



Knowledge Management - Getting the Wisdom we Need

Speakers Notes

USA	Asia-Pacific
IMS Corp.	IMS Corp.
P.O. Box 3638	Suite 5, 275 Maroubra Road
Cedar Park	Maroubra
Texas 78630-3638	NSW 2035
USA	Australia
Tel: +1 (877) 275-3684	Tel: +61 (0)2 9314 2908
	Email: info@imscorp.com.au
	Web: www.imscorp.com.au

This document contains commercially confidential information pertaining to IMS Corp. products, services and methods. By accepting this document, the reader hereby agrees that the information contained herein shall not be disclosed outside of their respective organisation.

© Copyright IMS Corp. All rights reserved.

All referenced trademarks are those of their respective owners.

This document is for information purposes only and any advice given is of a general nature only and may not be applicable to an individual or a specific situation. IMS Corp. accepts no responsibility for any consequential loss or damage arising from the use of this document.

Table of Contents

1 Knowledge Management.....	1-I
1.1 Slide 1 – Opening Slide	1-I
1.2 Slide 2 – Knowledge is Power	1-I
1.3 Slide 3 – Wisdom Wanted	1-II
1.4 Slide 4 – Why we Struggle.....	1-III
1.5 Slide 5 – Knowledge Management Legacy	1-IV
1.6 Slide 6 – Importance of Data	1-V
1.7 Slide 7 – Standard Recipes	1-VII
1.8 Slide 8 – Real Estate Sales Process	1-VII
1.9 Slide 9 – Eliminating the Ph.D.	1-VIII
2 Real Time Decision Making.....	2-I
2.1 Slide 10 – Introductory Slide.....	2-I
2.2 Slide 11 – Evolving Internet.....	2-I
2.3 Slide 12 – Real Time Decision Making.....	2-II
2.4 Slide 13 – Elements of the Solution.....	2-III
2.4.1 A consolidated repository.....	2-III
2.4.2 Information integrated with work-flow	2-IV
2.4.3 A unified knowledge search	2-IV
2.4.4 Work-flow	2-IV
2.4.5 Security	2-V
2.4.6 Standardised presentation	2-V
2.4.7 Messaging	2-V
3 Designing Solutions Information Age	3-I
3.1 Slide 15 – Introductory Slide.....	3-I
3.2 Slide 16 – Proven Design Principles.....	3-I
3.3 Slide 17 – Common Process	3-III
3.4 Slide 18 – As the User interacts	3-III
3.5 Slide 19 – Standard Iconic Interface.....	3-IV
3.6 Slide 20 – Selling Activity Objects	3-IV
3.7 Slide 21 – Object Hierarchy	3-V
3.8 Slide 22 – Object Structure.....	3-V
3.9 Slide 23 – Underlying Databases	3-V
3.10 Slide 24 – Activity Approach	3-VI
4 Moving Forward.....	4-I
4.1 Slide 25 – Introductory Slide.....	4-I
4.2 Slide 26 – Wishing Wisdom Well	4-I
4.3 Slide 27 - Questions	4-I

1 Knowledge Management

1.1 Slide 1 – Opening Slide

Mr / Madam Chairman, Ladies and Gentlemen, Good morning/ good evening. ¹We are at the dawn of the knowledge age. We are living in one of the most exciting times for humanity. Knowledge allows us to grow and to develop. Knowledge allows us to control situations and people. Knowledge is the currency of life. Today / tonight we look at managing the currency of life for the benefit of us and for our fellow human beings.

Now Ladies and Gentlemen, please feel free to ask questions and comment as we go through. There will be time for questions at the end as well.

1.2 Slide 2 – Knowledge is Power

Knowledge is strength and knowledge is confidence. Knowledge is power.

Access to knowledge is a great equaliser in society. It allows anyone to compete on equal footings. Access to knowledge allows us all to bake bread, to design clothes and it allows us to drive cars. When you have knowledge you are confident, it allows you to exert control over situations and when someone else wants it, knowledge allows control over them too.

