

Patrick Hoverstadt - Fractal

The Viable System Model

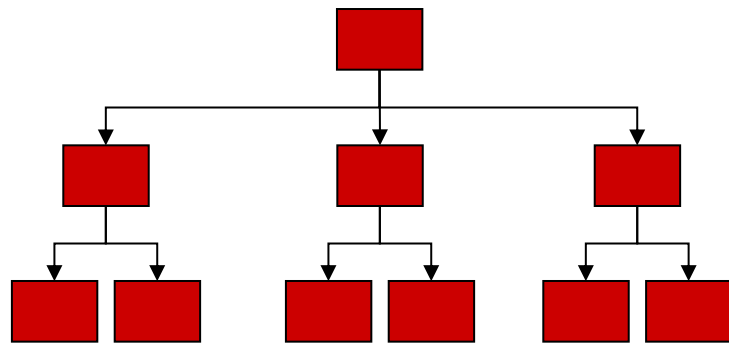
Understanding & Designing Organisations

Why Model Organisations?

- Our ability to manage an organisation depends on how well we understand it
- Our understanding depends on how useful & appropriate are the models we use
- Faults of Commission & faults of Omission

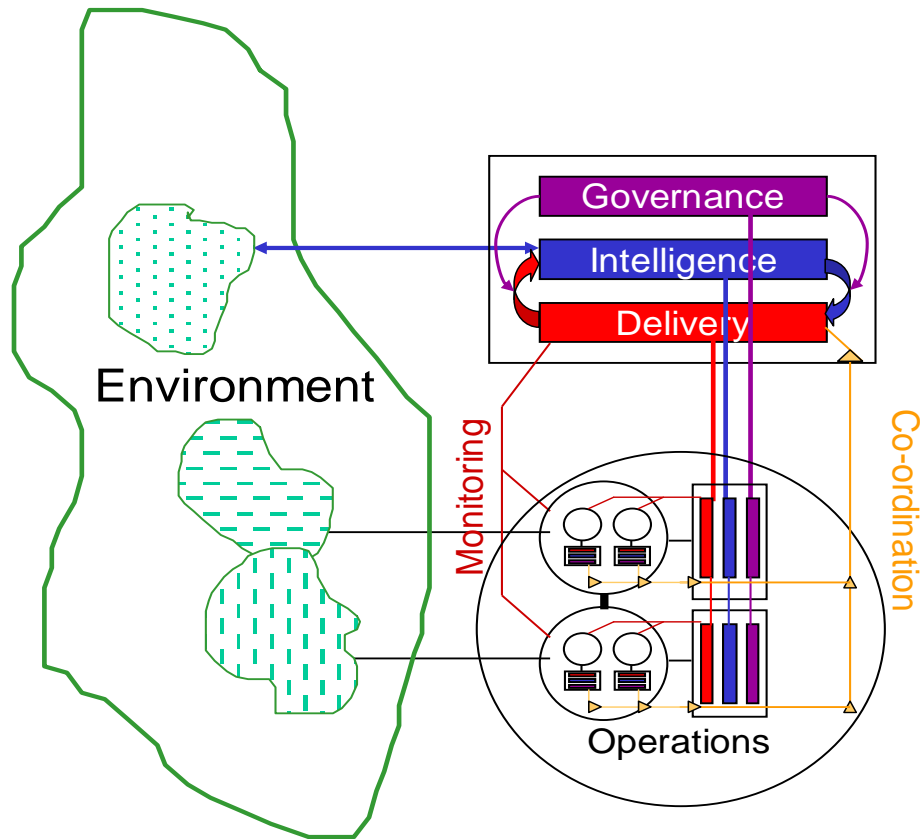
Hierarchy

Traditional/Dominant Model



- Models:
 - Power
 - Responsibility
 - Blame
- Doesn't Model:
 - What the organisation does
 - How it does it
 - Processes
 - Structures

