The Journey of a Knowledge Management System in the Department of Defence “TARDIS”

Mark Blackburn, Graham Durant-Law and Pat Byrne

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The Business Context
Capability Development Executive (CDE)

CDE gains government approval and funding for all Defence projects and monitors delivery of capability
The Core Business of CDE

Projects are Change Vehicles to which $$$ and Resources are Added

Current Capability

Future Capability

Current Security Environment

Future Security Environment

Projects

Make This Transition Occur

3 – 50 Years

Can Deal With

Can Deal With

Projects are Change Vehicles to which $$$ and Resources are Added

Current Capability

Future Capability

Current Security Environment

Future Security Environment

Can Deal With

3 – 50 Years

Projects

Make This Transition Occur
Characterised By

- 300+ people and a broader community of 7000+
- 400+ projects > $20m managed or monitored
- ≈ $60bn of projects in the pipeline
- 40% to 50% turnover of staff annually
- ≈ 90% male
- ≈ 80% military
- High education levels – tertiary (masters)
- Three networks (restricted, secret and top secret)
- Aging software
- Reporting overhead
- Extremely high political interest
- High profile
- Significant impact of decisions
- Portfolio vs Program vs Project
CDE Core Product = Information

1-5 Years

Documents and Papers → Submission

Databases → Submission

People / Workshops → Submission

Committee Process → ✅
CDE Core Product = Information

Documents and Papers
- Post Trip Reports
- Seeking Support
- Briefs
- Plans
- Justifications
- Deliverables against Plan

Databases
- Recording Source of Information
- Managing Versions
- Keeping Data up to Date
- Placing Documents into the Right Place
- Minutes of Meetings
- Workshop Outcomes

People / Workshops
- Committee Process
  - Knowing when Submission is Due
  - Knowing Whether it is on Schedule
  - Bidding for Funds
  - Managing Funds
  - Recording Committee Outcomes
  - Recording Decisions
  - Managing Risk
  - Scheduling Work
  - Managing Work
  - Informing Progress
  - Articulating Requirements
  - Identifying Dependencies/Relationships
  - Reporting
  - Making Decisions

Submission
- Post Trip Reports
- Seeking Support
- Briefs
- Plans
- Justifications
- Deliverables against Plan
Explaining TARDIS

TARDIS is a knowledge management framework in a project management environment focused on knowledge productivity
How We Define It

TARDIS is an information and knowledge framework comprising eight dynamic, evolutionary and interlinked components that are developed and evolved as resources permit and priorities demand. Focus is “knowledge productivity”

Approximately 100 active planned tasks
Between 5 and 50 ad hoc tasks every single day
Prioritisation is important
What That Actually Means

- the broad vision exists
- we keep the broad vision in sight
- we are reactive to the organisation
- we engage the organisation
- we are pro-active in aligning our tasks to the vision
- we commit to what can be delivered
- we deliver what we commit to
- we plan 2-8 weeks ahead
- we prioritise components
- we actually help
- we maintain the framework but modify if required
What the Dream Was

HolisTech’s® original briefing
Functional Needs

- Performance / Requirements
- Projects
- Capabilities
- Schedule
- Cost

Executives

Staff

Start

Finish
Non-Functional Needs / Constraints

• Information management approach – it is the information that is valuable not the tool
• “Portal” concept for virtual workspaces
• No new software – only software available under Defence corporate agreements to be used
• No coding beyond the application level – no tailor made applications that the consultants have to support – use inherent functionality of application
• CDE Staff to manage the system – do not want consultants on for ever
What the Reality Was, Is and Will Be

A Longitudinal View
structure, communities, knowledge connections, systems, help
Structure
Our Journey

WAS  ►  IS  ►  WILL BE

No Structure  ►  Good Structure  ►  Good Structure

• "Personal" drives
• Chaos

• Structure
• "Group" drive

• Structured and unstructured portals

+ Creative Space
Communities
Our Journey

WAS  IS  WILL BE

Islands  Groups  Groups

• Non-sharing  • Sharing  • Communities
• Despair  • Hope  • Encourage Interaction
+ Communities

Communities
Knowledge Connections
Our Journey

WAS  \rightarrow  IS  \rightarrow  WILL BE

No Knowledge Connectivity

Some Knowledge Connections

Many Connections

+ Multi-Dimensional

- Dynamic multi-dimensional view
- Modelling

- Limited understanding
- Limited reporting

- Understanding but limited agreement
- Static and single dimension reporting

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The Project and Knowledge Management Professionals
Systems
Our Journey

