The Cube is Dead

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We help New Zealanders to help themselves to be safe, strong and independent
Ko ta mātou he whakamana tangata kia tū haumaru, kia tū kaha, kia tū motuhake

Introduction and Motivation

choice / time

tech change / time

rate of change / time
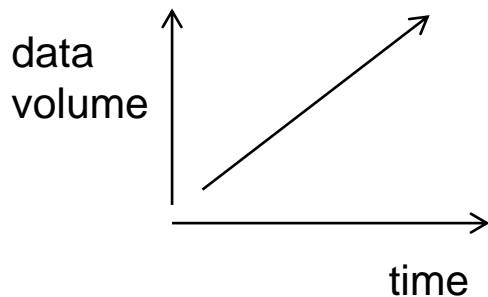
data volume / time
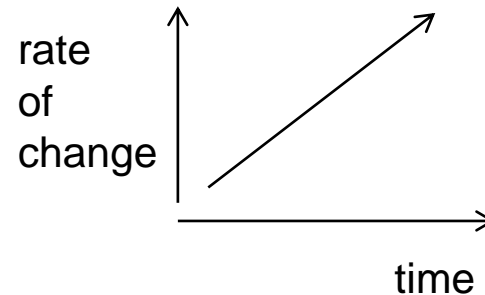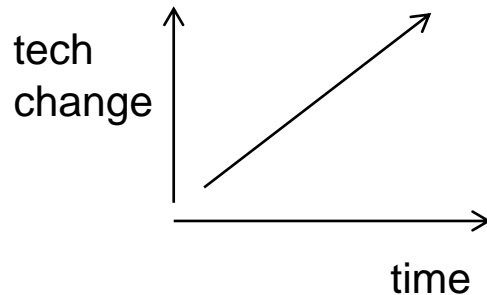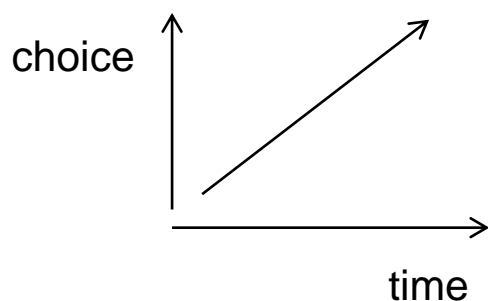
signal to noise / time — ?

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2
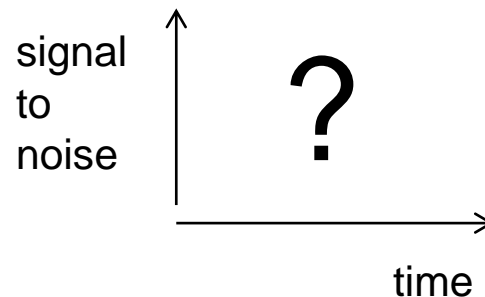
Exploring Trends
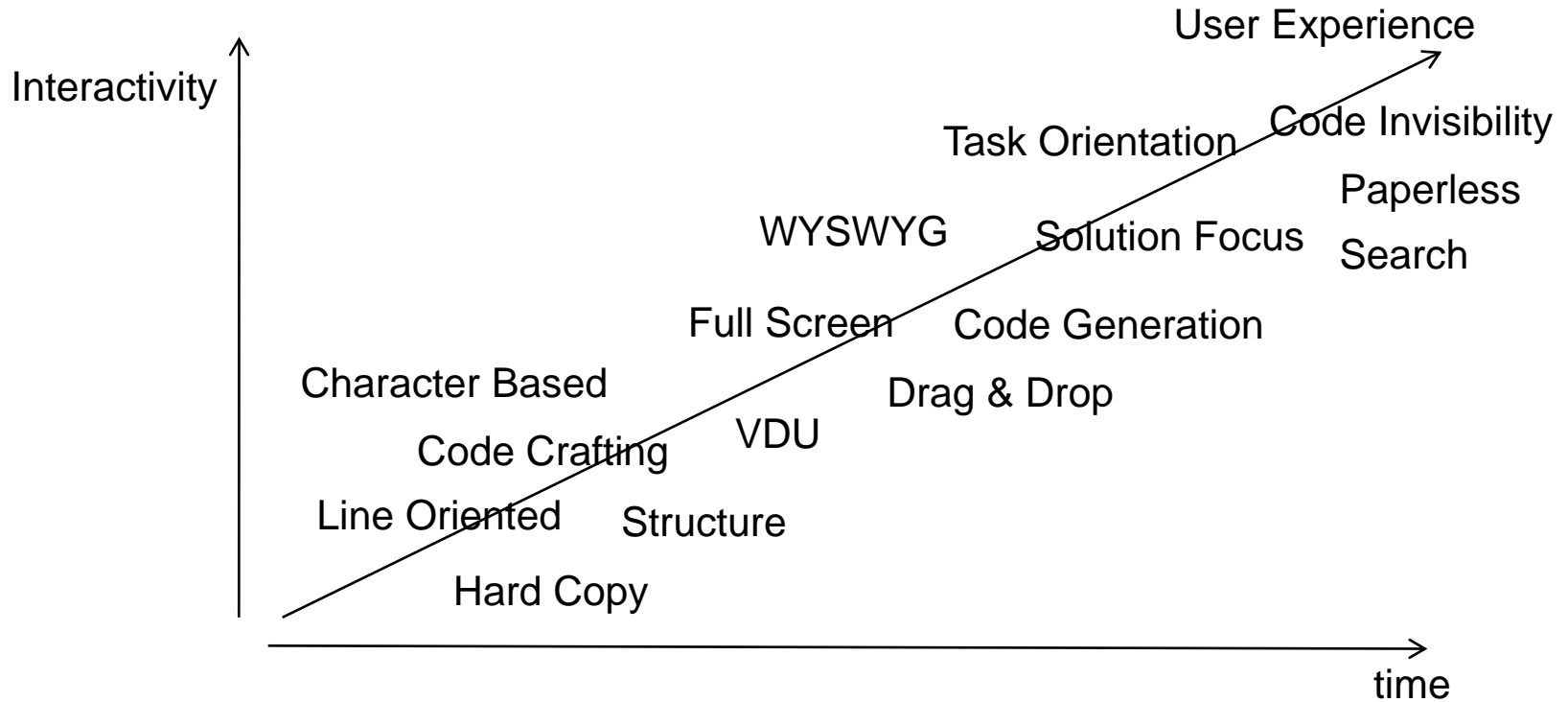
- Key Trends and Their Significance

