WorkScripting: Knowledge-based work support for business
Outline

• About Knowledge
• Knowledge Management
• WorkScripting
• Typical Growth Path
• Return on Investment
About Knowledge
Definitions

**Data:** Facts out of context

**Information:** Data organised in a way that has a potential for meaning

**Knowledge:** Data or information that enables the receiver to take informed action (content in context)

**Explicit Knowledge:** Knowledge that has been codified in some way (e.g. documentation, a computer application, etc.)

**Tacit Knowledge:** Uncodified, unrecorded knowledge usually available only in someone’s head (e.g. experience, know how, etc.)
Definitions, contd.

**Knowledge Workers**: People who are regularly solve problems by thinking (reasoning activities like collecting data, weighing evidence, interpreting policies, recognising patterns, drawing inferences and making deductions)
Knowledge Workers complete Tasks

Uncomplicated Tasks

- Tasks for which specific guidance is available or for which specific processes are documented and which do not require consideration of any alternative approaches.

Medium Complexity Tasks

- Tasks for which some guidance may be available but which might not have specific documented processes and may require consideration of alternative approaches. Some specific training may be required to be able to complete these tasks.

Complex Tasks

- Tasks for which specific training is required to be undertaken to enable the task to be completed without direct supervision. Guidance and procedures may be available but require significant interpretation on the part of the knowledge worker to apply to the circumstances involved.

Highly Complex Tasks

- Tasks that require the interpretation of difficult material (e.g. policy/legislation and or procedures, if any exists) and for which no specific training is available.
K Worker Knowledge Needs

![Diagram showing the relationship between volume and thinking effort required for tasks with varying complexities. The x-axis represents task complexity, ranging from Uncomplicated to Highly Complex. The y-axis represents volume, with guidance knowledge and reference knowledge depicted as distinct areas. The diagram illustrates that as complexity increases, volume decreases, and thinking effort required increases.](Image)
Knowledge is Today’s Competitive Weapon

Processes are the containers for the knowledge (know-how) of organisations

“How We Do Things Around Here” – Processes

Copyright © Wordware Pty Ltd 2005
Why Manage Knowledge?

• Improved operational efficiency:
  – Streamlined tasks, higher value outcomes
  – Reduced waste, lost time and rework

• Better relationships with staff, customers and suppliers

• Increased value leveraged from existing information and resources

• Reduced support workload
What is Knowledge Management?

A strategic business process that manages and leverages an enterprise’s knowledge base to increase its outcomes of value by knowledge-enabling its staff.
WorkScripting
A Knowledge Management System that:

- Manages processes as the containers for the knowledge (know-how) of the organisation
- Creates an environment for K-Enabling staff, providing access to structured guidance, training and reference process knowledge
- Provides the organisation with an intelligent operational system for delivering value
1. Define the Process

Low Cost Purchase

1. Fill in purchase request
2. Get quote

Under $1000

Over $1000

3. Get approval
4. Issue order
2. Add People

Low Cost Purchase

1. Fill in purchase request

2. Get quote

3. Get approval

4. Issue order

Requestor

Approver

Under $1000

Over $1000

Over $1000
3. Add Technology

Low Cost Purchase

1. Fill in purchase request
2. Get quote
3. Get approval
4. Issue order

In context links to:
legacy systems,
ERP systems,
External data sources
Web applications, etc.

Requestor

Approver

Under $1000
Over $1000
4. Add Content

Low Cost Purchase

1. Fill in purchase request

2. Get quote

Under $1000

Over $1000

3. Get approval

4. Issue order

Requestor

Approver

In context links to:
Guidance (how to...)
Reference (policies, standards experts etc.)
Training (worked examples, ScreenCams, videos, etc.)

In context links to:
legacy systems,
ERP systems,
External data sources
Web applications, etc.
A quick look at the system:
Growth Path
Typical Corporate Requirements

Progressively:

• Universal access to information and documents across the company
• Web-enable key processes and applications
• Distribute information to the field
• Reduce supplier and customer support costs
• Support collaboration between staff, suppliers and customers
• Lower information administration and distribution costs
• Expand to Extranet access
• Use as template for other Group companies.
Staged Approach

1. Build and implement a *Company Intranet*, for document sharing and corporate communications.

2. Expand the Intranet into a *Company Portal* by K-enabling selected processes and providing personalised access for staff.