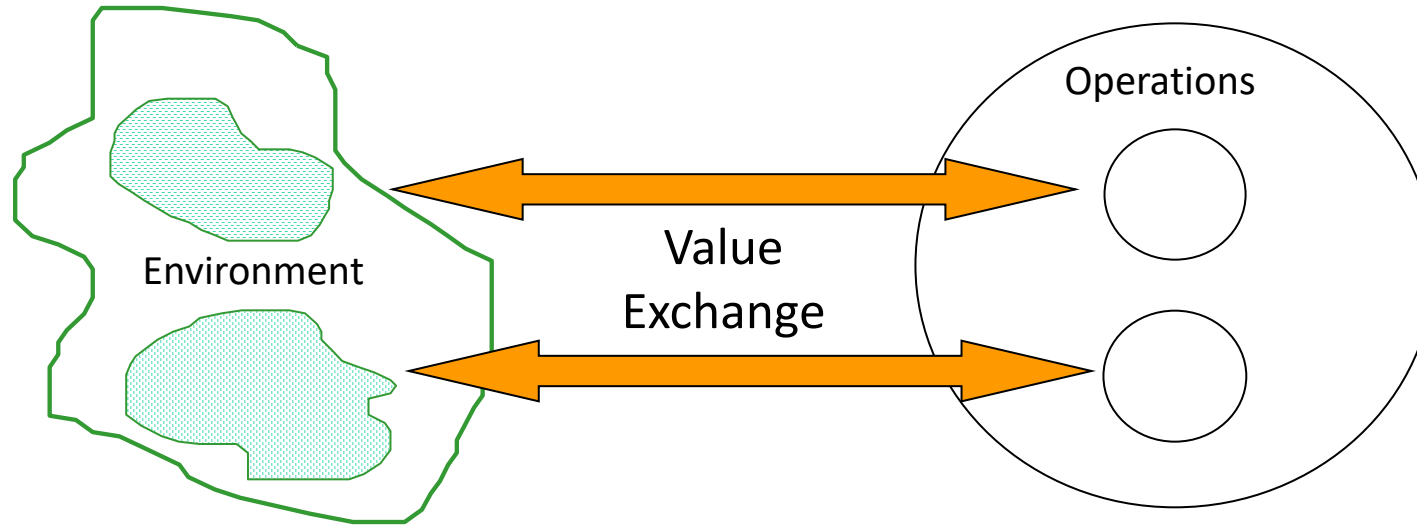
Viability System Model “Science of Organisation”



- Complexity
- Structures
- Processes
- Decision Making
- Communications
- Information
- Performance management
- Adaptation



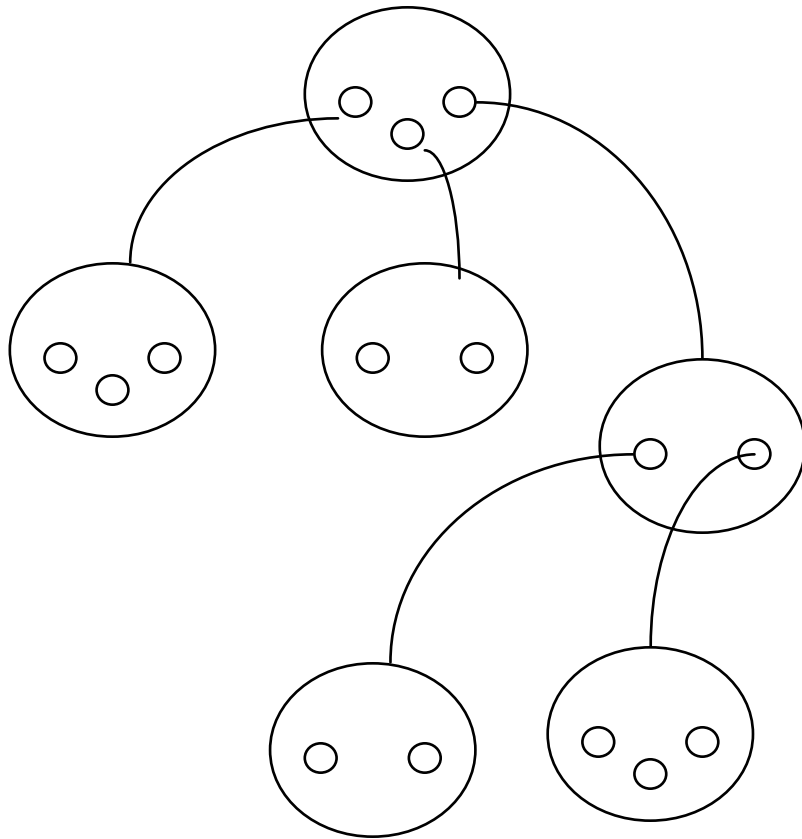
Primary Activities



- Separating the Primary Activities - “The things the organisation does that provide Value to its customers.”
- From Support & Regulatory Activities – “The things the organisation does to keep itself in being”



