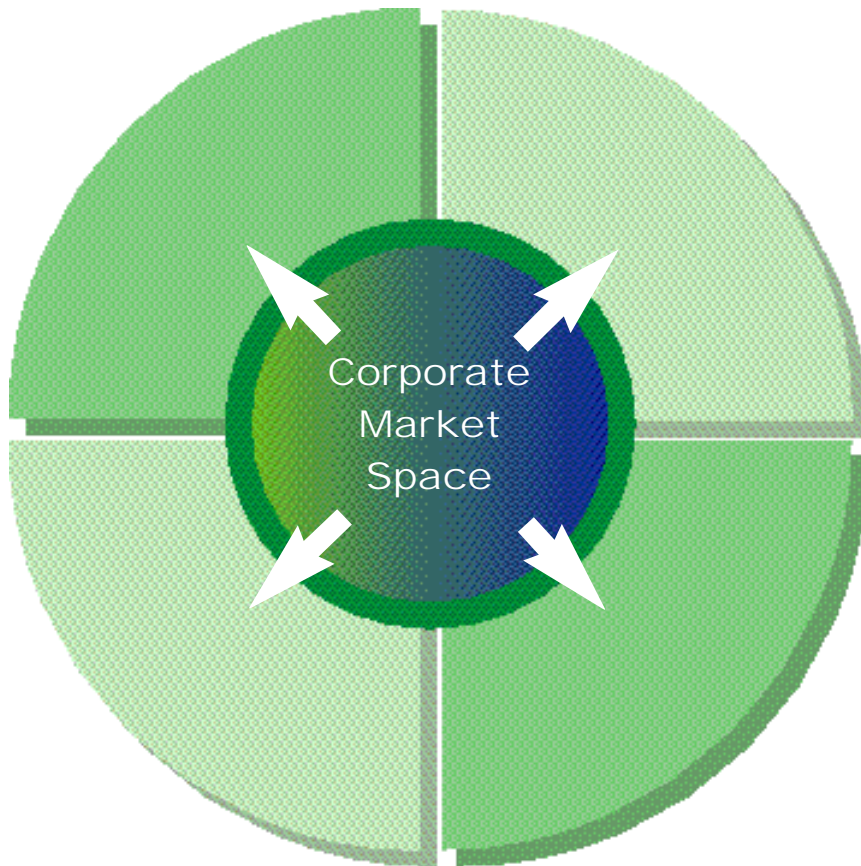


Intranets: The Backbone of Corporate Market Spaces

Executive Summary



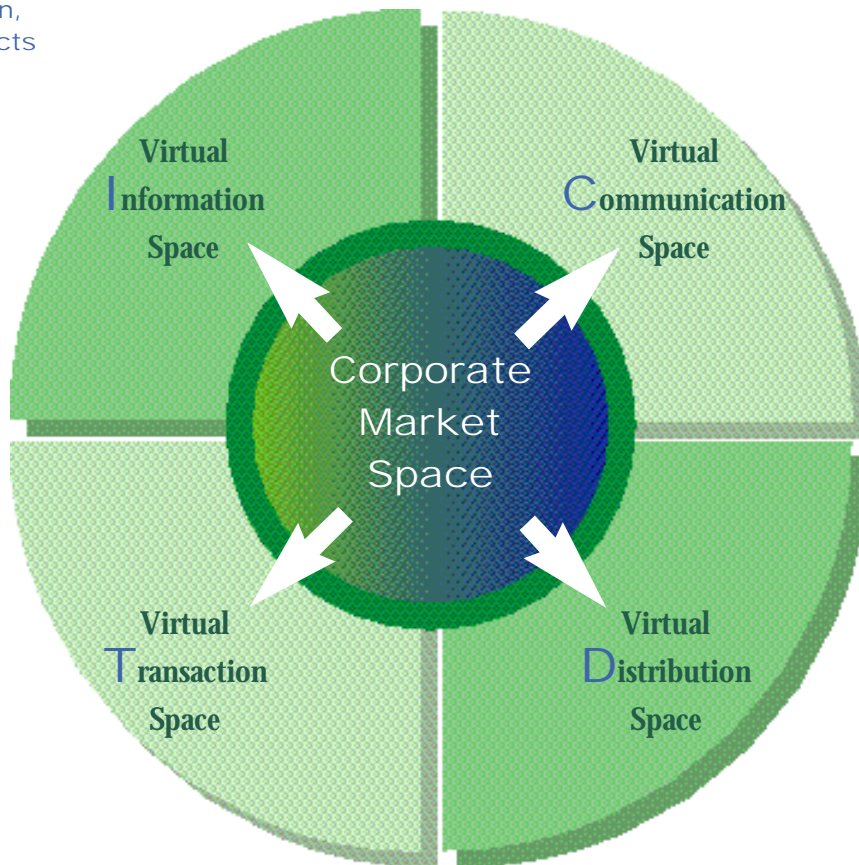
A study sponsored by IBM



Leveraging the new organisational Information, Communication, Distribution & Transaction channels

Creating new channels for organisational agents to display and access information about themselves, their role, function, knowledge, projects and objectives.

Creating new channels for organisational agents to engage in formal & informal communication, coordination/teamwork, and sharing of knowledge & best practices.



Creating new channels for organisational agents to initiate and execute workflow related organisational transactions and standardised administrative processes.

Creating new channels for organisational agents to distribute official corporate documentation, internal resources, and services like training & online support.

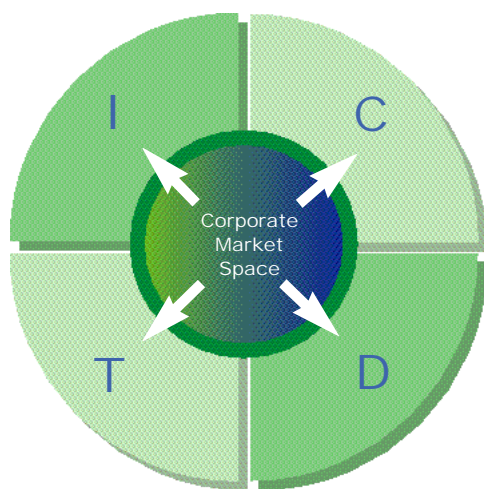
Intranets: The Backbone of Corporate Market Spaces

Executive Summary

The performance of modern organisations is determined by their efficiency in generating value by matching market demand, predicting it accurately, and contributing to its development through innovation.

