

Source : [http://www.business-excellence.co.id/btm\\_1.html](http://www.business-excellence.co.id/btm_1.html) (5 Maret 2007)

## *Business Transformation Management (BTM)*

A NEW Paradigm of Management Breakthrough

- *When you face the Strategy do not align with People Behavior*
- *When you need to empower all functions as part of Strategy*
- *When you think the Marketing Strategy is not enough*
- *When Business Strategy is more powerful to speed up the growth*

*Please, spend your limited time to read this new paradigm in management breakthrough.*

The Competition will kill your business very fast in the global market if you don't have synergy of your Intangible Assets such as Strategy Direction, Integrated Management System, People Competency and Behavior, Leadership, Accurate Information, and Appropriate Culture to drive your Tangible Assets become Business Performance Results.

The most problem in the organization now is the **Disharmony of People Behavior to Business Strategy**. Therefore, the Business Transformation Management is a new paradigm of management to look from different point of view.

The BTM aligns the Vision, Value Discipline, Goal and Strategy to be executed through Effective Business Processes by appropriate behavior of Competent People under the appropriate of Climate for Action. The BTM will create a synergy of your organization functions that we call Business Strategy. The company normally only depends on Marketing Strategy to create a differentiation in the market place. Normally, people mindset focuses on Marketing and Sales Strategy more than on Business Strategy.

You will have a clear structure and role of each function/department within your organization to create a synergy by using Business Strategy as a guide.

**The key words in applying the Business Transformation Management are:**

### **Focus on Business Unit**

You shall look the business unit as a holistic.

- *What unique value proposition do you want the customer to look for? It will be customer mind share.*
- *How can your unique value proposition be improved year after year to sharpen your positioning in the market place?*

### **Defining Value Discipline and Strategy Map**

- *The Value Discipline (Product Leadership, Operation Excellence, and Customer Intimacy) shall be chosen and shall describe your uniqueness to fit customer requirement.*
- *The Strategy Map shall be defined clearly in line with the spirit of your Value Discipline Choice and in achieving the Goal Setting.*
- *Surely, your people shall understand the strategy map and their contribution in the Execution.*

## **Developing Business Design and Making It Work**

- *All preparation of Business Processes, Competencies and Behavior, Infrastructures, Information and Climate for Action shall create a synergy to achieve the Unique Value Proposition.*
- *Ensuring the readiness of all preparations as the foundation of your strategy execution.*
- *Creating a strategic HABITAT for your people to achieve best performance.*

BTM is a management breakthrough to move all functions parallel under the business strategy. BTM focuses on Business Strategy rather than Functional Strategy. Thank you for your time to read this article and keep in your mind.

Source : [http://www.business-excellence.co.id/btm\\_2.html](http://www.business-excellence.co.id/btm_2.html) (5 Maret 2007)

## ***Business Transformation Management (BTM)***

A NEW Paradigm of Management Breakthrough

### **Ketika Persaingan Memaksa Anda harus Berubah**

Melihat iklim persaingan bisnis di Indonesia di mana pemain besar atau asing sudah mendominasi di sektor keuangan, mineral, manufaktur produk material dasar sampai consumer products, chain retailer, information and services, ini merupakan tantangan setiap industri mampu menjadi unggul di bidangnya. Bagaimana suatu organisasi bisnis mampu mempunyai keunggulan? Ternyata ada dua hal dasar yang harus disadari bersama yaitu:

Faktor pertama adalah Kekuatan Intangible Assets. Realita kebanyakan pemikiran para owner dan top manajemen perusahaan masih banyak didominasi investasi berwujud sedangkan pengeluaran intangible assets-nya lebih dianggap sebagai biaya. Intangible Assets mencakup manajemen sistem, sistem informasi, kemampuan orang, sikap mental dan perilaku tiap individu, kepemimpinan, team work, brand image untuk produk atau perusahaan, layanan prima, motivasi seluruh karyawan dan budaya kerja. Di tengah negara dengan SDM berdaya saing rendah dibandingkan profesional negara lain dari sisi mental attitude dan behavior dan kompetensi teknisnya, apa yang harus dilakukan manajemen perusahaan?

Persaingan sekarang menuntut produk bermutu, pengiriman tepat waktu, layanan cepat, purna jual memuaskan dan harga bersaing maka tentunya membutuhkan keunggulan manajemen perusahaan untuk mengelola bisnis dengan ketajaman daya saing yang harus dibangun secara sistematis. Kemampuan membuktikan kepada pelanggan serta publikasi tentang kehandalan manajemen perusahaan menjadi senjata membangun citra perusahaan.