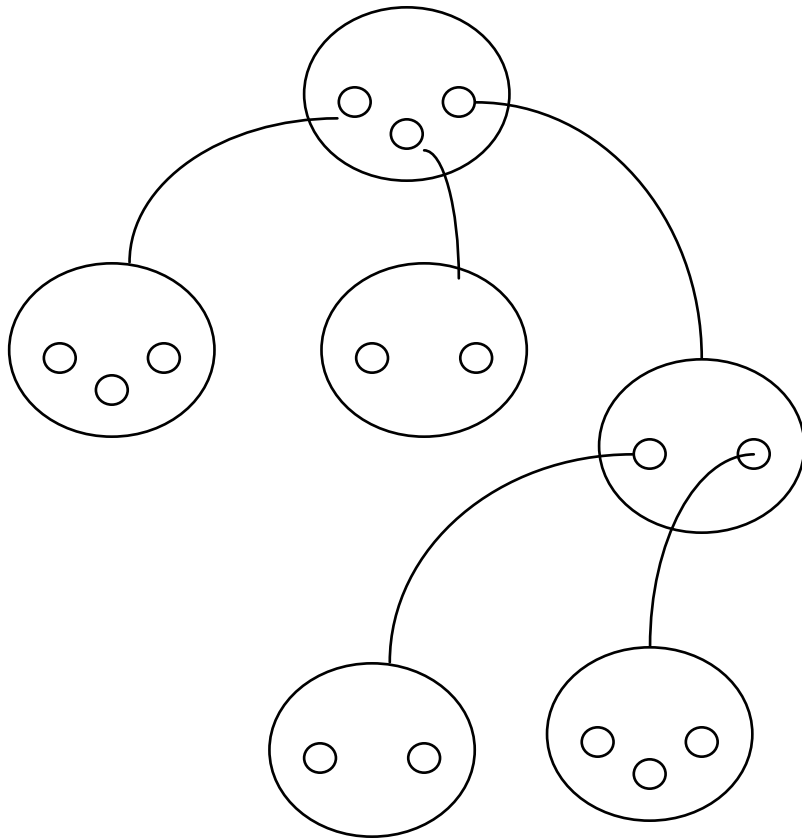
Unfolding Complexity



- The Organisation's "Primary Activities"
- "How the Organisation carries out its Purpose"
- Each level is part of a larger activity



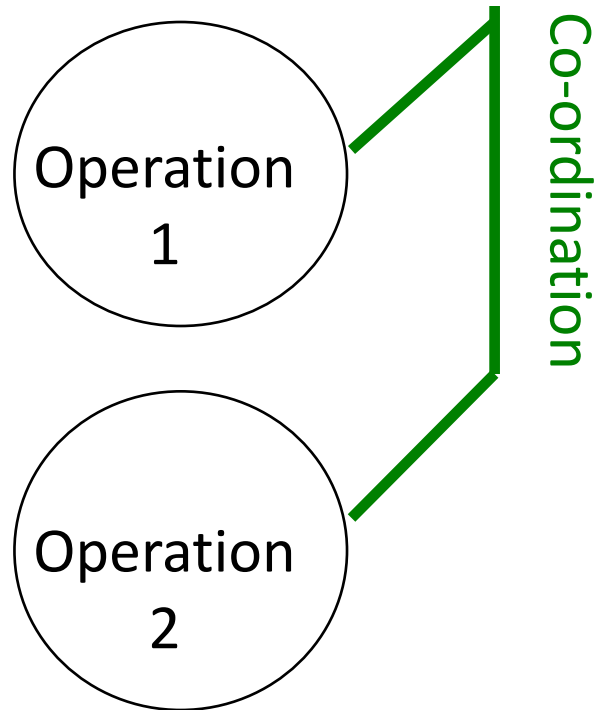
Four Complexity Drivers



- Primary Activities split by complexity drivers:
- Task - doing different things
- Customers - same task, different customers
- Geography - same task, different place
- Time - same task, different time