¹ Enterprise architecture note – by addressing knowledge management we not only address business efficiency but we provide a framework for enterprise architecture, software development and requirements gathering.



The sum total of human knowledge doubles every five years and in some areas, it is even faster. Knowledge is so integral to what we do, that we struggle to conceive of society without it.

When the printing press was introduced, it transformed our access to knowledge. We were no longer tied to Gregorian chants and the elites of society. We became empowered. We were liberated from the need to memorise everything; we just needed to remember where to find things. This revolution spawned the need for classification and knowledge management.

The arrival of the Internet with its vast amounts of human knowledge readily accessed in seconds is providing us with unprecedented opportunities and yet, we often feel overwhelmed and we seem to be spend a large chunk of our lives trying to find what we need.

1.3 Slide 3 – Wisdom Wanted

Before I go on, I want to define our terms. We live in a world of data overload, information is lacking, knowledge is hard to find and wisdom is wanting.

Only when you want it, you need it and you can understand it, does data become information. Just like a number in a database, a company's annual report, although well processed and nicely presented, is still data.



Information is then applied with your skills and experience to get knowledge. You then apply knowledge at the right time in the right way to get wisdom, power or profit depending upon your perspective.

Let me give you an example. You walk into your room in your hotel and you see your favourite wine and give the hall porter a tip. The hall porter created information because he needed and understood the data about your arrival at the hotel, with room number, time and your love of a given wine. The hall porter managed the relationships between the information and used it as part of a work-flow to gain knowledge. By applying the knowledge at the right time in the right way, the hall porter had wisdom / power to get money from you.

This simple example raises key issues:

- If we are ever to achieve knowledge management, we need to address data management first.
- We need to not only manage our data but we need to manage the relationships between them as well.
- Data are explicitly tied to work-flow.

1.4 Slide 4 – Why we Struggle

We struggle to find what we need because of the following.



- Information locked away on PCs.
- Disparate non-integrated solutions.
- Poor work-flow.
- Duplicated data and effort.

Our IT often reflects how the business actually operates and is it any wonder that we have problems!

1.5 Slide 5 – Knowledge Management Legacy

We got to this position as follows:

Back in the good old days of filing systems, we had consolidated storage of files so that we could share access. We indexed them and we had people dedicated to filing. Access was slow and limited and searching was person dependent.

When mainframes dominated, we had consolidated data storage, work-flow was integrated and content was separated from presentation and mechanism of delivery. The down side of mainframes were their cost, their limited computing power, the poor interface (dumb terminal) and the “gods in white coats” syndrome.

For business people, the PC was a liberation. PCs were just appearing on peoples’ desks. With the PC we had distributed computing power, an



attractive interface, we had flexibility and above all, we could bypass the “gods in white coats”. In the rush to implement the PC we lost work-flow and consolidated data storage and introduced coordination problems. As the power of the PC became more and more powerful, we put more and more complicated software on them and stored more and more data on them. This is the legacy that we deal with today.

The Internet has empowered us to unprecedented levels. It provides a low cost of entry to business and allows global access but as we rapidly adopted the Internet, the bad trends from the PC were rolled over. The Internet is characterised by poor business integration, lack of work-flow and we are in information overload.

1.6 Slide 6 – Importance of Data

Before when we talked about data, information, knowledge and wisdom, we identified three issues:

- If we are ever to achieve knowledge management, we need to address data management first.
- We need to not only manage our data but we need to manage the relationships between them as well.
- Data are explicitly tied to work-flow.

I know what to return to these three points.



First: data management. Data management is NOT a luxury. It is a business imperative.

Brains + Infrastructure + Data = Services

By taking our staff (brains) giving them desks, chairs, computers etc. (infrastructure), they use data to provide services (products) that we sell for profit. We have whole departments (HR) given over to the management of our staff (brains) and we carefully manage our infrastructure, it is in data management that we come up short.

The value of data are not included in balance sheets and financial reporting. We do not account for the cost of document creation and then manage them as assets and depreciate their value. We seldom give bonuses for data management and data management is seldom included in job descriptions and performance criteria.

