

Knowledge1 

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# Pragmatic Approach to Knowledge Management

**Anurag Bahal**  
PRINCIPAL CONSULTANT  
Infosys Technologies Ltd

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# Knowledge11

## Agenda

- Knowledge Enigma
- Knowledge Management defined
- Knowledge Management Strategy
- Implementation Approach
- Challenges
- Critical Success Factors
- Lessons Learned

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## KNOWLEDGE ENIGMA

### Pain Areas

- Knowledge exists in pockets but is not accessible by all
- Multiple, Disconnected and disparate repositories
- Limited Knowledge Transfer
- Limited Knowledge Capture
- Limited Ownership - resides in vendor databases
- Minimal tracking, and recognition of knowledge

### Impact

- Extended Incident Resolution Time
- Limited first call resolution
- Negative customer perception
- Inconsistent and suboptimal execution of processes
- Limited Self Service Capabilities
- Reduced Productivity

### Solution

- Pragmatic Knowledge Management based on Industry Best Practices
- Standardized and Federated Tool Sets
- Concerted Effort with defined Milestones over a 3 Year Roadmap
- Articulated Measures of Success

- Knowledge Management is typically displayed within the Data-to-Information-to-Knowledge-to-Wisdom (DIKW) structure. There are Key Knowledge Management activities around each element of this structure.
- We need to create the enterprise-wide ability to effectively transition useful data and information into critical knowledge to ensure service stability, maintainability, and performance that lends itself to Organization wisdom.

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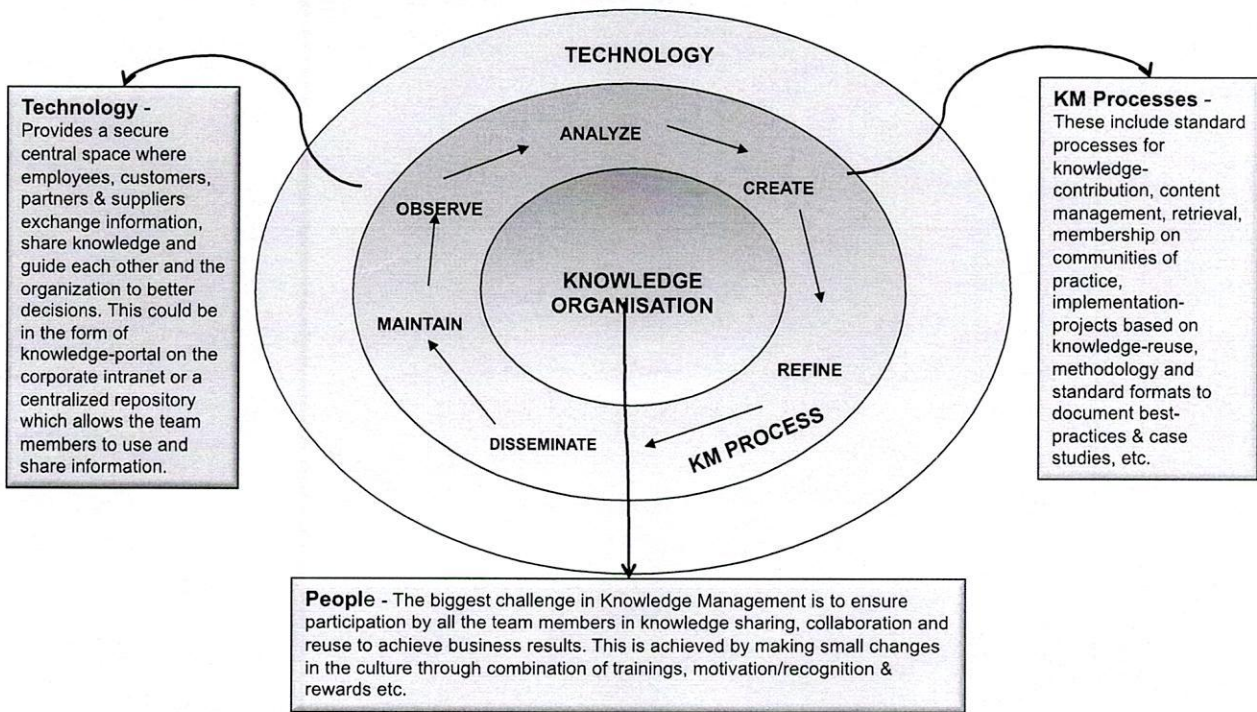
## KNOWLEDGE MANAGEMENT

- ***The purpose of Knowledge Management is to ensure that the right information is delivered to the appropriate place or competent person at the right time to enable informed decision making.***
  - *Information Technology Infrastructure Library (ITIL)*



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## 3 Spheres of Knowledge Management

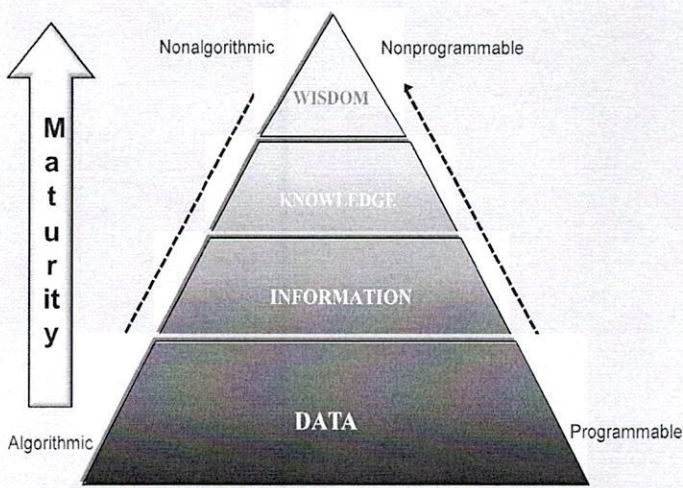


\* Source - Infosys KShop

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## Evolution of Knowledge from Data

“**Knowledge**, not information, leads to a competitive advantage in business.”