Co-ordination

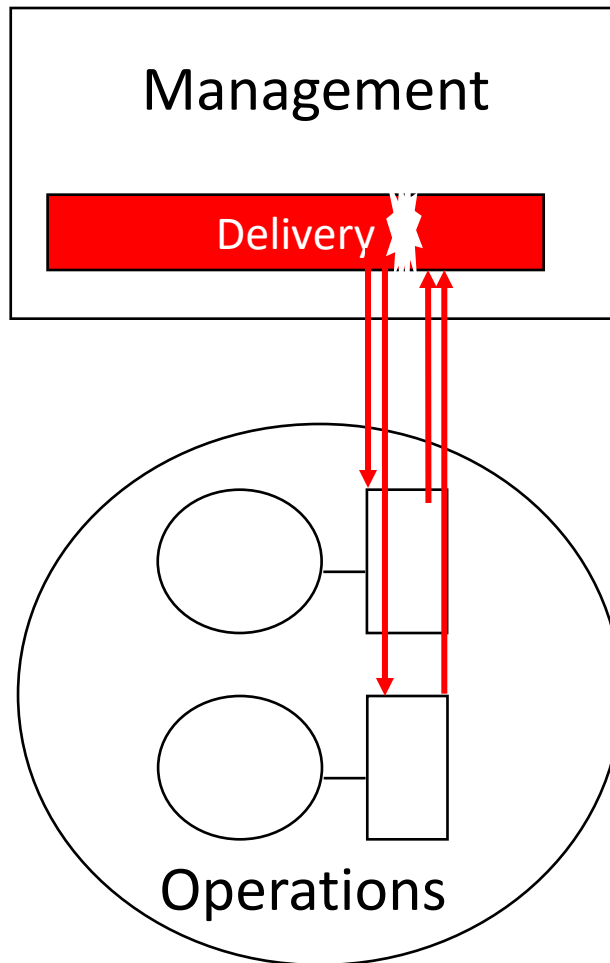


- Mechanisms to allow Primary Activities to operate smoothly:
 - Protocols
 - Schedules
 - Mutual Agreement
 - Common Standards
 - Common Languages

Co-ordination Breakdowns

- Resource Conflicts
- Turf Wars
- Conflicting messages to customers
- Weak operations planning
- Appeals to higher management to sort out inter-unit disputes

Managing Performance



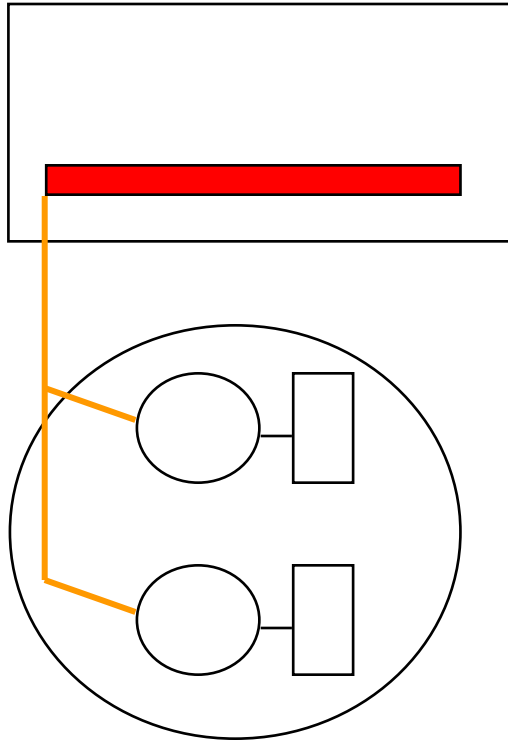
- Specific
- Agreeing Performance
- Measure Performance
- Resource Bargaining
- Fragmentation?

Control Dilemma

- Something happens to change demand from the environment
- Operations react
- Management worried at loss of control of subordinates
- Management demanding more reporting on operations
- Operational capacity absorbed in dealing with management, not problems