The key resources that companies use to achieve their goals are people - their skills, knowledge and imagination. Companies also depend on their people's capability to extend and apply all these qualities in working together to create and implement the corporate vision and objectives.

From this perspective, a company operates like a market in which organisational agents (such as individuals, teams or business units) cooperate and compete to achieve a shared objective. In these 'corporate market spaces' the role of management is to govern: creating and regulating the four key 'virtual' spaces within which organisational agents operate and interact:



Details on diagram on left page

1- Virtual Information Space

Accessing company-related information in a fast and transparent way, answering questions such as "who's who?" or "who knows what?"

2- Virtual Communication Space

Communicating in formal and informal ways, unlocking sources of knowledge and expertise, and improving the performance of teams.

3- Virtual Distribution Space

Distributing efficiently key internal documents (e.g. corporate guidelines), resources (e.g. software) and services such as training and support.

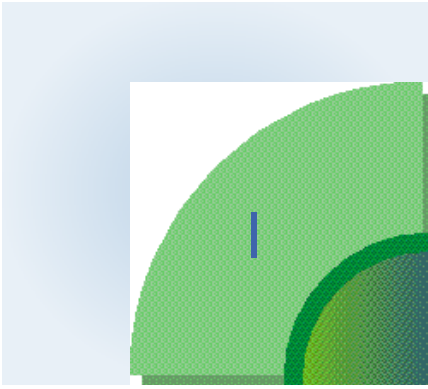
4- Virtual Transaction Space

Reducing the cost and cycle time of structured internal transactions and administrative processes such as budgeting and claim processing.