From Data Processing to Knowledge-based Systems

**Wisdom:** a state of the human mind characterized by profound understanding and deep insight. It is often, but not necessarily, accompanied by extensive formal knowledge.

**Knowledge** is derived from information in the same way information is derived from data; it is a person's range of information.

**Information:** Aggregation of data that makes decision making easier.

**Data:** Unorganized and unprocessed facts; a set of discrete facts about events.

\* Source: Infosys KShop

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## Key Terms

### Information

Information assets are collections, patterns, and meaningful representation of **data** applied in Organization contexts such as customers, contracts, services, projects and operations. They are useful for various purposes including **communication, coordination and control of business activities**. Information assets exist in various forms **such as documents, messages, records**. Examples are Business Acquisition Report, Server Migration Reports, etc.

### Knowledge

Knowledge assets are accumulations of awareness, experience, insight and intellectual property that are associated with Organization operations. Management, Organization, People and Process type of assets use and store knowledge assets. Examples - Information Security Program Standard, Known Error Record, Business Capabilities, Performance Expectations, Stakeholders and Resources list - etc.  
Knowledge is dynamic and context based. Knowledge puts information into an 'ease of use' form, which can facilitate decision making.

### Knowledge Management

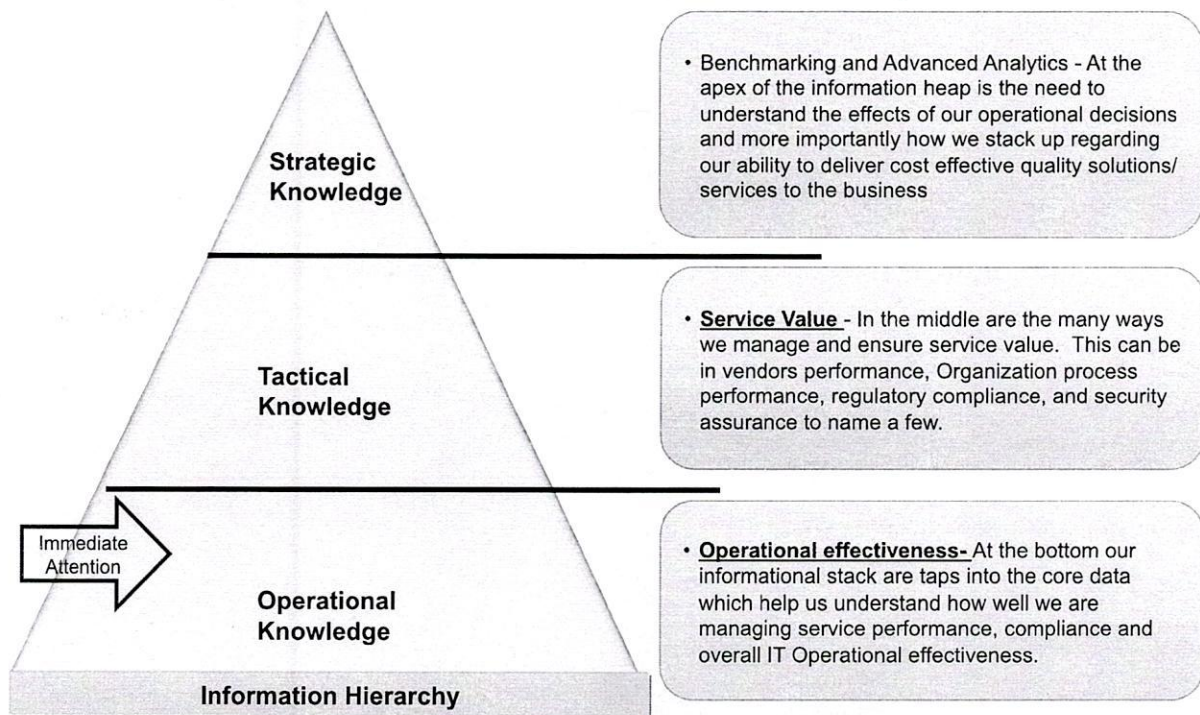
The Process responsible for gathering, analyzing, storing and sharing knowledge and information within an Organization. The primary purpose of Knowledge Management is to improve Efficiency by reducing the need to rediscover knowledge.

### Service Knowledge Management System

A set of tools and databases that are used to manage knowledge and information. The SKMS includes the Configuration Management System, as well as other tools and databases. The SKMS stores, manages, updates, and presents all information that an IT Service Provider needs to manage the full Lifecycle of IT Services.