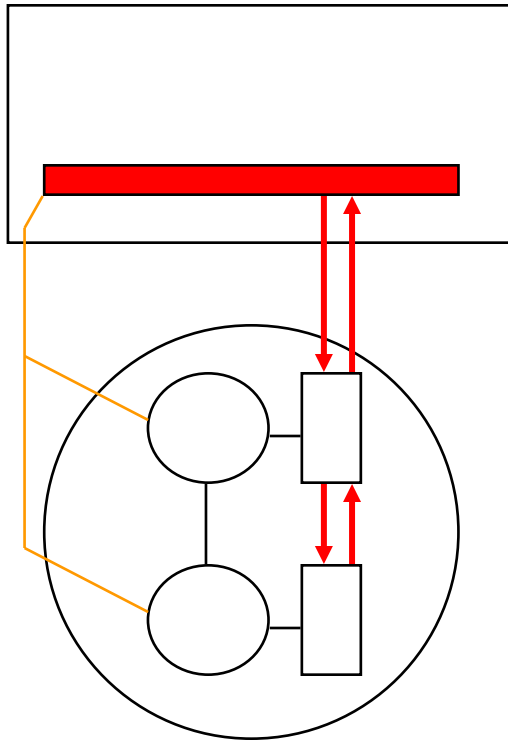


Monitoring Loop



- Bypass one level of management
- Ensuring Performance Reports are accurate
- Deepening manager's understanding of operations

Performance Management



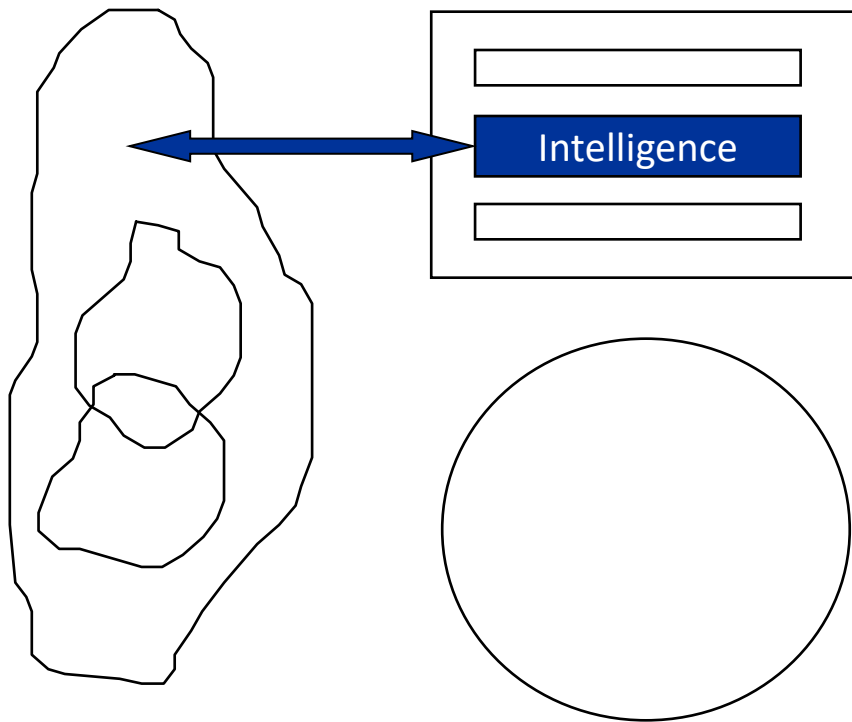
Linking operations to decisions

Agreeing & measuring performance

Agreeing resources

Monitoring -
Checking it works

Intelligence - Outside & Future



- Surveys Technical, Competitive & Market Developments
- Predicts, Plans, Creates the future
- R&D, Innovation
- Strategic Risk

Intelligence Breakdowns

- Creating new products with no markets
- Creating markets without products to fit
- Failing to adapt to changing demands
- Failing to adapt to changing technology
- Persisting with outdated products

