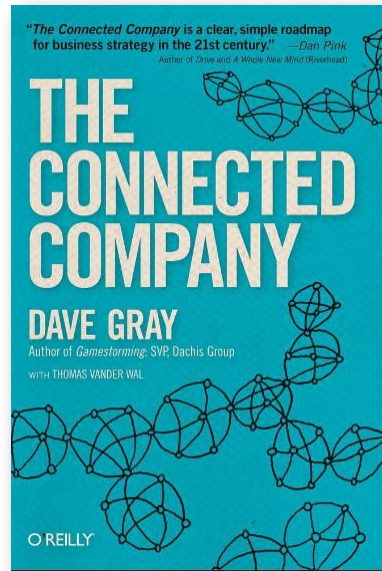
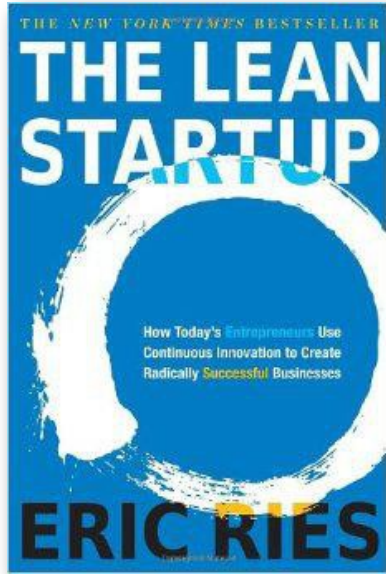
# Business Disruption

## Examples:

- Book stores
- Video stores
- Hotels
- Taxis
- Scalable
- Network Effects
- Value Chain



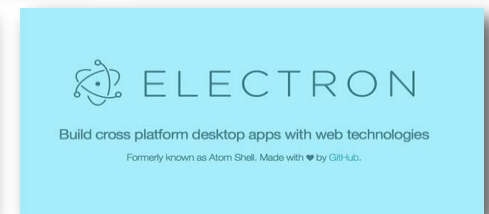
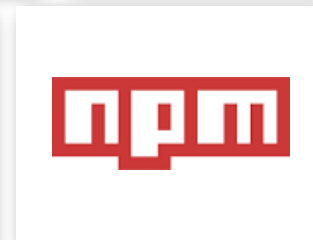
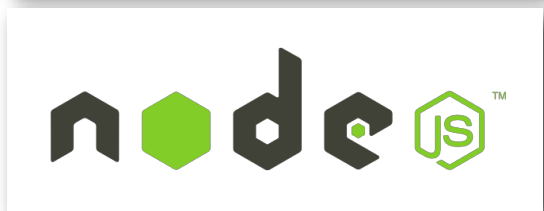
# Implications of Startup / Network Thinking



