



CHANGING INFORMATION TO KNOWLEDGE

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The information universe is transforming. The technological developments of the closing decades of the last century have created an ever-expanding universe of information, from pure content creation to the endless statistics created by every individual's interaction with the new technological environment.

This growth in the ability to create and distribute information, and the facility to monitor its use, offers enormous cultural, educational and financial benefits for those who know how to harness it and can present information in usable form hence extract Knowledge. However, the same growth has led to an inevitable dilution in both the quality and the applicability of that information to any particular individual unable to utilize knowledge of information.

Monitoring and identifying relevant information, and assimilating, managing and responding to it, is placing increasing time demands on the individual. In an ever-expanding universe of information, information itself is no longer scarce but Knowledge is. Many people have reached a point of “information overload” – they don't have the time to find the valuable information themselves and convert into knowledge.

Similarly for enterprises, systems are delivering and receiving information on a continuous basis – client services deliver data and track usage; internal services aggregate information; systems monitor technical activities round the clock. The real challenge is to harness this information for real competitive advantage and for economic benefit. Timely, relevant information has become the scarce commodity. For the workforce, intelligently managing and distributing information offers real opportunities for cost- and time saving, and improved customer servicing. For clients, value-added, convenient and pertinent services will build client relationships and drive revenues.

INFORMATION DELIVERY CHALLENGES

The growth of “any information to any device” solutions has already answered the questions of how, when and where information can be delivered. Users now expect to be able to access information at their convenience and services must answer this demand.

However, this user expectation creates new challenges for the information service provider: quality, consistency, and applicability of service. Users use different devices at different times for different reasons, but the core 80% of actions each day are repetitive functions: looking for email; checking diary; accessing or updating databases. The challenge is to offer access to often, vast centralised databases of information but to deliver highly personalised and relevant information, making best use of the mode and medium of delivery.

Existing information solutions have failed to solve these core problems. They are constructed on the old linear information paradigm built around “browsing” and deeply hierarchical menu structures where a user must drill down before s/he has an idea of what, if any, information is available and of interest. This structure is workable, if not ideal, with PC access, but is ineffectual and time-consuming on other voice and text solutions. Alternatively, companies implement narrow technical solutions that solve one information problem (e.g. field sales monitoring) but which are not part of a more complete corporate information solution.

The resulting “negative user experience” has created resistance against the adoption of WAP, GPRS and (eventually) 3G services, from a public disillusioned with broken service promises. Successful services need to overcome this resistance with high quality, user-friendly, value-added services. Good mobile services will typically be used frequently and often. Successful services will offer rapid, easy access to valuable, personalised information. “Browsing” diverse information sources are not a reliable option (dropped connections, slow download times etc). Services must offer the consistent, relevant and pertinent information, optimally rendered – both with regard to delivery (text, voice etc) and content (text, graphics, multi-media etc), to offer a service that is not just “anywhere, any device” but the most valuable information, easily accessible and easily navigated, anywhere on any device.