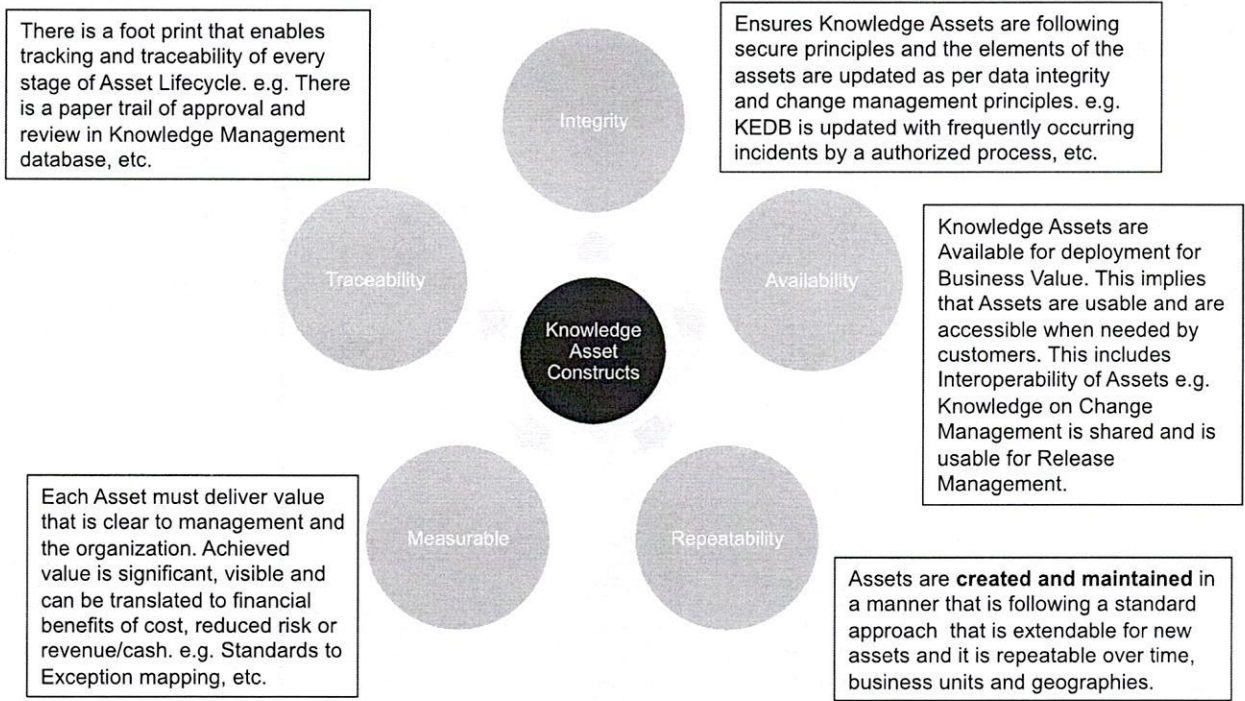
Source – Derived from ITIL, Six Sigma and Consortium for Service Innovation Artifacts.

## Knowledge based on Information Hierarchy





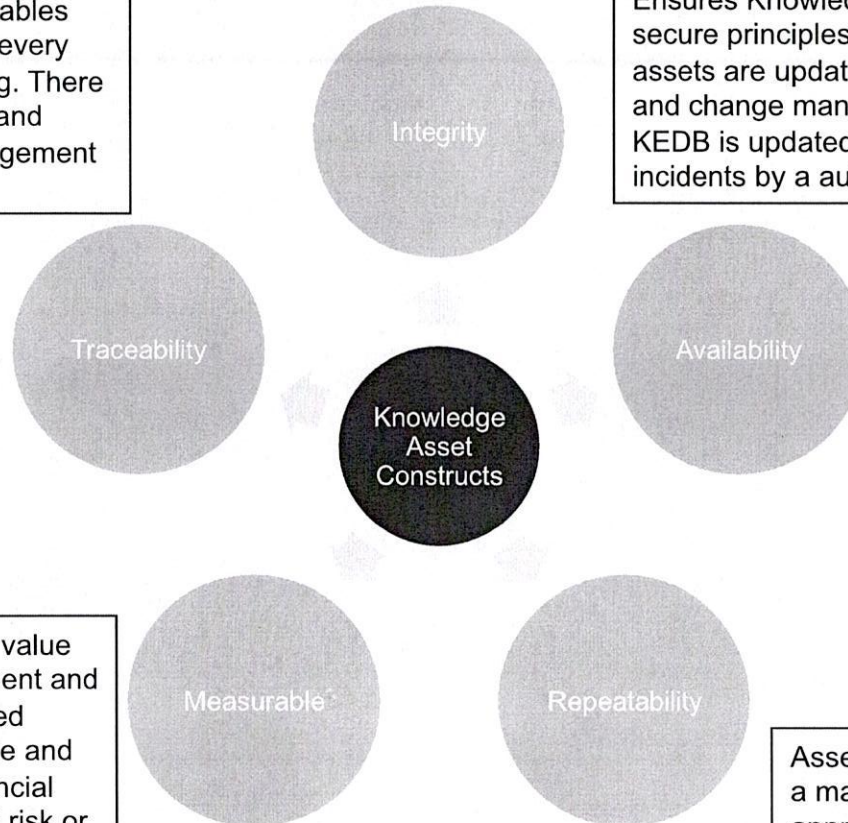
## Characteristics of Knowledge Assets



## Characteristics of Knowledge Assets

There is a foot print that enables tracking and traceability of every stage of Asset Lifecycle. e.g. There is a paper trail of approval and review in Knowledge Management database, etc.

Ensures Knowledge Assets are following secure principles and the elements of the assets are updated as per data integrity and change management principles. e.g. KEDB is updated with frequently occurring incidents by a authorized process, etc.



Knowledge Assets are Available for deployment for Business Value. This implies that Assets are usable and are accessible when needed by customers. This includes Interoperability of Assets e.g. Knowledge on Change Management is shared and is usable for Release Management.