The cases in this research illustrate how intranets can provide a backbone for radical new efficiencies across all four key areas.

The immediate benefits are in the scope for major improvements to corporate information, communication, distribution and transaction channels.

Further, the easy sharing of ideas, 'best practice' and achievements open the way to stimulating continuous corporate renewal through innovation of internal processes at all levels of the organisation.



Intranets as Corporate Information Spaces: Increasing Organisational Transparency & Business Intelligence

Key business functions addressed

Market efficiency can be achieved only by eliminating information barriers so that information about demand and supply can be accessed and distributed in an economic way. The analogy to this is that organisational efficiency can be achieved only when information about all the elements of the organisation (such as individuals, project teams, and business units) and their role and function in the company can be accessed and displayed in a transparent way. Companies are organisationally efficient when questions such as 'who is who?', 'who knows what?', and 'who is responsible for what?' can be answered easily at all levels of the organisation.

Intranets provide a new way of significantly improving information flows inside a company by: 1) enabling employees to access relevant market information immediately and at low cost, and 2) enhancing the transparency of the organisation and the visibility of its different elements - thus gradually helping to eliminate internal information barriers and to stimulate new synergies and cooperative activity.

Functions concerned:

- Public relations ■
- Engineering / R&D ■
- Customer services ■
- Finance and Accounting ■
- Marketing ■
- Purchasing ■
- Sales ■
- Human resources ■
- Investor relations ■
- MIS ■
- HR / Recruitment ■

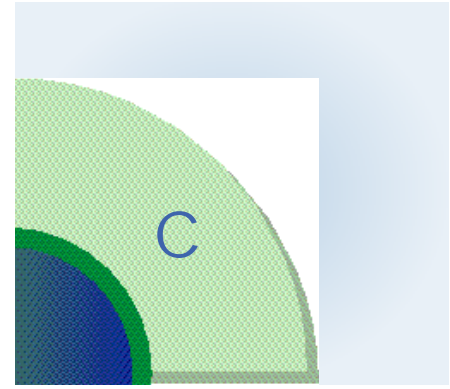
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Case 1

An R&D team uses an intranet to select and manage its project portfolio

Case 2

Information from a 'global directory' makes teamwork easier by helping to locate the right people and resources for projects across the world.



Intranets as Corporate Communication Spaces: Creating New Communication and Cooperative Work Environments

Key business functions addressed

How employees communicate and work together determines a company's ability to create synergies, to make better use of the ideas and innovation potential of its employees, and to increase the performance of project teams across functional and geographic boundaries. This is true whether the cooperation is formal or informal, within or across departments, global or local. The role of managers here is to create appropriate 'communication spaces' by exploiting the potential of new technologies to enhance places like office buildings, meeting rooms and cafeterias in which people normally interact with 'virtual' extensions that support distributed teamwork, tele-working, and so on.

In recent years, companies have successfully taken a first step in this direction with electronic mail systems - achieving a measurable impact on the cost, speed and quality of corporate communications and cooperative processes. The use of intranets can deliver further gains through the design of more customised, flexible and user-friendly 'virtual' spaces that allow groups of employees to communicate efficiently across functional and geographic boundaries.