- Game Changers

- Ubiquity

Trends – 1 Interactivity

Trends – 2 Accessibility
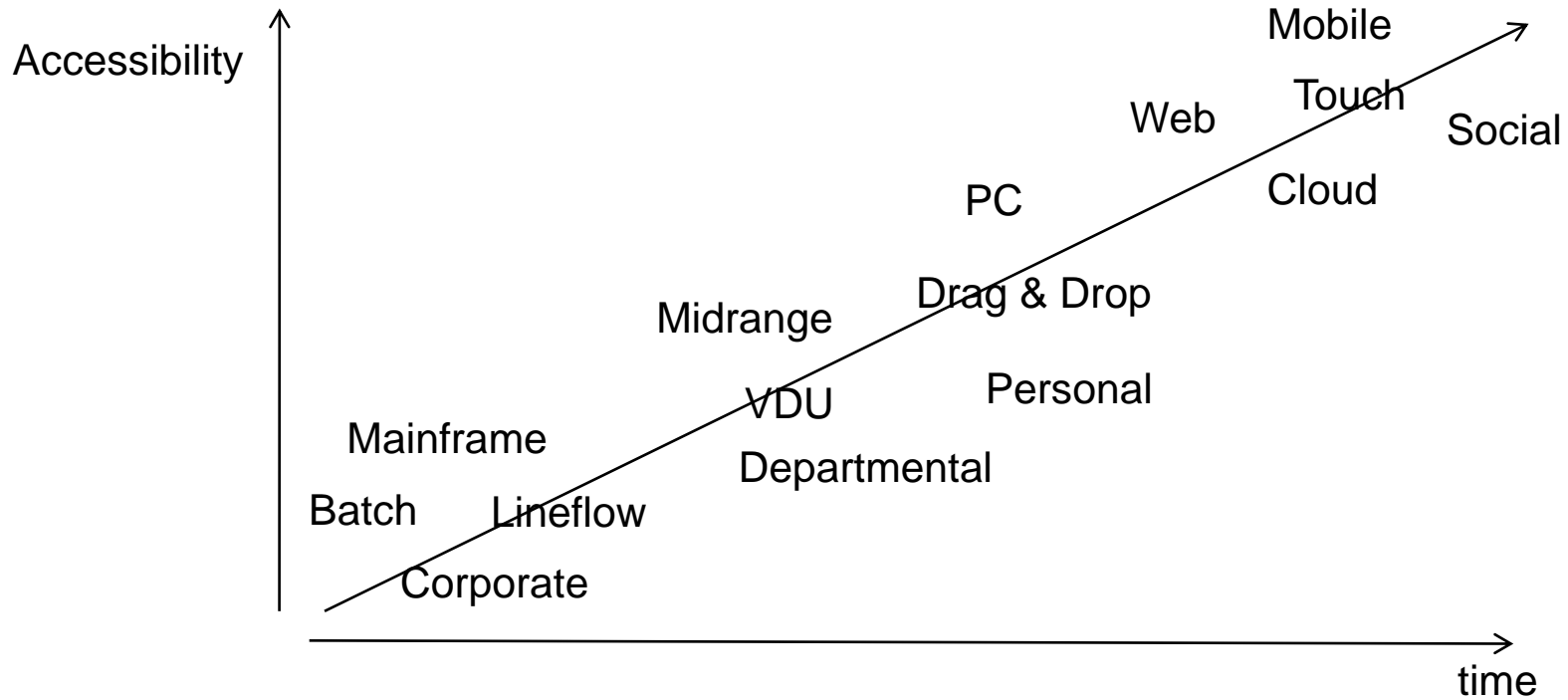
Trends – 3 Structure Irrelevance