Each Asset must deliver value that is clear to management and the organization. Achieved value is significant, visible and can be translated to financial benefits of cost, reduced risk or revenue/cash. e.g. Standards to Exception mapping, etc.

Assets are **created and maintained** in a manner that is following a standard approach that is extendable for new assets and it is repeatable over time, business units and geographies.

## KNOWLEDGE STRATEGY

What comprises a knowledge strategy?

- Vision coupled to Strategic Objectives
- Clearly defined term for “knowledge” – specific to organization’s context
- Technology : A Service Knowledge Management System
- Knowledge Lifecycle – creation, update, publication and archival of knowledge
- Knowledge Governance – roles, metrics, training
- Knowledge culture

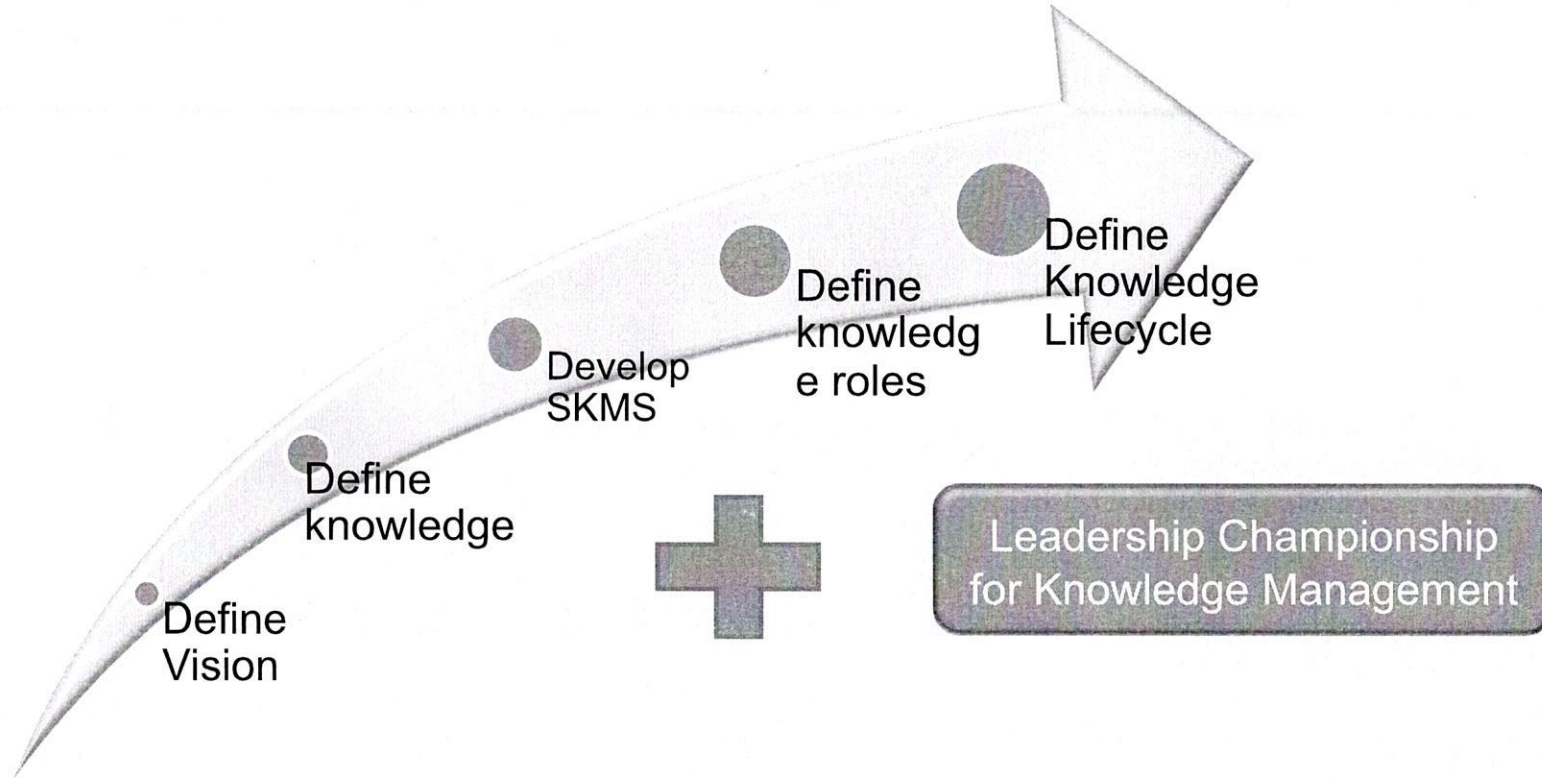


## Knowledge Strategies

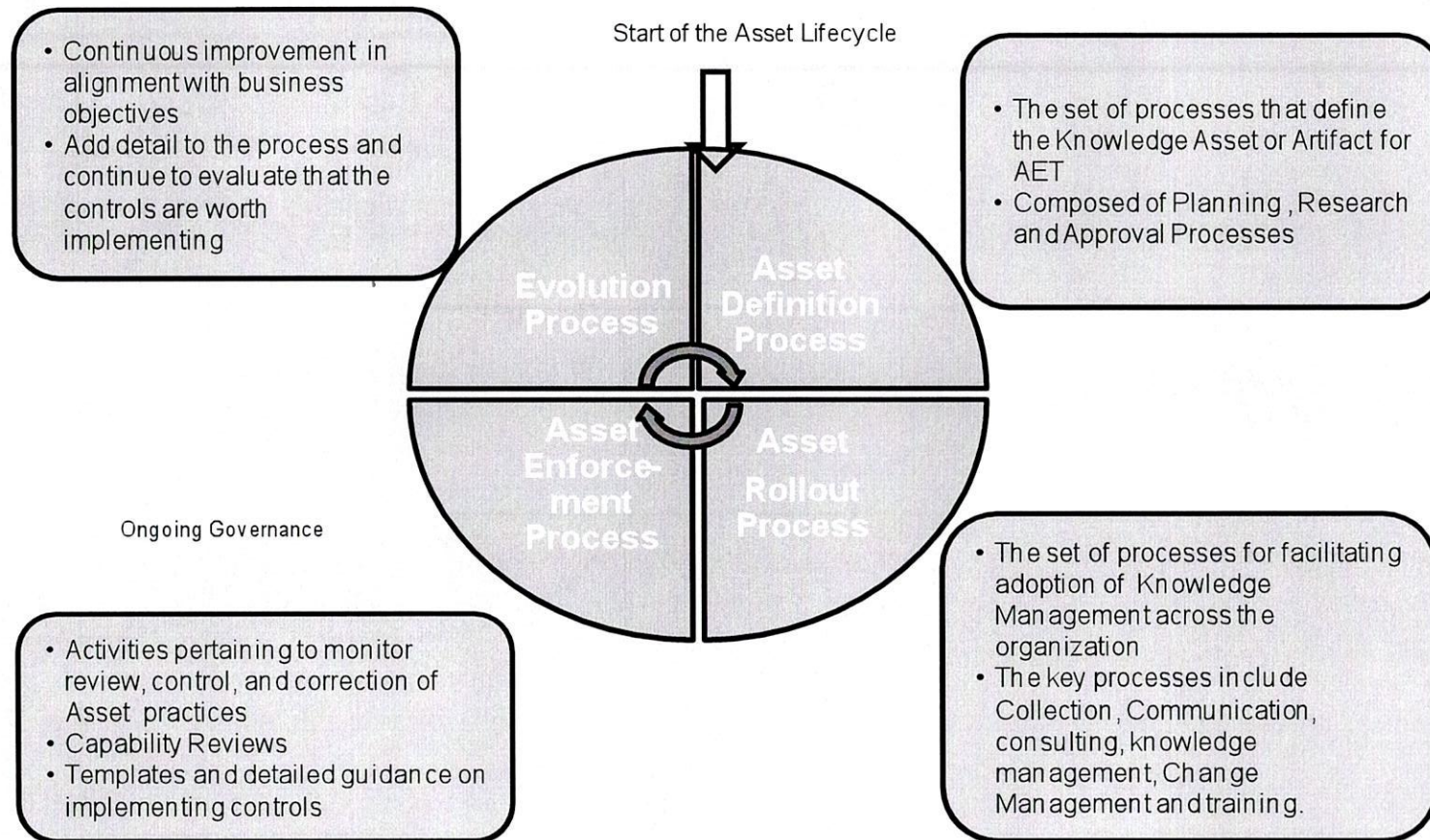
- **Knowledge Competence.** The goal here is to be an efficient and effective company with just enough emphasis on responsible management of the Knowledge. These are the characteristics of this Strategy:
  - The Key People, Process and Tools capabilities have to be sufficiently developed to substantially reduce operational inefficiency, but they do not have to be world-class . Under this strategy, the Knowledge is not the center of the business.
  - Focus on delivering quality products and services to customers and shareholders through better knowledge.
  - Comply with regulations and make adequate investments in building the capabilities for information, data, and knowledge management as well as investing in Organization communication.
  - 50 percent of the companies in the world fall into this category. Typical examples are Consumer products companies like Safeway, Unilever and Financial Services Companies like Barclays.
- **Knowledge as a competitive advantage.** This strategy is often adopted by companies that are in the Knowledge Intensive Industries or companies that want to up the ante in the spirit of continuous improvement. These are the Key characteristics of this Strategy:
  - This Strategy involves making Knowledge Management a critical capability of the organization.
  - This capability distinguishes the company from the competition, attracts both employees and customers, and can earn an enviable reputation among customers, investors, regulators, suppliers, and policymakers.
  - Being a Knowledge-driven company is a painstaking and high investment endeavor, in which you pay as much attention to incorporating effective Knowledge Practices in the Ongoing Business as to developing the next great product.
  - 20 percent of the companies in the world fall into this category. Typical examples are Companies renowned for innovation like 3M, Apple and Companies that are in Knowledge Business like Mckinsey, Booz & Co. and Accenture.

Source – Infosys KM Practice

## Knowledge Management Strategy Development



## KNOWLEDGE LIFECYCLE



## CASE STUDY

The Help Desk at a large Financial Services organization faced the following challenges:

- Low User satisfaction
- Large call volumes
- Phone primarily used by users to contact Help desk, leading to more cost of operations
- Poor knowledge management leading to no service improvement

### ➤ **Scope**

- Assess the knowledge and knowledge management practice
- Utilize Service-now platform as a medium for self- service and knowledge management
- Define the knowledge management lifecycle, workflow and roles

### ➤ **Approach**

- Demonstrate tangible benefits for the organization by piloting KM in a niche, but highly visible domain of Help Desk.
- Deploy KM process through workflows, roles and responsibilities, governance mechanisms, templates and metrics.
- Prepare the organization for the adoption the knowledge management culture through communication and positioning knowledge as an integrator of all processes.
- Leveraged Service-now as a medium of deploying the KM process.