Perlu kita sadari bersama bahwa yang dulu kelihatan hebat sekarang sudah menjadi biasa-biasa saja, lalu apa yang terjadi dengan bisnis anda kalau hanya biasa-biasa saja?

### **Ada paradigma manajemen di banyak perusahaan sebagai berikut:**

- *Untuk apa kita harus mendidik karyawan ? Toh kalau pandai atau terampil malah pindah ke pesaing. Kita yang melatih, pesaing yang menikmati.*
- *Kita harapkan karyawan bekerja sekian lama harus makin pandai dan makin terampil dengan sendirinya. Kenyataannya belum tentu.*
- *Membangun sistem manajemen, kemampuan karyawan, sistem informasi adalah merupakan biaya yang tidak jelas manfaatnya karena sering tidak secara instan dapat dilihat hasilnya.*

- *Dengan percaya pada orang lama, toh perusahaan ini masih untung dan tidak perlu menghamburkan biaya membangun manajemen yang handal.*

**Di sisi lain ada paradigma manajemen melihat dari:**

- *Ketergantungan dengan satu atau dua orang termasuk owner harus diminimalkan*
- *Bulan madu tidak selamanya ada, mumpung perusahaan masih punya profit maka harus mempersiapkan kemampuan orang, sistem manajemen, budaya, infrastruktur dll*
- *Kecepatan perubahan di luar harus diimbangi dengan kesiapan manusia, sistem, manajemen, kepemimpinan serta informasi yang tepat dan cepat*
- *Bisnis tidak dapat hanya mengandalkan lobby atau hoki tanpa didukung kehandalan produk dan atau jasa dibandingkan pesaing.*

Kedua paradigma di atas merupakan fakta yang ada di dunia bisnis, anda merupakan bagian dari paradigma pertama atau kedua? Tentunya masing-masing punya konsekuensi yang harus dihadapi.

Perlu disadari bahwa banyak diyakini bahwa persaingan sekarang dan mendatang ternyata faktor keunggulan yang mendominasi adanya di Intangible Assets bukan di Tangible Assets, lalu apa yang terjadi kalau sekarang anda masih berpikir bahwa Tangible Assets yang merupakan bentuk investasi utama. Ingat, apakah Nike, Reebok, Cisco punya pabrik sendiri untuk melayani seluruh dunia? Mereka pemimpin pasar di dunia karena Intangible Assets-nya sebagai kunci strategis.

Faktor kedua yang harus disadari adalah Perubahan Internal perusahaan untuk mengimbangi dan mengatasi persaingan dan tuntutan pasar yang berubah dengan cepat di beberapa sektor bisnis. Perubahan dalam iklim persaingan dengan makin tanpa batasnya antar negara karena dipakainya teknologi telekomunikasi dan informasi makin menjadikan persaingan turbulen. Kesadaran Manajemen melakukan perubahan strategis, terarah, terencana, terpadu adalah yang terbaik dari pada mereka terpaksa melakukan karena terjepit situasi tertentu. Bagaimana caranya? Tentunya pola pikir dari setiap karyawan dan manajemen termasuk pemilik harus selaras dengan kebutuhan perubahan perusahaan karena factor eksternal. Tiap perusahaan berkepentingan memetakan peta persaingan dan perubahan dalam persaingan yang dimilikinya.

Untuk mengingatkan perlunya kesadaran mendalam dan menyeluruh dimulai dari pemilik atau manajemen puncak, maka kita perhatikan produk-produk cina yang membanjiri hampir semua sektor seperti elektronik, mainan anak, makanan, obat, kendaraan bermotor, perlengkapan rumah tangga, buah-buahan, material bangunan dll. Pola mereka sama dengan Jepang dan Taiwan pada awal mula mereka masuk pasar global dengan harga murah meskipun produknya banyak di-complain. Tapi ingat, mereka pasti menaikkan mutu produk untuk membangun kepercayaan setelah “harga murah” menjadi jurus pemasaran pertama mereka dan tentunya mereka akan juga membangun after sales service produk mereka melalui distribution network yang harus mereka miliki baik dibangun sendiri atau kerjasama dengan lokal partner untuk menunjang after sales service mereka. Selain itu, negara-negara maju mendukung dengan investasi mereka ke Cina untuk membangun manufaktur berteknologi tinggi, produktif, dan efisien guna memenuhi kebutuhan pasar global.