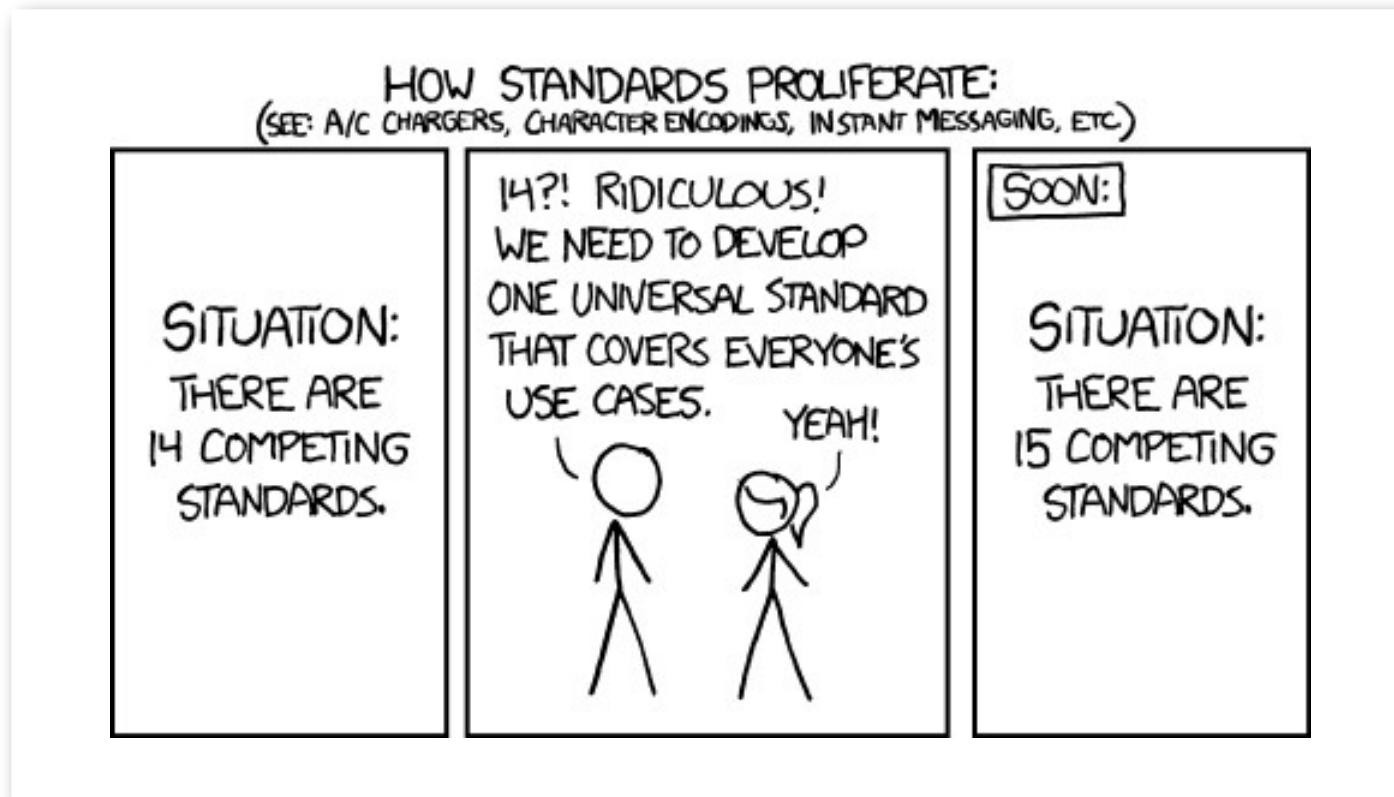
# Application in Defence

- Government Digital by Default Standard
- Alpha & Beta approach to implementation
  
- New Style of IT
- Defence as a Platform
- “Fail Early”
- “Swipe with Pride”
- “Be Disruptive”
- “Masters of Our Own Destiny”