Dimensional Irrelevance

Structure Irrelevance

Unstructured

N Dimensional

Virtual Denormalisation

Two Dimensional

Cube

Navigate

RDBMS

Spread Sheet

Drill

One Dimensional

Tables

Flat Files

Sub Totals

Aggregate

Totals

time
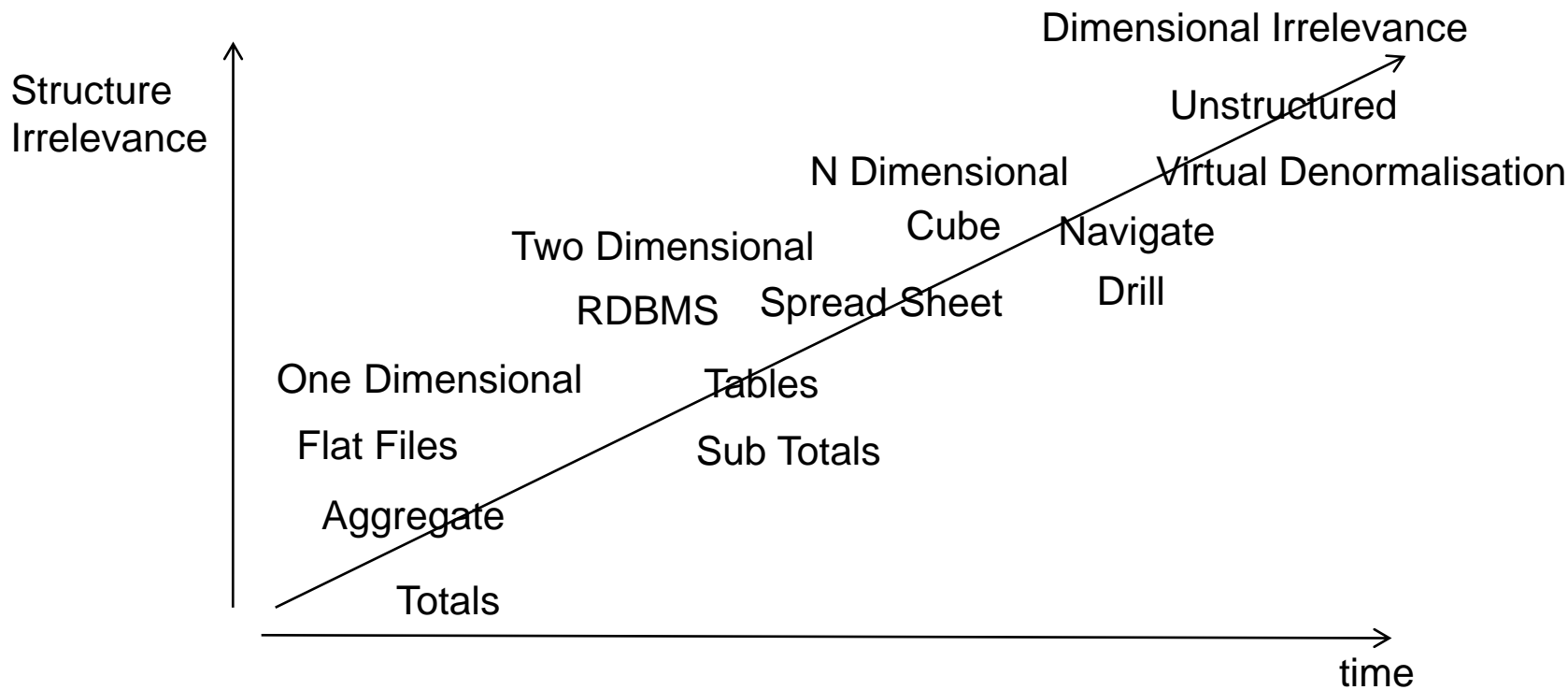
Trends – 4 Sensory Engagement

Sensory Engagement (y-axis) vs time (x-axis):