Functions concerned:

- Public relations ■
- Engineering / R&D ■
- Customer services ■
- Finance and Accounting ■
- Marketing ■
- Purchasing ■
- Sales ■
- Human resources ■
- Investor relations ■
- MIS ■
- HR / Recruitment ■

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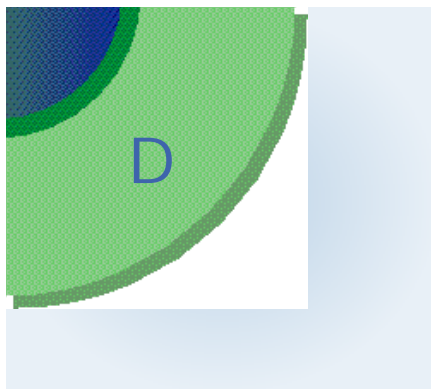
Case 1

The first Belgian bank to offer electronic banking via the Internet is now putting internal applications on the intranet

Page 7

Case 2

The implementation of an intranet in a European media company has made communication by fax and paper a thing of the past



Intranets as Corporate Distribution Spaces: Towards Efficient Access of Internal Documents, Resources & Services

Key business functions addressed

Efficient distribution channels determine the speed at which employees at all levels 1) access relevant documents such as corporate guidelines, product specifications, market reports and technical documentation, or structured templates and forms, 2) exploit the knowledge accumulated in the organisation over the years, and 3) access internal services provided by business units and functions - including training, technical help desks, sales support or legal advice.

Intranets provide a new platform for guaranteeing easy, low-cost and immediate access to up-to-date document libraries, knowledge bases, and internal services corporate-wide. Intranets help avoid unnecessary duplication of effort and make full use of best practices, internal resources and services. These can be delivered online and on demand, across geographic boundaries.

Functions concerned:

- Public relations ■
- Engineering / R&D ■
- Customer services ■
- Finance and Accounting ■
- Marketing ■
- Purchasing ■
- Sales ■
- Human resources ■
- Investor relations ■
- MIS ■
- HR / Recruitment ■

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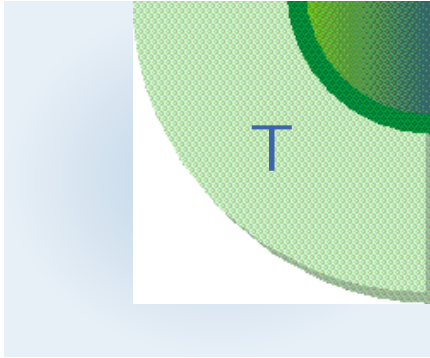
Case 1

An international advertising agency responds with speed and accuracy to customer needs through its new knowledge-based 'mediatech' approach

Page 9

Case 2

A large international corporate bank uses an intranet to consolidate customer information and offer a highly professional service



Intranets as Corporate Transaction Spaces: Redesigning Administrative Processes & Workflows

Key business functions addressed

A company's performance largely depends on the ability of individuals and business units to engage in structured business processes. These include requests handling, claims processing, budgeting, recruiting or reporting. Such internal transactions between different elements of the company typically require a high level of transparency and coordination: who should deliver what to whom, in which order or sequence, and when? It also requires monitoring - the tracking and recording of meaningful events.

Intranets provide managers with an opportunity to redesign and streamline internal transactions. This can bring significant reductions in cycle times and costs of maintenance processes, while increasing the processes' transparency and traceability.

Functions concerned:

Public relations
Engineering / R&D ■
Customer services ■
Finance and Accounting ■
Marketing
Purchasing ■
Sales ■
Human resources
Investor relations
MIS ■
HR / Recruitment

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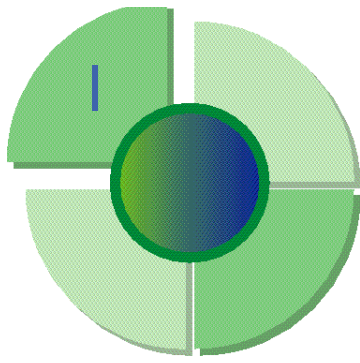
Case 1

A major manufacturer uses an intranet to track supplies and reduce purchasing costs.

Page 11

Case 2

In just two months, a large European reinsurance company introduced a secure extranet that reduces the business cycle from 12 days to two - and strengthens a long-term customer relationship.