## Demonstrate tangible benefits for the organization by piloting KM for Help Desk

### ➤ Purpose

- Showcase tangible benefits by implementing basic Knowledge Management (ie a simple knowledge repository and knowledge lifecycle).
- Secure executive sponsorship for KM strategy adoption
- Explore and understand the potential of the Service-now as a platform for enterprise wide knowledge management

### ➤ Method

- Step 1: Analyzed the current call volumes and the cost associated with resolving the issues at various levels (level 1, 2 & 3).
- Step 2: Recognize patterns and trends for the most frequently received calls/incidents.
- Step 3: Utilize Service-now as a platform to create a knowledge repository with knowledge cases for the most frequently received calls/incidents and make the repository available to the Service Desk agents.
- Future step : Promote the knowledge cases as a self help for end users to refer to **before** approaching the Service Desk.
- Step 4: Present the benefits realized due to the above KM pilot : Benefit realized in terms of the reduced cost due to reduced call volumes. (Please note these are only tangible benefits. Intangibles like improved efficiency of Service Desk also would also follow)



## Deploy KM process through workflows, roles and responsibilities, governance mechanisms, templates and metrics.

### ➤ Purpose

- Define a knowledge management process so as to capture the knowledge across the organization in a form that can be easily applied.
- Make implicit knowledge explicit

### ➤ Components

- Design aspects
  - Knowledge Lifecycle – knowledge capture, storage, search, retrieval and update.
  - Integrates with Service Management processes across organization
  - Governance mechanism for the knowledge generated and stored in the service-now database
- Technical / Operational aspects of KM process
  - Define workflow for knowledge capture, storage, retrieval and update
  - Define roles and responsibilities for Knowledge Management process – who can create, publish , reject and update cases
  - Define templates and structure for the knowledge cases
  - Define the gating criteria and visibility model for knowledge cases
  - Identify and define feedback capture mechanism for knowledge cases
  - Metrics to measure the effectiveness of the KM process

## Prepare the organization for the knowledge culture

### ➤ Purpose

- Drive the adoption of the knowledge management process
- Capture, re-use, feedback and updation of knowledge becomes integral part of customer interaction and service management processes
- Knowledge Management becomes the integrator between different business units/teams within organization
  - ***In essence, Ensure success of KM strategy***

### ➤ Methodology:

- Senior Leadership involvement in championing the Knowledge Management cause
- Identify training needs for Knowledge management and train the Service Desk agents on the use of the tool and the knowledge lifecycle
- Change definition of “hero” – one who knows and shares it with entire team
- Recognize individuals and teams contributing the most (quality and quantity) to the capture, storage, application of knowledge
- Establish Knowledge champions to sustain the knowledge sharing culture across the team/organization

## SERVICE-NOW AS THE LAUNCH PAD FOR KNOWLEDGE

- Following features, helped accelerated launch of knowledge
  - ❑ Workflow Engine:
    - To deploy the Knowledge management process through the define knowledge lifecycle (creation, storage, publication, search , retrieval and update)
    - Deploy the gating criteria and visibility model for knowledge cases
  - ❑ Import set / Export set
    - Import the knowledge articles/cases from legacy database into Service-now knowledge base
    - Approximately 800 knowledge cases migrated
  - ❑ Content Management
    - To develop portal for self service for the end users.
    - Portal powered by the search engine and knowledge cases imported
    - Identify and define feedback capture mechanism for knowledge cases
  - ❑ Knowledge Base application
    - Develop the template and form for the submission, validation and publication of knowledge by knowledge team
  - ❑ Report Generation
    - Easy to configure real time metrics to report the knowledge management process effectiveness and efficiency
    - Metrics to measure the age, utilization and the feedback from end users on knowledge cases

## SNAPSHOTS FROM SERVICE-NOW

### End User view of a knowledge case

This screenshot shows a user's view of a knowledge article. The browser address bar indicates the URL is [Mainframe > AXIOM > User not authorized, logon was denied by security](#). The article title is "AXIOM - Error - User not authorized, logon was denied by security". The content explains that the error message is caused by a TSO User ID not being changed within 30 days and provides a list of steps to resolve the issue. At the bottom, there is a feedback section with "Was this helpful?" (Yes/No buttons), a "Not rated" section, and a "Flag article" button.

Article #E10110 Published 2010-10-13 Lastmodified 2010-11-17

**Title:** AXIOM - Error - User not authorized, logon was denied by security

Error message "logon was denied by the security system" is caused by a TSO User ID not being changed within 30 days. So although you may access AXIOM on a regular basis, the password is actually maintained elsewhere (example: WRTSO is where an ID is maintained for AXIOM4P0).

**Fix:**

Do the following:

1. Signon to the corresponding TSO region and change/update your password. Note: You can reference the Mainframe Complex Chart on [Software:Application - Mainframe.complex\\_CDN bubble chart](#) to locate corresponding TSO region for the AXIOM application on which you are receiving the error message.
2. If you still encounter problems, open a ticket to the Help Desk by clicking on the button above and ensure the following information is included in the free-form text box:
  - User ID;
  - Exact error message(s);
  - AXIOM region you are attempting to signon;
  - The last time you successfully accessed AXIOM, if known.

Feedback:

Was this helpful?