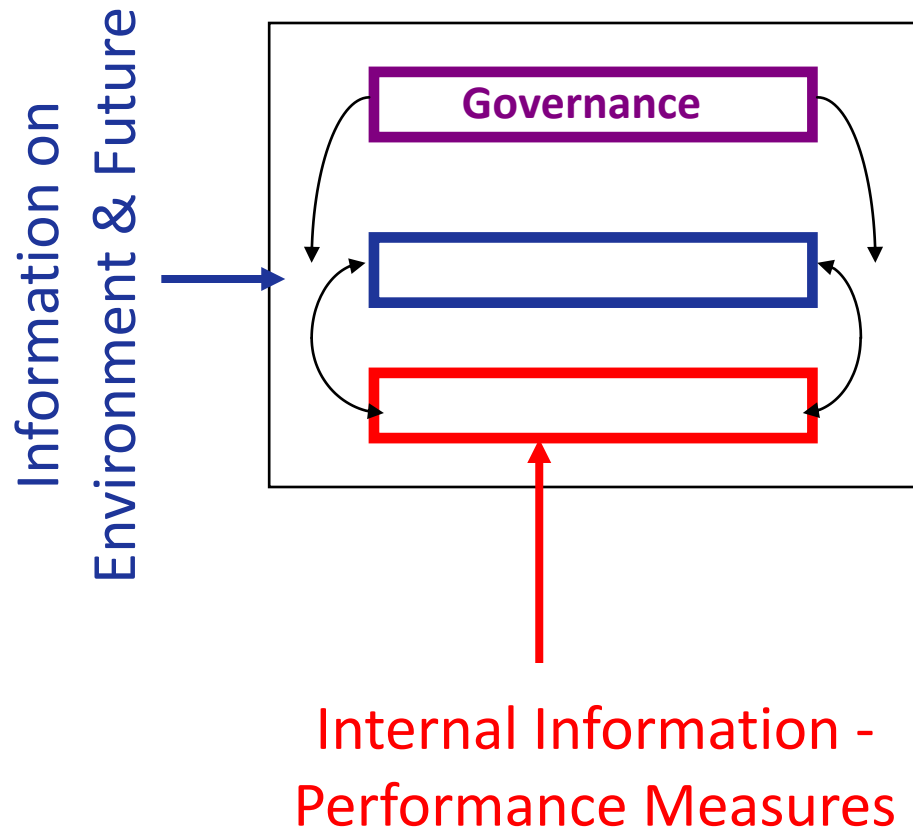
Intelligence breakdowns – Overcome by Strategic Risks

- S&P 500 – 85% failed over 40 years
- Top 1000 companies, 50% lost 20% Cap value in 1 month over 10 years
- 35% of fatal strategic risks came from an unforeseen direction



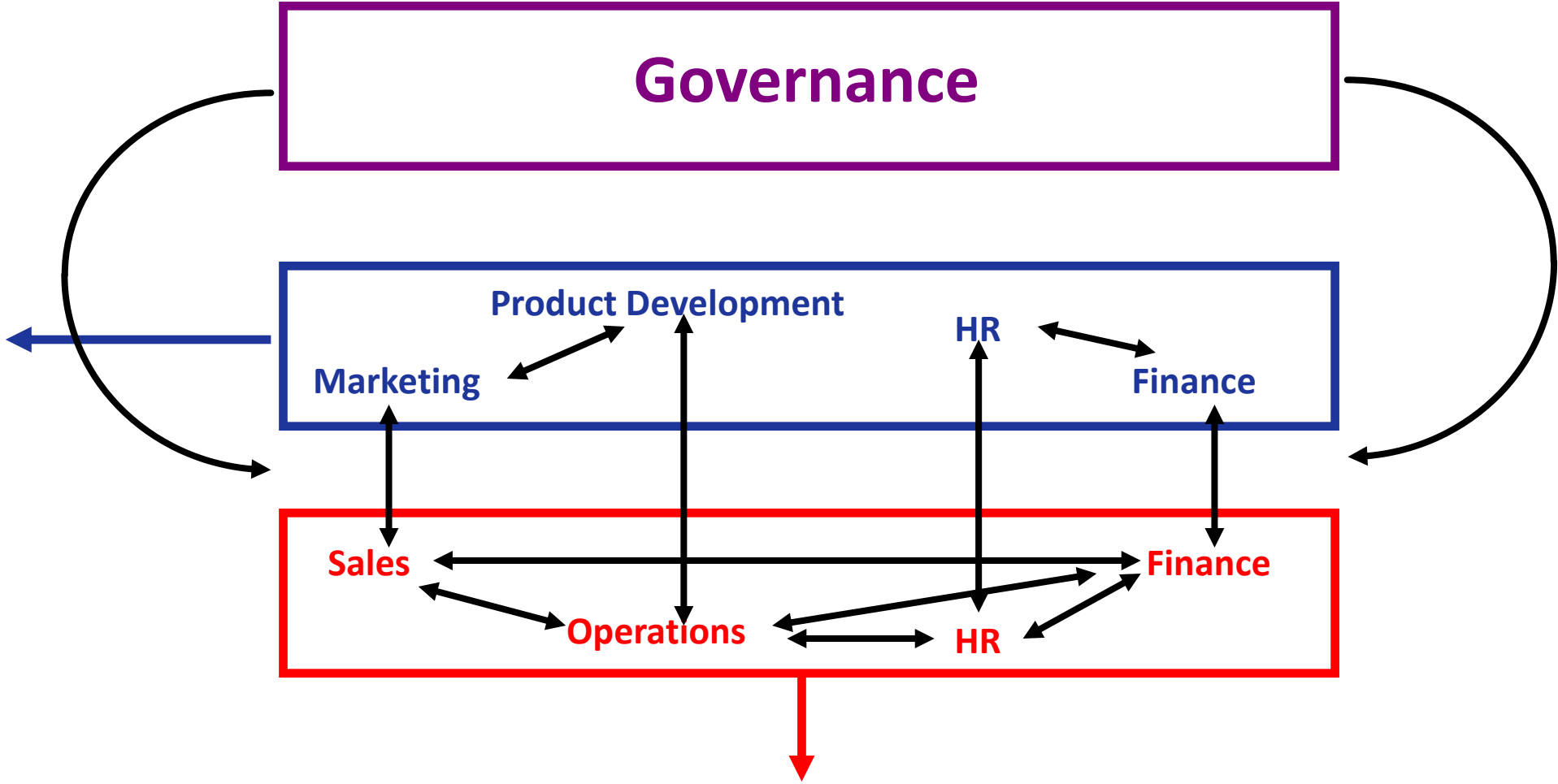
VSM - Predicts organisational
crisis / survival(78% confidence)