Redesigning Information Channels Cases 1 and 2

Managing project portfolios

An R&D team uses an intranet to select and manage its project portfolio

In a large European energy provider, the R&D department is a major force for innovation. With deregulation on the horizon, the company is preparing to face the revolution that will affect all European energy suppliers. Because of this, the R&D department is extending its focus beyond core research to offer internal - and sometimes external - partnerships aimed at defining, researching and developing new products and services for the group. By improving the information flow across the company and within its departments, an intranet is enabling the R&D team to identify emerging needs that offer new business opportunities, together with the related funding. In developing and implementing the intranet, the project manager was determined to 'keep it simple, be pragmatic, and give users something they can use and manage'. The result is an application that enables the R&D team to share and exchange ideas on proposals of interest within the group and across the enterprise - thus raising the visibility and transparency of R&D activity. Project tracking and management is also an integral part of the application - greatly reducing the time and effort that R&D specialists need to spend on selecting new proposals and managing the projects.

Designing the 'transparent' organisation

Information from a 'global directory' makes teamwork easier by helping to locate the right people and resources for projects across the world.

Among the challenges facing a large multinational engineering group was maintaining the company culture and contact, and enabling teams to work together when individual members are dispersed around the world. With 51,000 employees and a presence in 100 countries, the group was finding it difficult to maintain coherence and communication over its wide geographical spread. It needed to tighten coordination between sales, marketing, engineering, R&D and customer services to develop and support new products effectively. At the same time, the acquisition group was asking for better ways to access and exchange legal and negotiating data.

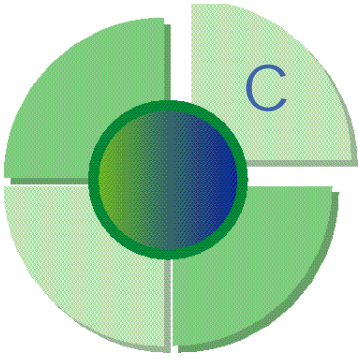
The company implemented a company-wide intranet offering over 100 forums organised on business lines. An important aid to communication was the development of a directory with a search engine. This makes it easy for the company's people to locate specialists,

skills, or resources relevant to an activity or project - navigating through the organisation chart to find what they need.

The enterprise has implemented even more specific intranet functions that model the coordination needs of entire processes such as new product development or acquisitions. Because of the global reach and management requirements of such a large intranet, the company approached the project through an alliance with an international telecommunications service provider which manages the intranet.

Implementing the intranet has enabled the company to overcome the barriers of geography and time zones, thus enhancing collaboration between the different teams and functions within the company. It also releases the full value of the company's people and their expertise - they can share knowledge, find current information on bulletin boards, and use workgroup applications to reduce the time-to-market for new products.

Redesigning Communication Channels Case 1



Extending electronic banking benefits from customers to employees

The first Belgian bank to offer electronic banking via the Internet is now putting internal applications on the intranet

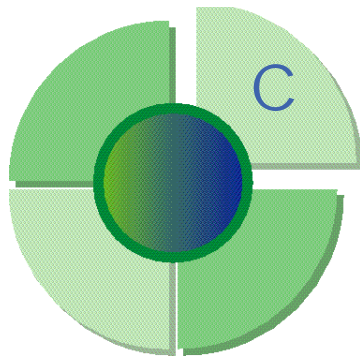
One of the largest banks in Belgium constantly seeks innovative service solutions to increase its market share. Corporate customers have had access to electronic banking for several years using industry standard protocols. This year, the bank has extended this service to its other customers - becoming the first in the country to offer electronic banking on the Internet.

As subscribers to the new service have increased from 150 a month to 100 new subscribers a day, the bank is extending the benefits of network computing to its employees with a range of applications on an intranet. The applications address key business processes related to the bank's financial services, and thus are enabling the bank to review and revise its operations, and introduce innovative ways of working.