Yes  No

Not rated

★ ★ ★ ★ ★

Flag article

Fileshare: [http://seel1.srv.nov.com/tp/psam\\_jds44#E10110](#) Views: 2

### Knowledge Portal

This screenshot shows a Knowledge Portal interface. The browser address bar shows the URL [https://seel1.srv.nov.com/knowledge\\_portal\\_v2/psam\\_jds44#E10110](#). The page features a search bar with the text "Answers to your questions using IT knowledge base" and a search icon. On the left, there is a navigation menu with options like "Most Recent", "Most Popular", "Most Rated", "Most Commented", "Categories", "Browse All", and "Contact Us". The main content area displays a list of knowledge articles, including "Windows XP How-To: Manage Your Computer's Security Settings in One Place", "Testing change knowledge 1", "Text description modified", "User Manual", "FAQ", "Create Change", "IT Service Catalog (ITSC) - Environment Deprovision or Remove - IBM Managed Midrange Application - 0", "eIR - Error - We are sorry but our records indicate you have not been authorized to use this system", "IT Service Catalog (ITSC) - Architecture Consulting - How to request a Business Intelligence - Conn", "ssd", "IT Service Catalog (ITSC) - Agent and Supervisor Configuration - How to request an Agent Login ID", and "IT Service Catalog (ITSC) - Agent and Supervisor Configuration - How to request an Agent Login ID".

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IT knowledge base

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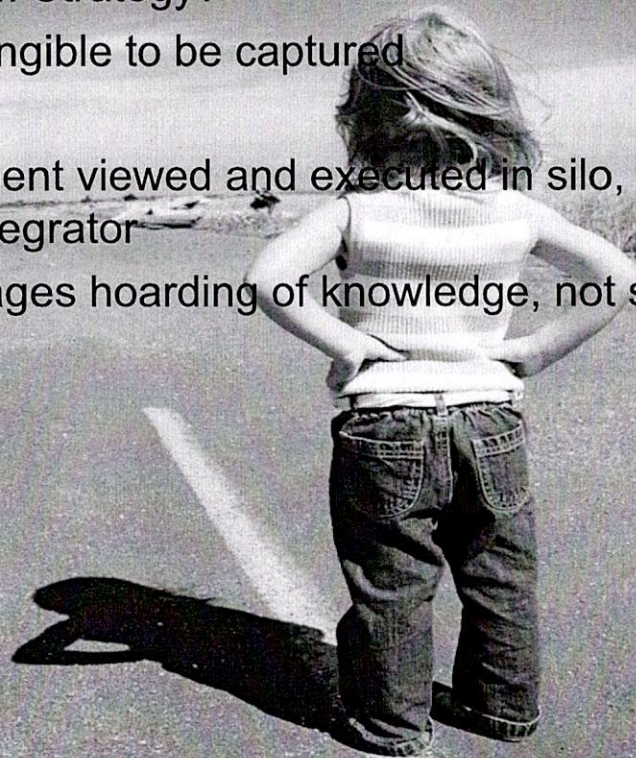
- Windows XP How-To: Manage Your Computer's Security Settings in One Place
- Testing change knowledge 1
- Text description modified
- User Manual
- FAQ
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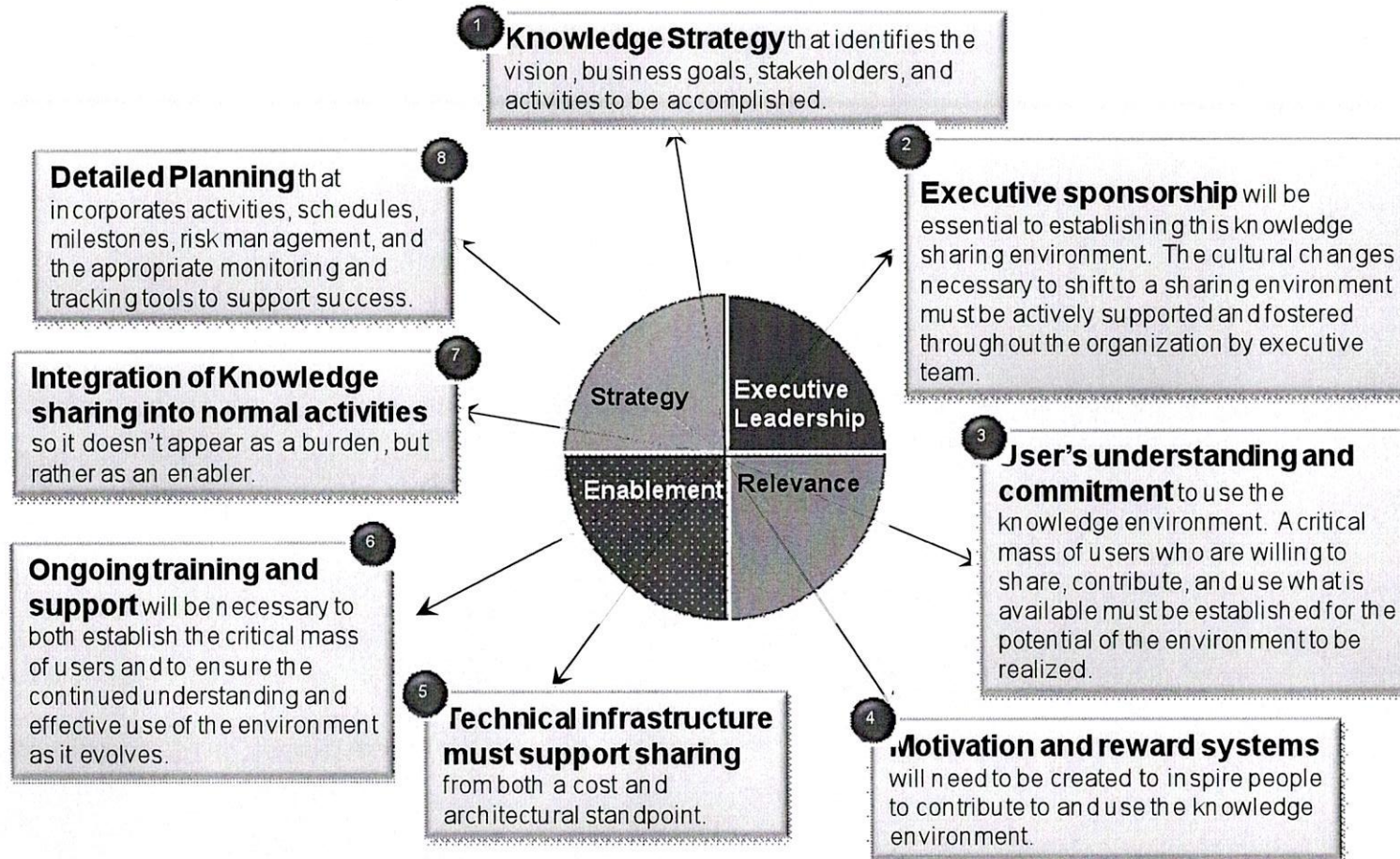
## CHALLENGES