Anticipatory, Predictive, Relationship, Pictures, Touch, Motion, Engagement, Sound, Velocity, Current, Words, Pointers, Retrospective, Colour, Characters, Keys, Monochrome, Static

Trends – 5 User Relevance

User Relevance

Presentation Oriented

Solution Oriented

Storage Irrelevance

Process Relevance

Icon Oriented

Task Oriented

Structure Relevance

Programmer Relevance

Character Oriented

Instruction Oriented

Storage Relevance

User Relevance

time

Game Changers - Interactivity

- Google

- Amazon

- Search

- Offer Presentation

Game Changers - Accessibility

- PC (emergence of the Personal Device)

- Internet (is it the Browser)

- Internet (is it "social")

- Internet (or is it P2P)

Game Changers - Structure

- Visicalc

- Excel

- Spread Sheet (data as a table)

- Spread Sheet (data as a cube)

- Spread Sheet (data you interact with)

Game Changers - Sensory

- Mouse

- Pointer

- Drag & Drop

- Instruction Reduction

Game Changers - User

- Icon

- Visual Cue

- Branding

- Command Hiding

- Enabler

Ubiquity

- What Drives Ubiquity?

- Examples

Ubiquity – Spread Sheet

Invoice

| Line |
| Line |
| Line |
| Line |
| ———— |
| Total |

Table

	Col	Col	Col
Row			
Row			
Row			Total

Pivot

2014
2013
2012

	Col	Col	Col
Row			
Row			
Row			Total

Ubiquity – Spread Sheet

- The Spread Sheet emerges to solve a problem

- Speed, Interactivity, Responsiveness

- 3D Interactive Calculator

- The Spread Sheet (not Excel) is Ubiquitous

Ubiquity – Smart Phone (?)

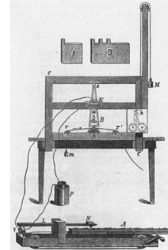**The Digital
Swiss Army Knife**

Phone, Camera, txt, GPS,
Browser, Audio, Video,
Torch, Payments, Alarm,
(bring on the on-board laser so
I can cut something)

**Pheidippides
(Marathon)**

**Native American
(Smoke Signals)**

**Morse
(Telegraph)**

Ubiquity – Smart Phone (?)

- The smart phone is the response to a desire for convergence of a large array of personal devices onto a single device

- Accessibility, Mobility, Affordability

- The Digital Swiss Army Knife (not iPhone) is Ubiquitous

Ubiquity – What Drives It?

- The Spread Sheet is a simple accessible tool for presenting multidimensional data with basic calculations to reduce dimensionality and present information.

- Market Size is large. Even one-person businesses need to keep track of how they are doing

- Deployment execution by the Vendor

Ubiquity – What Drives It?

- The Smart Hand-Held Device is a platform for the convergence of P2P transactions.

- Market Size is huge. See "Black Hawk Down".

- The UI hides complexity from the user.

- "Appnology"

Ubiquity – What Drives It?

- The VA platform is one response to the need for multi-dimensional exploration and Insight Discovery in a large scale data environment, where data organisation and preparation effort distracts from the goal of speed to market and ROI

- Decouples the presentation and navigation UI from the data storage / organisation and Analytics Engine

Ubiquity – What Drives It?

- The human brain drive to extract and access Signal amongst the Noise

- Lists, groups, tables, graphs, drill, navigation, aggregation, summarisation, - anything that makes it easier

Ubiquity – What Drives It?

- The "Cube" is a conceptual aid for organising data across multiple dimensions

- The "Cube" is a technical implementation using pre-summarisation and storage of dimensional aggregates for speed of retrieval

Relevance to MSD – Current State

- Business Silos

- Information Silos

- Application Legacy

- Application Focus

- Process Focus

- Managing Technical Debt

Relevance to MSD – Future State

- One MSD

- Information Sharing

- Application Retirement

- Information Focus

- Client Outcome Focus

- Managing Resources and Talent

Relevance to MSD – VA

- Simplification of Insight Discovery Data Preparation

- Disintermediation of Data Experts (less reliance)

- Technical Debt Reduction (maintenance / upgrade)

- Step Change in move to Mobility

- Release of CPU cycles to higher ROI activity

- Shifts Insight Discovery to the Visual Domain

VA - Convergence

- Interactivity (Hides code and data manipulation)

- Accessibility (Web, Mobile, Analyst, Consumer)

- Structure Irrelevance (Big, Fat, Wide, Deep)

- Sensory Engagement (Visual)

- User Relevance (Configurable for Role)

The Cube Is Dead

- The technical implementation of the "Cube" is Dead

- VA represents a Convergence of computing power (IO performance and CPU performance) , flexibility and adaptability in data navigation, Interactive usability and sensory engagement, with accessibility via Browser and Mobile devices

- A Game Changer? Ubiquity?