All sectors of the bank can profit from the intranet. Technical services staff who monitor the network can now operate remotely. Translators can 'telework' from home. In sales, branch managers can 'take the branch to the customer' - thus opening the way for 'virtual branches'. For household credits, the bank already has a credit simulation system based on Java, and available to its electronic banking customers, and the bank's savings product team will also be able to handle transactions on the intranet. Better communication across the organisation also enables the human resources department to find new ways to offer job opportunities.

The team implementing electronic banking took the innovative approach of first building a successful electronic banking system to serve customers, and then applying the experience gained to internal developments. One important feature aimed at smoothing and prioritising the development of new intranet applications was the integration of a 'Workflow' procedure. Departments requiring an intranet application first complete an electronic form template. All requests are then verified, qualified, and prioritised using a scoring system based on the bank's strategy, and the external and internal customer value the new application offers. This way, the bank can rapidly develop services that offer the highest business value, and make them available to employees on the intranet and externally to customers via the Internet.

As a result, the bank is attracting new customers, and seeing its market position rise along with customer satisfaction. Electronic banking subscribers have increased by 1500% since access via the Internet became available, and internally the bank's employees are gaining the benefits of new, more effective working practices made possible by better communication and the ability to share information.



Redesigning Communication Channels Case 2

Fax and paper becomes outdated

The implementation of an intranet in a European media company has made communication by fax and paper a thing of the past

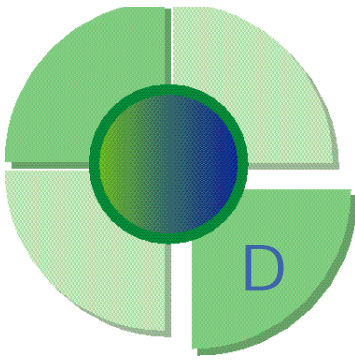
A media company that is a world leader in encrypted television services takes pride in the fact that an astonishing 98% of customers renew their subscriptions annually. Until recently, internal communication was entirely paper-based, but now the company successfully uses an intranet to improve communication in all its key business areas.

Electronic mail lets employees communicate quickly within the department or across the company to exchange messages and information and reduce the lead time for projects. Bulletin boards on the intranet keep employees up-to-date with company information, press reviews and future activities, and also provide a convenient and accessible way for the human resources team to distribute HR information such as job offers.

The company saw an urgent need for an enterprise-wide communication system, and began the project in January 1997 when the internal communications and IT departments set out the early plans for a pilot application for presentation to the Board. After reviewing various technologies, they decided to implement an intranet with controlled access to the Internet. Special care was taken to ensure that the look and feel of the intranet was in harmony with the company culture - so the 'home page' has the same family style as other company publications, complete with company logo.

The intranet was developed and implemented within three months, and is now providing core functions such as electronic mail, press reviews, access to knowledge bases, corporate information, HR information bulletin boards, sales management, and Workflow applications. In addition, TV programme information is made available to the public directly from the intranet to the company's Website.

The company has moved smoothly and quickly from paper to electronic communication. From the start, it focused on informing, training and supporting users, and produced a basic guide to the intranet for employees. The payback from this is the universal view that the system has increased productivity and improved teamworking. One example of the intranet's success comes from the company's daily satirical puppet show. This is produced in two separate locations, and formerly suffered delays and inaccuracies because the scripting team was communicating with the production team by paper and fax. Transferring this to the intranet allows the immediate exchange of ideas and makes revisions easy to follow. Benefits like these are delivering real business value by revolutionising the way the company operates.