Journey to adopt KM is not easy

- Why do we need a KM Strategy?
- Knowledge is too intangible to be captured
- What is ROI?
- Knowledge Management viewed and executed in silo, and not viewed as process integrator
- A culture that encourages hoarding of knowledge, not sharing it with peers



## CRITICAL SUCCESS FACTORS



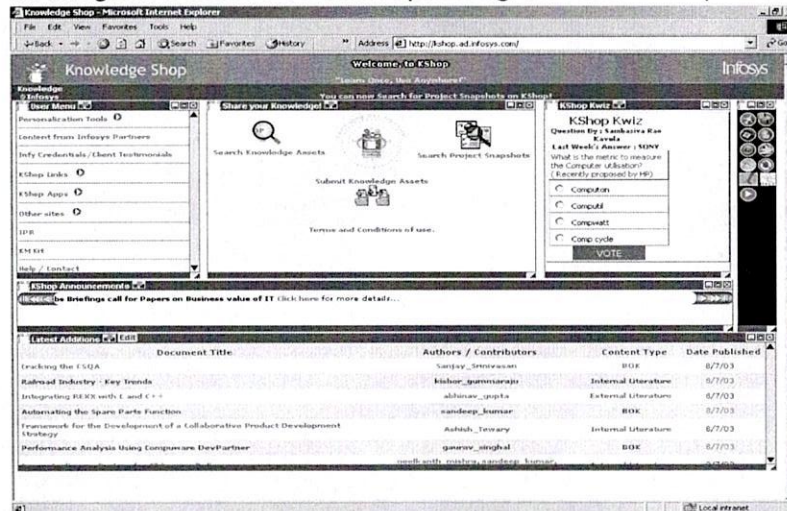
## Lessons Learnt

- Small, but decisive steps at a time: Demonstrate tangible benefits for the organization by piloting KM in a niche, but highly visible domain ex Customer Service/Service Desk.
- Institutionalize KM process and infrastructure as the “integrator” for all processes.
- Leverage Service-now as a medium of deploying the KM process.
- Prepare the organization for the adopting the knowledge management culture through communication and enabling people.

## Knowledge Management credentials

Infosys has a comprehensive Knowledge Management infrastructure complete with a dedicated team, a fully functional technical infrastructure and, most importantly, increasing awareness of the criticality of knowledge sharing amongst all employees.

Infosys has a **fully functional Knowledge Management portal (K-Shop)** which acts as the central repository around which all Knowledge-Sharing initiatives are built. The KM portal allows for on-line search and sharing of content thereby providing an integrated access solution spanning across the corporate intranet.



As Infosys executes projects for its customers, apart from the standard documents (like requirements, programs specifications, test plans), Infosys team is actively encouraged to create and share knowledge, while protecting client confidentiality and IPR.

**Body of Knowledge** – Infosys as a part of project closure dictates that all project teams to publish their experiences as part of our internal KM initiative. It is meant to be a central repository of experiential knowledge that can be tapped by the rest of the team. Many process improvements have resulted primarily because of the above.

Infosys has won the prestigious Global Most Admired Knowledge Enterprises (MAKE) Award. A panel of Global Fortune 500 senior executives and internationally-recognized knowledge management experts chose the Global MAKE Winners. The annual Global MAKE study is an international benchmark for KM practices. Infosys is the only company founded and headquartered in India which has been named among the Global Most Admired Knowledge Enterprises.



# Thank You

Principal Consultant  
Anurag Bahal



Infosys Technologies Ltd  
Anurag\_bahal@infosys.com

Consultant

Balachandra Emani  
Infosys Technologies Ltd  
Balachandra\_emani@infosys.com

## SESSION EVALUATION

Text us at **22333** with



AWESOME!

**18B10 A text**



GOOD

**18B10 B text**



MEH

**18B10 C text**

Case is not important

space is important

comments are optional

OR

Complete the session evaluation on the Knowledge11 Portal

Type	Room	Survey
Training	Sunset II	take survey