WAS  IS  WILL BE

Few Systems  Useful Systems  Fewer Systems

• No systems  • Integrated systems  • Portal/database
• Chaotic management  • Many systems  • Some best practice

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The Project and Knowledge Management Professionals

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Help
Our Journey

WAS → IS → WILL BE

Little Help

Good Help

More Help + More Services

- IT Help
- Formal process

- Responsiveness
- Easy to use

- Project knowledge office
- Project management office
What the Reality Was, Is and Will Be

A Modular View

was, is, will be
What the Reality Was
Messy …..Sometimes Chaotic

No Structure

Islands

No Knowledge Connectivity

Little Help

Few Systems
What the Reality Is
Order ………Mostly

Good Structure

Good Help

Groups

Some Knowledge Connections

Useful Systems
What the Reality Will Be
Mostly Order ………Controlled Chaos

Good Structure

+ Creative Space

Many Connections

+ Multi-Dimensional

Groups

More Help

+ Communities

+ More Services

Fewer Systems

+ Flexibility
Two Brief Examples

supporting tacit, implicit and explicit knowledge productivity require different strategies
Request for Knowledge (RFK)

- Connects people to information (explicit and tacit).
- Connects people to people (tacit knowledge).
- Entered into FAQs.
- Helps overcome lack of corporate knowledge.
Requirement, Cost and Schedule

On-line database containing thousands of non-functional requirements.

Explicit Knowledge Rich Area

Non-Functional Requirements System

On-line collaboration tools, brainstorming workshops, communities of practice, request for knowledge system, facilitation assistance.

Explicit Knowledge Rich Area

Tacit and Implicit Knowledge Rich Area

Tacit Knowledge Rich Area

System Requirement
Functional and Non-Functional

Solution Options

Explicit Knowledge Rich Area

Work Breakdown Structure (WBS)

On-line database, schedule modelling tools, cost modelling tools, historical data.

Explicit Knowledge Rich Area

Costings

On-line database, schedule modelling tools, cost modelling tools, historical data.

Requires This Work

Drives

Drives

Requires This Work

Builds

On-line database containing thousands of non-functional requirements.
Delivery Against Dreams, Wants, Needs

1 = Poor  ➔  10 = Good
Functional Needs

- Performance / Requirements
- Projects
- Capabilities
- Schedule
- Cost

Executives
- Staff

Start → Finish

6 7 8

6 4 7

Executives
Staff

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What We Have Learnt

solid intellectual basis but grounded in reality and pragmatism and focussed on the business outcomes
Some Lessons

- Knowledge, information and data are *enablers* of business not an end.
- “Airy fairy” concepts achieve nothing – rubber on the road makes a difference and builds credibility.
- Current KM relies on personal altruism – reality is that if KM is implemented in a closed system, some discipline with reward and consequence is required.
- Knowledge management is a fraught, change management journey – you have to stick with it.
- Need a mix of discipline and creative chaos – discipline is the hardest to instil.
More Lessons

• Turn those who are opposed into change leaders - engage them and address their specific needs.
• Evangelists must be embedded and nurtured throughout the organisation - these evangelists must include people from all levels of the organisation.
• Complexity and complications abound - everything that is simple in conception is difficult in execution, therefore take small steps and build on them.
• Manage expectations - particularly manage the unintended consequences.
• People will talk a lot - the secret is to actually get them to do something!
Even More Lessons

• You need to market the initiative – but don’t oversell as expectations will not match the reality.

• Executive buy-in is essential – you need three things for project success …a champion, a champion and a champion.

• Executive perseverance and enforcement is key – selective non-compliance will become the norm otherwise.

• Sit …..Stand…..Walk ……Run – evolve mostly with the occasional revolution.
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Discussion

Questions

Mark Blackburn
Department of Defence
Director Capability Knowledge Management
Capability Operations and Plans
Canberra, ACT, Australia
Phone: +61 2 626 67566
Fax: +61 2 626 53321
Mobile: +61 411 486 280
Email: mark.blackburn@defence.gov.au

Graham Durant-Law
HolisTech® Pty Ltd
Knowledge, Networks, Research
Canberra, ACT, Australia
Phone: +61 2 6255 0122
Fax: +61 2 6255 0133
Mobile: +61 408 975 795
Email: graham.durantlaw@holistech.com.au

Pat Byrne
HolisTech® Pty Ltd
Projects, Knowledge, Research
Canberra, ACT, Australia
Phone: +61 2 6255 0122
Fax: +61 2 6255 0133
Mobile: +61 412 103 629
Email: pat.byrne@holistech.com.au