Redesigning Distribution Channels Case 1

Distributing the benefit of knowledge and experience

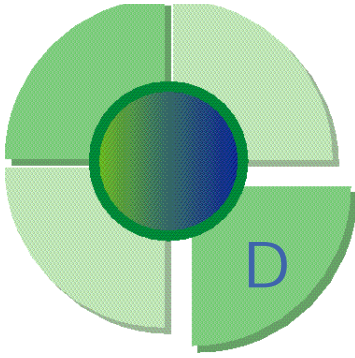
An international advertising agency responds with speed and accuracy to customer needs through its new knowledge-based 'mediatech' approach

A leading advertising agency with offices in the world's major capitals is blending technology with creativity to find innovative ways to promote clients' products. In preparing campaigns for new products, the agency spends much time on researching results of previous work for the client and competitive products in the marketplace. For consumer products this is an especially lengthy process, and the marketing department asked for a tool that would give the creative team instant access to information about what had been produced for specific products - on film, photographs and text - to help them speed their response to clients.

The Paris agency developed a media knowledge base - a 'mediatech' - working with the marketing department to find out what information would really help them speed up the delivery of proposals to customers. This teamwork helped to ensure a smooth development and implementation process. Taking extra care not to use technical jargon, the development team presented users with a friendly intranet interface, thus avoiding any possibility of resistance to change.

Today the marketing department has dramatically improved productivity and client service with a tool designed precisely to meet its needs, and can quickly carry out the essential background research before creating new product images for clients. Marketing's involvement from the start has been a key success factor in developing an intranet that everyone can easily understand and use.

Redesigning Distribution Channels Case 2



Global customer service based on local information

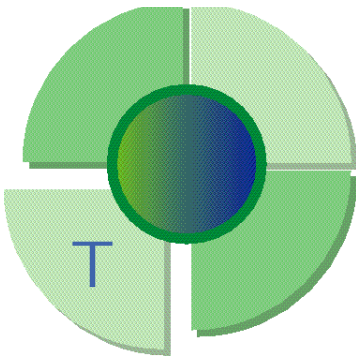
A large international corporate bank uses an intranet to consolidate customer information and offer a highly professional service

A large bank working with corporate customers in several countries has successfully provided its specialist teams with access to comprehensive customer information that was previously dispersed across the organisation. For corporate customers in particular, banks face the challenge of providing consistent, high-quality service at the global level, while in many cases branches or local representatives manage customers at the local level.

With this challenge in mind, the bank implemented an intranet across the enterprise, enabling salespeople in every branch to access full information about the customer, and to keep track of customer contacts in different locations. The application also helps manage documents related to the customer so that they can be accessed whenever and wherever they are required.

Now, by sharing information between its widespread sales departments, the bank is able to take a global view of its customers and provide a more thorough and professional range of customer services. Both the bank and its customers are discovering new benefits from having consistent, complete information at both global and local levels.

Redesigning Transaction Channels Case 1



Increased buying power through enterprise- wide supply management

A major manufacturer uses an intranet to track supplies and reduce purchasing costs.

One of the largest independent component manufacturers for the automotive industry employs 30,000 people in some 21 countries. The group is highly decentralised - each site is an independent business unit developing and producing high-tech products to meet local needs. The purchasing department employs 350 buyers, each responsible for a number of supply lines. Purchasing is an area of prime importance in a manufacturing environment in which the supply of consistent quality, well-priced goods delivered on time underpins the profitability of the production line.

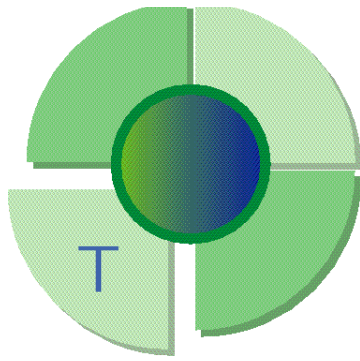
The company needed to coordinate and optimise the sourcing of supplies, thus in 1996 the head of purchasing decided to implement an application that would enable buyers to communicate efficiently with each other, to share supplier information and best practices, and to track product supply. Another key requirement of the application was to provide purchasing management with monthly reports showing a consolidated view of the group's buying muscle, so that they could use the group's bargaining power to buy more competitively in the global marketplace.