This inability to properly address 1/3 of the manufacturing value of knowledge workers is why we fail to guarantee service delivery. It is a hidden cost that is just endured.

As a shareholder, it is not just the hidden cost that annoys me but it is the failure to standardise and to guarantee service delivery and the loss of market share that frustrates me.



1.7 Slide 7 – Standard Recipes

Second: the tying of data to work-flow. For every area of business operation, standard processes, rules, recipes can be determined.

- There are standard ways for creating a brand. Fail to follow them and you have a foolproof way of destroying a brand.
- TV shows and newspapers are made to formulas (recipes).
- There are standard techniques for handling the media. Look at our politicians and how they handle the media.

Recipes apply to all areas of business activity.

Macdonald's created and owns the standard recipes for fast food franchises and number 1 in the market. Hungry Jacks (Burger King) copied them and is number two. Dominoes, Pizza Hut and Subway etc. have applied them to other markets and are the market leaders.

To create market dominance in your industry, create and own the standard recipes.

1.8 Slide 8 – Real Estate Sales Process

Third information relationships. I've picked real estate sales to illustrate this point. In 20 minutes I sat down and identified the following activities for selling a property and some of the information needed. Yes we need some more detail. Yes there may be extra information and it may vary slightly



between residential, commercial, industrial and retail but basically the process is the same and same kinds of information are required. It is by handling the relationships between the information and tying it to work-flow that we deliver.

By the way, any half-capable business person can do this and provide you with the necessary details.

1.9 Slide 9 – Eliminating the Ph.D.

In our jobs and our lives, we should not have to care about applications, file formats, versions, locations and remembering where to find things. I just want the right information presented to me at the right time.

To make our lives easier, to optimise our business operations, we need to eliminate the information management Ph.D.

We need to single source information from database data, transactional data, spatial data and documents. We need an integrated search. We need to manage the information relationships and integrate with work-flow and we want it on any device anywhere anytime.



2 Real Time Decision Making

2.1 Slide 10 – Introductory Slide

Once we eliminate the information management Ph.D. Ladies and Gentlemen, our lives will be easier. Humankind shall be liberated and horizons of opportunity shall arise. Real time decision making to any device anywhere anytime shall empower our lives.

2.2 Slide 11 – Evolving Internet

The Internet is evolving rapidly and has become an every day business activity. The major use of the Internet is probably still e-mail, but this is set to change with phone calls and TV.

If we look at the business use of the Internet, we have gone through the brochureware phase. Though this is still the dominant form of Web site, it has been extended through the use of transaction processing.

There is still much to be done with transaction processing and in changing the role of knowledge workers. Advances are not technologically constrained but are held back by business integration and the lack of information management and work-flow. Only if you have existing proven business processes, can you bring them to the Internet and optimise them.

The next great use of the Internet is collaboration. With increasing use of e-mail, integrated messaging and phone calls over the Internet, the business



dynamic will change. Global collaboration becomes much easier and the need for lower telecommunication costs will drive much greater collaboration over the Internet.

As occurs with many technologies, the retail user currently leads business in the use of the Internet for collaboration. Bill Gate's new I-pod and connected entertainment is an example of this. Manufacturers and telcos are gearing up for collaboration now, except in Australia where Telstra is holding us back.

The forward thinking companies are looking beyond collaboration to real time decision making. This is the next big opportunity and will really drive societal change. Real time decision making will empower us to an unprecedented extent.

2.3 Slide 12 – Real Time Decision Making

Ladies and Gentlemen: Our lives are about making decisions and how we struggle to make them. We struggle because we do not have the right information, presented at the right time, in the right way.

We spend our time searching instead of doing!

What we need is real time decision making rendered to any device anywhere anytime. Real time decision making is about having the information we need delivered to us at the right time in the right way. Real



time decision making is about providing us with what we need to make decisions, so that we can spend our time doing instead of searching.

