INVERSING CONWAY’S LAW
The speed of a startup at the scale of an enterprise

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AGENDA

1. OUR JOURNEY
2. ACCELERATING DELIVERY AT SCALE
3. LESSONS
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From how we deliver software today...
MARKET FORCES

OPEN BANKING, FINTECH, NEO-BANKS, BIG TECH

REGULATORY RECALIBRATION

MITIGATING CYBER RISK

TECHNOLOGY MANAGEMENT

REIMAGINING THE WORKFORCE

CUSTOMER CENTRICITY

NEW LEADERSHIP

Jan 2016
Shayne Elliott
CEO

Jul 2016
Maile Carnegie
Digital

Jan 2017
Gerard Florian
Technology
ORG STRUCTURE
NEW WAYS OF WORKING

ANZ blows up bureaucracy

Students get caning in uni budget cuts

Office works valued at up to $1.5 billion

ASX climbs strongly after US Congress deal
NEW WAYS OF WORKING

**People**
Flattening the hierarchy, building smaller teams and reducing handoffs.

**Process**
Our processes are shifting to provide flexibility so our squads can now choose how to meet those obligations.

**Technology**
Using paved roads to embrace CI/CD, governance as code and deliver faster.
I SEE NO CHANGES...
Alignment enables Autonomy

High Alignment
- Authoritative organization
- Conformist culture

Low Alignment
- Micromanaging organization
- Indifferent culture

High Autonomy
- Innovative organization
- Collaborative culture

Low Autonomy
- Entrepreneurial organization
- Chaotic culture

Source: Stephen Bungay, "Art of Action"
CONWAY’S LAW

Small, distributed teams

Large, co-located teams

Modular service architecture

Monolithic architecture
MICROSERVICES

SQUADS

MICROSERVICES
INEFFICIENCY

SQUADS

MICROSERVICES
CREATE SHARED SERVICES TO INCREASE DEVELOPER PRODUCTIVITY

One way to enable market-oriented outcomes is for Operations to create a set of centralized platforms and tooling services that any Dev team can use to become more productive, such as getting production-like environments, deployment pipelines, automated testing tools, production telemetry dashboards, and so forth. By doing this, we enable Dev teams to spend more time building functionality for their customer, as opposed to obtaining all the infrastructure required to deliver and support that feature in production.

All the platforms and services we provide should (ideally) be automated and available on demand, without requiring a developer to open up a ticket and wait for someone to manually perform work. This ensures that Operations doesn’t become a bottleneck for their customers (e.g., “We received your
LOOKS GOOD TO ME
ONE PLATFORM TO RULE THEM ALL

Infrastructure as a Service
- Applications
- Data
- Runtime
- Middleware
- O/S
- Virtualisation
- Servers
- Storage
- Networking

Platform as a Service
- Applications
- Data
- Runtime
- Middleware
- O/S
- Virtualisation
- Servers
- Storage
- Networking

You Manage
Other Manages
...to the way we will deliver software tomorrow.
NO HUMANS PLEASE

Google Source Repositories

Google Cloud Build

Vulnerability Scanning

Spinnaker

Google Kubernetes Engine

Cloud DNS

Kubernetes Engine

Cloud SQL

Cloud Firewall Rules

Cloud Storage

Logging
INDUSTRIAL CI/CD PIPELINE
LESSONS
ARCHITECTURE
GOVERNANCE

https://www.youtube.com/watch?v=OGAWi9PlDrA
WORKFORCE STRATEGY

Phase 1: Collect underpants
Phase 2: ?
Phase 3: Profit
SECURITY
1. It starts with **LEADERSHIP**
2. Your **ORGANISATION DESIGN** is your architectural design
3. The **FUNDING MODEL** can be problematic if not congruent with org model
4. Use public **CLOUD** and use a PaaS if you can
5. Use DDD to drive your **ARCHITECTURE**. Limit divergence through economic drivers
6. Create speed for your engineers using an **INDUSTRIAL CI/CD pipeline**
7. Automate **GOVERNANCE**
8. Your decisions will impact the skills in your **WORKFORCE STRATEGY**
9. **SECURITY** is everyone’s concern. Shift left and kill the perimeter
10. Care for your staff. Give them **MODERN TOOLING**.
THANK YOU

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