To achieve these goals, the company implemented an enterprise-wide Supply Management System based on a Lotus Notes intranet. The implementation and operation was outsourced to a major international service provider. The new system is easy for buyers to use: they complete one electronic form per product purchased, giving five key figures: percentage cost reduction, turnover, satisfaction rating, deliverables rejected/PPM and refused delivery/PPM.

These factors are then consolidated for all buyers. The Supply Management System produces one master report for each supplier every month. This is available to every buyer, with a monthly summary available to management. Buyers have access to all the information which enables them to compare suppliers on factors such as cost, quality, and delivery, and gives buyers the information they need to negotiate new deals. Two forums on purchasing and supply management are linked with the Supply Management application so that buyers can share experiences and information on best practice.

By making it easy to share and exchange supplier information the intranet-based system has enabled the buying team to operate more efficiently and deliver increased value to the group. Supplier information from different factories is automatically consolidated, and supplier management is more consistent. At the same time, the intranet has created a strong purchasing community through its environment of open communication and cooperative working.

Redesigning Transaction Channels Case 2



Compressing underwriting cycle times

In just two months, a large European reinsurance company introduced a secure extranet that reduces the business cycle from 12 days to two - and strengthens a long-term customer relationship.

For one of Europe's leading reinsurance companies, claim management and credit check facilities are among its most important services, and are used by a major banking customer to underwrite its loans portfolio. In a typical business cycle, the bank's own customer would complete a loan request form which was then processed and forwarded to the reinsurance company by post or fax. The reinsurance company then evaluated the risk, and transferred it to one of its insurance suppliers who - in turn - would analyse and accept or refuse to cover the loan. The information flow was then reversed, and communicated back to the bank's customer, who had by then waited between seven and 15 days for an answer. Facing intense competition, the bank asked the reinsurer to find ways to shorten the cycle.

Financial services operations are under increasing pressure from the paperwork and the number of steps involved in each process that result in slow response and high transaction costs. The reinsurance company took the innovative step of adopting a secure extranet solution to automate the workflow and dramatically reduce costs and cycle times. The extranet is a secure external link between the corporate networks of the bank and the reinsurance company, and uses the Internet as a base.

Although the bank's customer still needs to complete a loan form, after this the process is handled automatically, and the customer gets an answer within two days.

Loan requests are transferred overnight from the bank to the reinsurance company, where customer files are checked automatically. If the loans are under a certain amount and all criteria are met (which is true of 80% of requests), an agreement statement is generated and posted on the network by 3 a.m. - to be available in the bank the next day. For the remaining 20%, the reinsurance company forwards the loan request to the insurance company, and once again the agreements or refusals are sent back to the bank via the Internet.

Giving the bank access to secure, electronic communication has improved the bank's performance and increased customer satisfaction and loyalty. Customers value the bank's fast response to loan requests and its ability to tell them the status of their request at any stage. For the reinsurance company, the extranet solution has strengthened a relationship with a key customer, cut transaction costs, and massively improved the efficiency of its processes.

The cases analysed in this research illustrate how intranets can provide a backbone and new stimulus for corporate renewal. Central to this is the potential they offer for more efficient communication channels - making it easy for individuals to work with departments and colleagues across the enterprise, and to access information and expertise. In parallel, these new communication and information facilities open the way for innovation and revision of internal processes at all levels of the organisation.

As mature technological options start to become available, large companies as well as small and medium-size businesses can replicate major performance improvements such as achieved by the companies in this study. Key success factors include the design of sound technological platforms, the willingness and capability of functional and IS managers to innovate, and the presence of champions able to identify opportunities and drive transformation within their companies.

This Executive Summary is based on research conducted at the INSEAD's Centre for Advanced Learning Technologies (CALT) by Professor Albert A. Angehrn and Nicholas Leck, Research Programme Manager.

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