Let me give you some examples:

- Foreign exchange trades – You want to know the best rate, cheapest fee, assured delivery, who to use etc. and you want all of this delivered when and where you need it so that you can decide to do the trade.
- Travelling home – You want to know the best route, how to avoid the traffic jams, cheapest petrol, tolls etc. All displayed as you need it so that you can make a decision.
- Eating out – your favourite restaurants bid in real time, with incentives and offers, to get you to eat there. Supermarkets bid in real time to get your business.

Real time decision making empowers the customer and it all can be done through your TV set, laptop or mobile device.

2.4 Slide 13 – Elements of the Solution

The basic building blocks of the solution are as follows:

2.4.1 A consolidated repository

Create a virtual consolidated repositories to single source information and stop the duplication of effort. Issues with versions, formats, locations etc.



are a thing of the past. We combine spatial data, database data, transactional data and documents and separate content, from presentation and mechanism of delivery. The issues of archiving, backup, recovery and version control are performed on the consolidated repository, freeing up the end user and their end-device, i.e. we form a virtual mainframe.

2.4.2 Information integrated with work-flow

Information relationships managed through a metadata framework (data about data). Framework includes classification schema, versioning information, role based access and security, privileges and device specific information. In the future we will have artificial intelligence to classify information and relationship manage.

2.4.3 A unified knowledge search

Search will be unified across all data types and tightly integrated into work-flow. Searching will include the information relationship framework and role based access.

2.4.4 Work-flow

Define our standard recipes and relate information to the task we are trying to achieve. Incorporate work-flow into the interface when rendering information.



2.4.5 Security

Not mention now.

2.4.6 Standardised presentation

I'll come to that in a minute but we need a unified interface across devices, allowing for personalisation, customisation and branding. As long as we separate content, from presentation and mechanism of delivery, this can be achieved.

2.4.7 Messaging

To deliver to any device, anywhere, anytime, we need a unified messaging environment. We need to combine, voice, data, text, images and video.

People often confuse fax and email between being a document and information with that of a messaging environment. Email and fax should be considered as a messaging environment like the phone. We just choose to store the information in the messaging environment instead of separating them out as we do in a phone call.

To guarantee service delivery in our messaging environment we need to architect a solution around the FedEx model.

FedEx guarantee the delivery of a parcel - a message. There is a quality of handoff to FedEx and if it is not met, they do not accept your parcel. Yes



they make every effort to help you but you need to meet that quality of handoff.

FedEx then have an industrial strength pipe to deliver between A and B with guaranteed service delivery and a handoff back to you.

FedEx is not in the warehousing and storage business; they are in the delivery business. FedEx do not confuse storage with transmission.

FedEx processes catch the exceptions and successively handle them; i.e. the exceptions are not ignored and discarded.

To deliver a unified messaging environment that guarantees service delivery, you need to use the FedEx model.



3 Designing Solutions Information Age

3.1 Slide 15 – Introductory Slide

Ladies and Gentlemen: I want to talk now about how we design software and how we design our enterprise solutions to support real time decision making.

3.2 Slide 16 – Proven Design Principles

Look, there is a lot of talk about methodologies, e.g. Prince vs PMBOK, design philosophies, e.g. SDLC vs Agile, and whether you focus on big picture enterprise architecture or evolving needs per business unit. Today / tonight I want to cut through this and look at sensible solutions.

Start with the basics. What we do does not change that fast, it is how we do it that is rapidly changing. Above all, the proven principles change even slower.

Mobile phones have a rapid development cycle and a short life expectancy in the marketplace. Mobile phones are designed and made using proven principles and a rigorous design and engineering process. So let's go look at these principles and pick the best of them:

- First principle - Any methodology is only as good as its implementation. It is people and communication using a common process that delivers. Move past the theory and deliver what works.