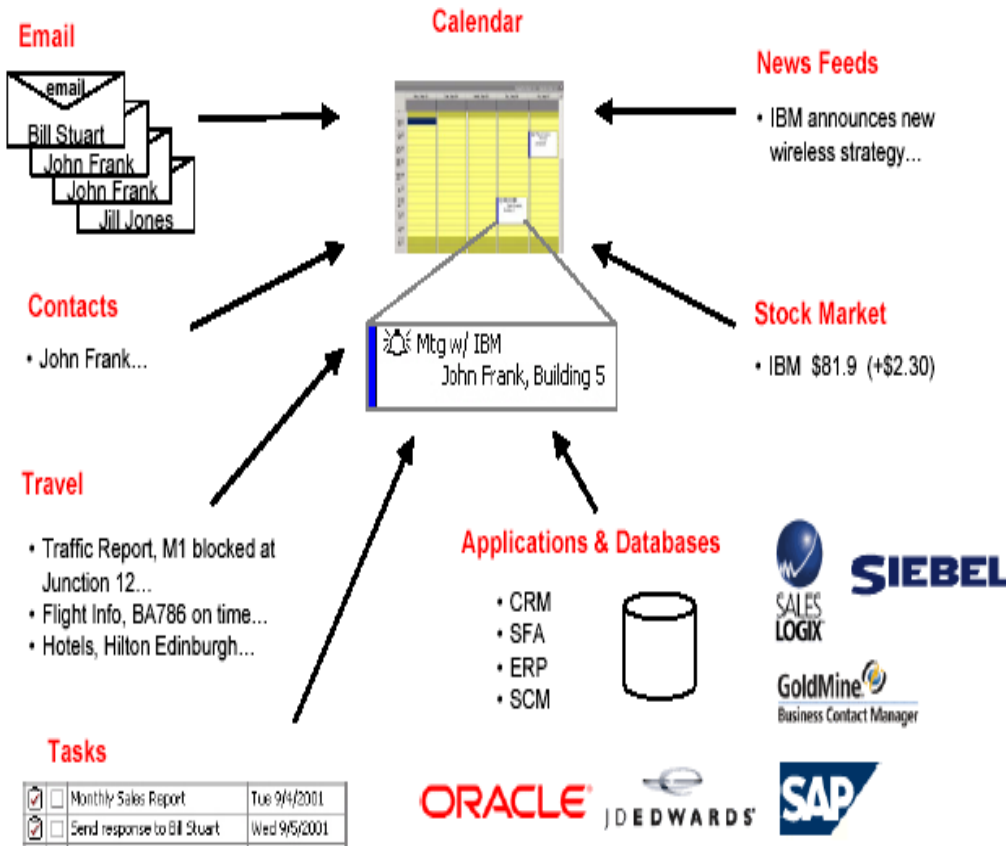
VERSATILE INFORMATION SOLUTIONS

From consumer services to enterprise solutions, the capability to delivery timely, personal information can improve the usability and value services, and boost the productivity and efficiency of work forces.

Consumer Services

It is a truism that customers are expensive to acquire. Whether a major telecom carrier or a retail bank, securing customer loyalty and realising the value of each customer is vital. Quality services are essential in differentiating from competitors. These must offer relevant, timely, valuable services and information that are easily accessible in as many ways as possible. However, the obstacles to offering such a service often seem prohibitive: from how to deploy solutions for everything from a set-top to a standard landline cost-effectively, to how to manage the information delivery and formatting, and how to ensure a solution will deliver value now but migrate to next generation technology etc. And mistakes can be costly.

Relevance Cluster



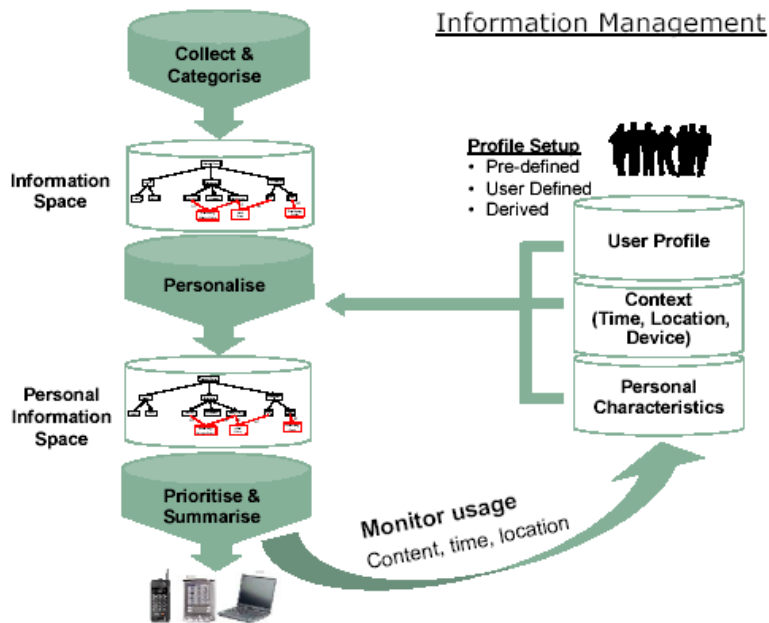
Enterprise Solutions

Mobilising an enterprise's critical and valuable information can deliver real competitive benefits and cost reductions, whether for field service forces (sales, customer services, engineering etc), information professionals (financial, legal, etc) or suppliers and partners. It can reduce costs through resource and supply chain management; improve revenues through better customer relationship management; and increase efficiency by delivering workforces up-to-date, relevant