# Example: MEAN Stack



# Aside: The Challenge of Standards

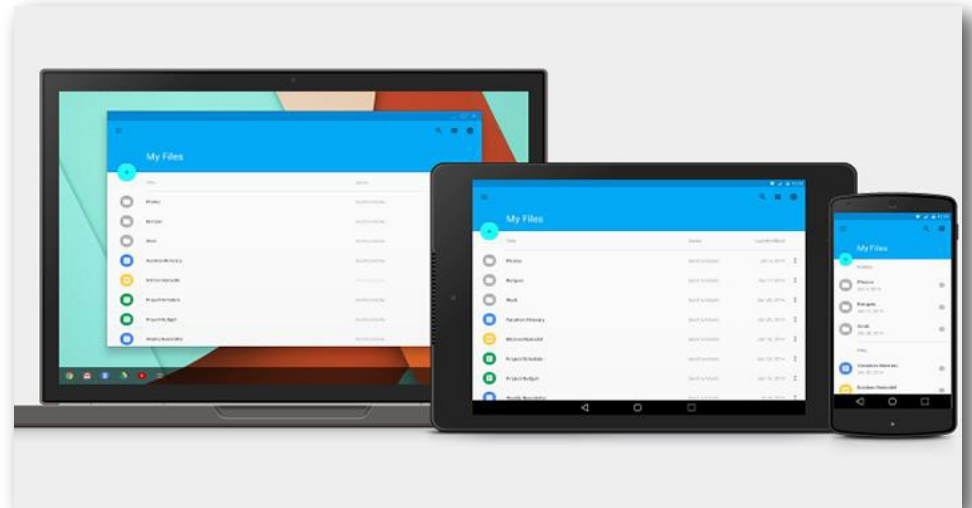


XKCD

e.g. XHTML 1.0 vs HTML 5.0



# Emerging Trends



polymer

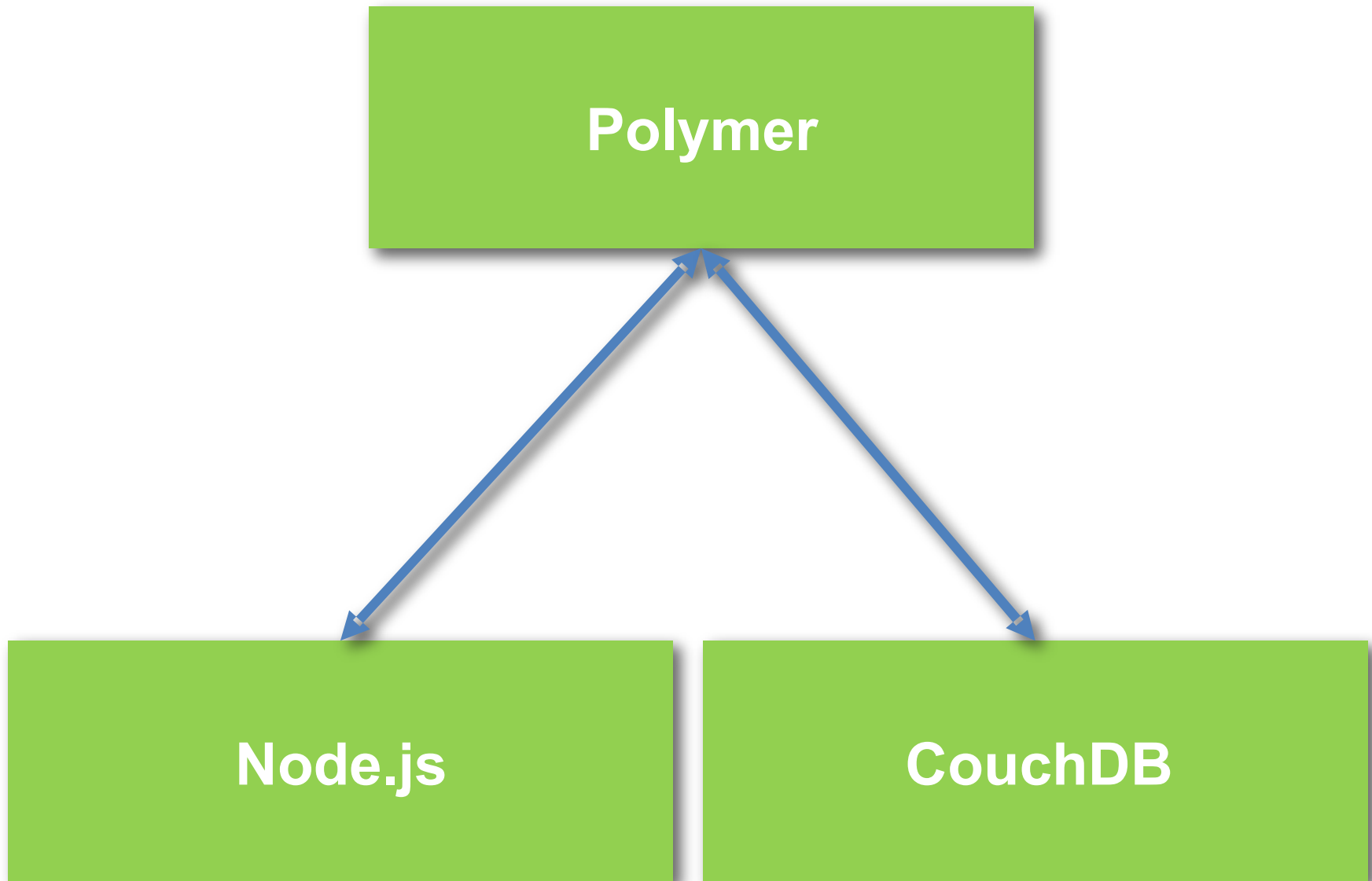
v. 1.0

## Production ready

Polymer 1.0 has been rebuilt from the ground up for speed and efficiency. The new, leaner core library makes it easier than ever to make fast, beautiful, and interoperable web components. If you haven't used Polymer before, it's time to try it out. If you haven't tried it recently, time to take another look.

The image is a promotional slide for Polymer 1.0. It features the Polymer logo (a stylized 'P' made of blue and red triangles) and the text "polymer" in a lowercase, sans-serif font. To the right, there is a dropdown menu showing "v. 1.0" and a search icon. The main heading is "Production ready" in a large, bold, sans-serif font. Below the heading is a paragraph of text describing the features and benefits of Polymer 1.0.

# Demo Application



# Simple Code

```
<iron-ajax
  auto
  url="http://127.0.0.1:5984/notes/_design/notes/_view/notes"
  handle-as="json"
  last-response="{{response}}"></iron-ajax>

<template is="dom-repeat" items="{{response.rows}}">
  <paper-material elevation="1">
    <span>
      <a href="{{item.key.url}}" class="note">
        <h2>{{item.key.title}}</h2>
        <p>{{item.key.description}}</p>
      </a>
      <template is="dom-repeat" items="{{item.key.tags}}">
        <paper-button>
          {{item}}
        </paper-button>
      </template>
    </span>
  </paper-material>
</template>
```

# Points for Discussion

- What are the information differences between a startup and the MOD?
- What opportunities does technology driven innovation present to Defence?
- What risks does it present?
- How might the MOD enable it?
- What governance is appropriate?
- What are the implications for UKCeB and the Joint Information Group?