- Second principle - Market forces drive solution design and enterprise architecture. An evolving market requires highly responsive solutions, whilst a mature market is highly regulated and utility infrastructure is the order of the day. We know how to integrate market forces, cost, regulation and customer demand into our solutions. We have umpteen road maps to show us how to do it.
- Third principle – IT is the assembly line for knowledge workers. Go look at industry and see how they can quickly bring product to market, whilst following a proven design process. Go look at how they design their assembly lines and apply proven principles.
- Fourth principle – Define the product. If you do not have a clear vision of what you are trying to develop, what it will look like, how it will function and the goal keeps changing; then of course, it's not going to work. Market forces, marketing principles and user testing tells you how to do this – we do not need to re-invent the wheel.
- Fifth principle – Common business practice tells you that a mixture of specification, modelling, prototyping, testing and doing things in stages that delivers.



3.3 Slide 17 – Common Process

Every business process is a recipe. Every area of business has common elements with other areas of business, e.g. refunds or signature verification. In the example here, I have picked three financial services examples and related it to a courier service and along the bottom, we have different insurance types.

Define business along functional lines and cross product lines. We define the recipes and stop duplicating the common functionality.

3.4 Slide 18 – As the User interacts

So, how do we do it.

Begin with what the user sees and how the user interacts. A standard iconic interface. A series of simple icons that people can understand and that are intuitive. Arranged appropriately, to detail the work-flow and eliminate the need for cumbersome navigation.

Upon choosing an icon, the interface automatically refreshes to provide the next layer of activity. Drill down through tasks. A list of short-cuts is supported.

Whole thing is customisable and one framework works across all applications. Can configure interface for multiple devices and integrates to task management and messaging.



Multi-lingual support is seamless and icons bridge nationality. Search and help available. Help is context sensitive.

As well as having fun in choosing icons, the interface can be readily determined by most business people. Above all, it integrates documents, transactional, database and spatial data and eliminates the need for application specific expertise.

3.5 Slide 19 – Standard Iconic Interface

The features and benefits of the interface are summarised:

3.6 Slide 20 – Selling Activity Objects

From the interface objects, we can define a series of standard activity objects, along Audience-Task-Recipe lines. Audience – is who the task is being completed for. Task – the job we want to achieve. Recipe – the steps we need to go through to achieve the task with the right information presented.

Consider the activity of selling. We can determine a series of activities for this, e.g. reporting, market analysis or product details and ordering.

The objects define a hierarchy of work-flow and processing incorporating the required information, security, business rules, processing logic and more.



3.7 Slide 21 – Object Hierarchy

Take the account object. A series of further objects are determined, e.g. account creation, contact details. As you drill down the object become more specific but form a logical task sequence.

This approach is easy to use and design and is easily documented.

Furthermore, it is inclusive and authoritative and is not prone to the vagaries of current requirements analysis because the business can readily give you this information.

3.8 Slide 22 – Object Structure

Rules, images, processing logic and content etc. are all separated and stored in contextual databases. Using the standardised objects, the required elements are combined and passed through the hierarchy to the standard interface.

Since the rules, information and processing logic, are separated in databases, it is easy to add customisation. Standard objects can be readily defined and then extended to industry specific situations.

3.9 Slide 23 – Underlying Databases

Key to the standardised approach is the separation of data, processing rules, logic and images etc. from the source code and having it stored in consolidated databases. Contextual databases (information in context) is



stored in a variety of databases and drawn together in real time to form the required objects.

Needless to say, the databases are virtual consolidated repositories.

3.10 Slide 24 – Activity Approach

Ladies and Gentlemen: As you reflect upon the approach and the software design principles, I'd like to summarise the activity objects approach for you, both the elements and the advantages of it.



4 Moving Forward

4.1 Slide 25 – Introductory Slide

Ladies and Gentlemen: At the start of this talk, I said “knowledge was power”, it is, but knowledge is much more than that.

4.2 Slide 26 – Wishing Wisdom Well

By addressing knowledge management we not only address business issues but we have a framework for business development optimisation, enterprise architecture, software development, solution design, requirements gathering and testing.

We need to address wisdom management not because of the business benefits but because it is about empowering society to a better life. It is about realising real time decision making for the betterment of all.

4.3 Slide 27 - Questions

Ladies and Gentlemen: Questions please.