information on the move. However, deploying and managing such a solution can seem daunting. Enterprises are concerned about deploying information solutions that will become redundant when the next generation of telephony technology arrives, or when newer access devices become available. They are concerned about integrating legacy systems; about maintaining the integrity of centralised databases; about avoid expensive gambles in a constantly shifting technological environment; and about falling behind their competitors if they don't take that gamble.

Industrial Solutions

As industrial processes become increasingly complex and manufacturing facilities follow business in becoming more geographically disparate, there is an increasing challenge to manage industrial processes and information in the most cost-efficient and time efficient way possible. Increasingly complex production systems require constant monitoring to ensure that end-to-end production can be maintained at an optimal level. Information on systems functions must be delivered in a timely fashion to the appropriate engineers and systems administrators, to ensure prompt maintenance of systems and comprehensive monitoring of processes. Automating this process for maximum cost and time efficiency can be a highly complex task.



Conclusion

The range of challenges presented by the need for information retrieval management and distribution systems across a range of industries and sectors, can be delivered to corporate (whether consumer, enterprise or industrial) by information solutions that are:

- Accessible: offering the most rapid access to information with the minimum of effort and potential confusion possible.
- Personalisable: highly

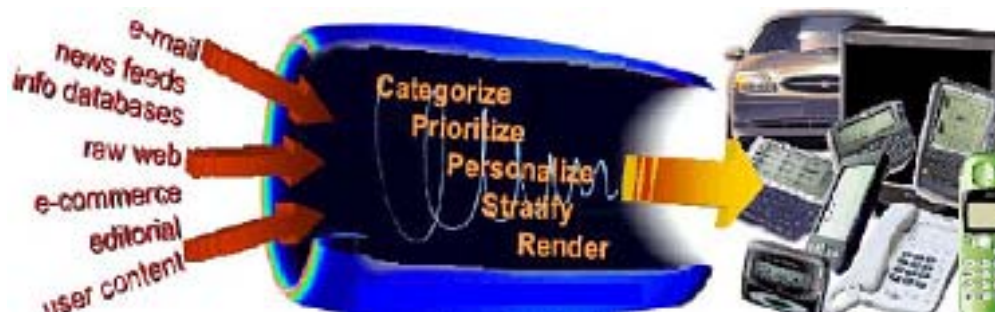
configurable personalisation to ensure that information is delivered the relevant person, with reference to time, place, urgency and interest.

- Intelligent: understanding the information held; what elements can be delivered to what device to ensure the most efficient and user-friendly solution; how information is used.
- Feed-agnostic: accepting feeds from all sources and in all formats.
- Device-agnostic: offering access to a centralised information system in what ever form (text, voice etc) and on whatever device, offering improved efficiency and reduced cost.
- Carrier-agnostic: a solution that can offer real solutions on GSM but GPRS-ready and can be migrated to 3G.
- User-error resistant: an interface that offers the least possible opportunity for user error to interfere with effective information delivery.

KNOWLEDGE: INFORMATION RETREIVAL, MANAGEMENT AND DELIVERY

CORE PROCESSES

- Collection: collect content from any source.
- Categorisation: analyse the context of information to correctly categorise it and associate it with related information.



- Prioritisation: calculate the priority of each item of information collected.

- Information Space Database: prioritised information is stored.
- Personalisation: A user can specify through a user profile the categories of information also the relative interest in each category.
- Stratification: determine what information in the Personal Information Space is most important to the user.
- Rendering: system to present information concisely to the user.
- Delivery: Multi channel delivery independent of device and platform but customized according to any device used for useful representation.

Deepak Pareek is a seasoned Financial Technology Specialist specializing in Enterprise, Internet and Wireless applications. He has worked with a wide range of companies, financial institutions, and IT personnel to effectively meet the benchmarks. Deepak is available to consult on your next IT project. Visit his site today for additional details.