Decision Making



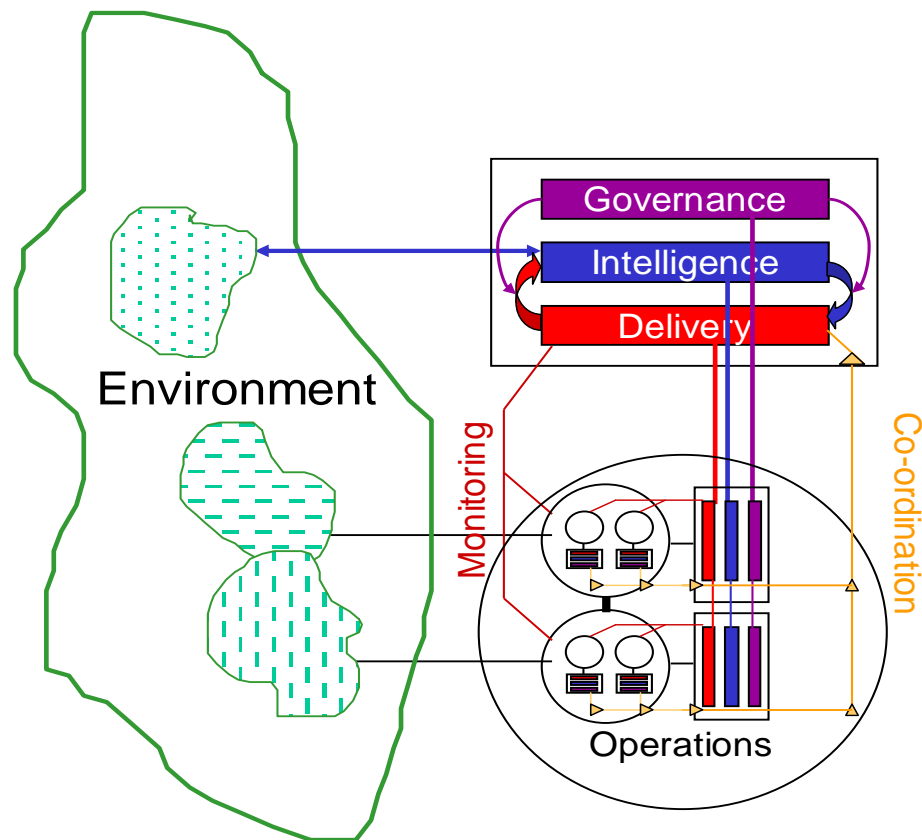
- Good Decision Making balances:
 - External & Internal
 - Future & Now
- Performance Measures designed as **Inputs** to strategy, not just outputs
- Articulated throughout the organisation

Decision Making





Viability Systems



Viability Systems are:

- Ultrastable – designed to deal with turbulent environments
- made up of Viable Systems with the same mechanisms for change and performance management at every level