3. Upgrade to a *Corporate Portal* by expanding access, security and functionality to support partners, suppliers, customers and investors.
Stage 1 - Company Intranet

Required:
1. Knowledge Map
2. Content Management System
Stage 2 - Company Portal

Required:
1. Knowledge Map
2. Content Management System
3. Process Management System
Stage 3 - Corporate Portal

Required:
1. Knowledge Map
2. Content Management System
3. Process Management System
4. Extranet access and security
Achieving a Return on Investment in KM

1. Align WorkScripts with business objectives
   - Identify business objectives
   - Identify strategic processes
   - Identify strategic business metrics
   - Determine potential RoI
     - Organisational level
     - Departmental level

2. Develop highest RoI WorkScripts first
Identify Business Objectives

- Identify the core organizational goals and objectives of the business
- Look in: vision statements, annual reports, executive interviews with the trade press, planning statements, SWOT statements, etc.
- Examples:
  - “We will be the easiest automotive parts supplier with whom the big three can build lasting partnerships.”
  - “We will be recognized as the most responsive package delivery service in the world.”
  - “We will provide a higher standard of care than any other physician group in our market.”
Identify Strategic Processes

– What are the processes that produce outcomes that help achieve those objectives?

– Example:

*Sales Process:* to secure orders for the (client’s) products/services to target levels of value and profitability, invoicable within the target period, from new or existing customers, including prospecting, qualifying prospects, territory management, sales presentations, cash collection and securing referrals.
Identify Strategic Business Metrics

• Sample sales KPIs for measuring success:
  • Revenue per head of sales staff
  • Spread of revenue stream (indicates diversity of income sources)
  • Percentage of tenders won (win-rate)
  • Active customer ratio (% of active to total clients)
  • Average order size
  • Gross margin by customer (indicates market price sensitivity)
  • Sales growth
  • Average order size per sales person
  • Average order cycle time
  • Number of new customers per period
  • Number of lost customers per period
### Potential RoI 1

#### Organisational:

<table>
<thead>
<tr>
<th>CALCULATED METRICS</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average hourly rate</td>
<td>$40.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue/Head</td>
<td>$75,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Labour Cost</td>
<td>$14,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Concurrent Users</td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of desktop PCs requiring upgrade</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of System Administrators</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### SETUP ESTIMATE

| Estimated Implementation Labour Costs  | $0     | $0     | $0     |
| Estimated Total Setup Costs            | $118,000| $14,200| $14,200|

#### SAVINGS ESTIMATE

| Net Training Cost Savings              | $132,000| $145,200| $159,720|
| Net Rework Savings                     | $1,134,000| $1,134,000| $1,134,000|
| Net Processing Time Cost Savings       | $1,050,000| $1,155,000| $1,270,500|
| Estimated Total Cost Savings           | $2,316,000| $2,434,200| $2,564,220|

#### TOTAL BOTTOM-LINE IMPROVEMENT

| $2,198,000 | $2,420,000 | $2,550,020 |
### Potential RoI 2

- **Departmental (improved operational efficiencies)**

<table>
<thead>
<tr>
<th>Benefit/Process</th>
<th>FY 01-02</th>
<th>FY 02-03</th>
<th>FY 03-04</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhancements Process</td>
<td>$118,053.56</td>
<td>$118,053.56</td>
<td>$118,053.56</td>
</tr>
<tr>
<td>Problem Management Process</td>
<td>$130,220.00</td>
<td>$130,220.00</td>
<td>$130,220.00</td>
</tr>
<tr>
<td><strong>Total Benefits</strong></td>
<td>$862,417.90</td>
<td>$301,606.89</td>
<td>$301,606.89</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td>$312,726.18</td>
<td>$234,147.50</td>
<td>$42,260.00</td>
</tr>
<tr>
<td><strong>Net Cashflow</strong></td>
<td>$67,459.39</td>
<td>$259,346.89</td>
<td>$259,346.89</td>
</tr>
<tr>
<td><strong>Cumulative Net Cashflow</strong></td>
<td>$67,459.39</td>
<td>$326,806.29</td>
<td>$586,153.18</td>
</tr>
<tr>
<td><strong>Benefits to Cost Ratio</strong></td>
<td>2.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above illustrates the benefits and costs associated with departmental improvements, indicating a strong return on investment.
Benefits

Typical Return on Investment (ROI) of 10:1 within 12 months. How?

• Lifts productivity
  – Accelerated performance at all levels (22%)
  – Increase in deployment rate of new products and services (30%)
• Tightens control and compliance
  – Reduced work inaccuracies (90% less rework)
  – Improved compliance (80%)
• Improves business process transparency
• Increases business agility
• Improves customer service