Salah satu faktor keberhasilan Cina menjadi dapur dunia adalah karena faktor mentalitas dan motivasi kerja yang luar biasa sehingga mereka mempunyai produktivitas kerja yang tinggi. Mereka bekerja bukan diukur oleh jam kerja melainkan oleh output yang harus mereka hasilkan. Bagaimana dengan pola pikir karyawan kita? Bagaimana dengan peraturan yang ada di negara kita? Apakah mendukung atau menciptakan kondisi yang membangun produktivitas kerja serta menjadi bagian dari budaya organisasi? Kesadaran untuk memacu pola pikir karyawan perusahaan menjadi dasar dalam keberhasilan anda membangun “Change Management” perusahaan. Timbul pertanyaan, change management-nya mau diarahkan ke mana? Apakah menunjang strategi perusahaan untuk membangun daya saing terhadap global player? Memang menjadi tugas pemilik,

manajemen puncak dan manajemen madya untuk membangun kesadaran tadi sehingga kita mampu menggulirkan bola salju keseluruh karyawan perusahaan. Demikianlah prioritas utama tanggungjawab anda sebagai manajemen perusahaan.

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*Source : <http://www.hermesgroup.com/whitepapers/intranet/body.html> (5 maret 2007)*

## **INTERNET TECHNOLOGY**

### **Definition**

In simple terms, the **Intranet** is the descriptive term being used for the implementation of Internet technologies within a corporate organisation, rather than for external connection to the global Internet. This implementation is performed in such a way as to transparently deliver the immense informational resources of an organisation to each individual's desktop with minimal cost, time and effort.

The impact of the Intranet affects a corporate's operation, efficiency, development and even its culture. To fully understand what is meant by the Intranet we need to look at several areas

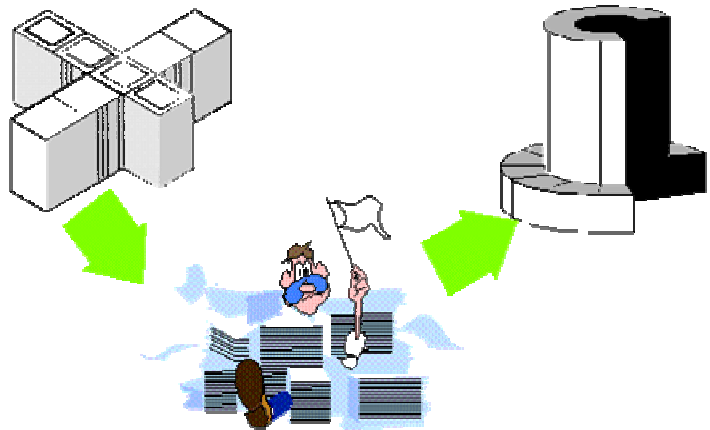
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### **A Scenario**

Your company has 20 sites and 1000 people who need timely access to company news, corporate policy changes, Human Resource procedures - even simple, but crucial, documents such as phone books, product specifications and pricing information.

Normally, you use printed matter, such as employee handbooks, price lists, sales guides etc. This printed material is both expensive and time consuming to produce, as well as not contributing directly to the bottom line. Once created, there is the question of distribution and dissemination. How can you guarantee that all your people have received exactly what they need? How can you be sure they have the latest and correct versions? How can you ensure that they even know that important policy details or other information have changed or are now available? The simple answer is, with existing technology, you can't.

Furthermore, due to the changing nature of any organization in today's global business world, the shelf life of any internal printed matter is reducing so rapidly that, in many cases, it is out of date before it reaches the people that need it. Many corporate hours are lost just confirming and verifying the validity of information. Then we can start to consider the direct cost of preparation, typesetting, production, distribution and mailing. Additionally, labor costs, overhead and the fact that during any financial year most documents require reprint in ever increasing frequencies.



For example, a standard price book may cost in the region of \$15 each to produce. This is increased by the distribution cost, multiplied by the number of people who need it, and then by the number of times per year it is produced. We can very easily see the substantial cost that is required to deliver just a single, accurate document to one of our employees to allow them to perform their job. But if you also add the hidden cost of the people verifying accuracy and quality of the information the cost becomes even more astronomical. The above calculation concerns just one price book, a single document out of the many that are similarly distributed every year.

The above example assumed 20 sites and 1000 employees, but the reality is that this problem is equally important to a single site with 20 people. The problem described above is not new and attempts to exploit computer technologies have already been implemented, with different degrees of success. Implementations to-date have built-in gross inefficiencies, expense and rely mostly on vendor-specific, or proprietary groupware technologies. Accurate, timely communication and information flow is essential in today's world.

The solution to the problem requires technology which:

- can deliver information on demand - **as and when needed** (i.e Just-In-Time)
- can **guarantee** that the information is the latest and most accurate available
- ensures that information can be held at a single source (although, there is no need for that source to be the source of all information)
- allows the information to be maintained by the people who would normally maintain and prepare the original information (i.e the "owners")

The solution to this problem is provided by just one of the technologies available under the generic heading of 'the Internet'.

### ***The Changing Business Environment***

Competition has reached a new level of intensity in virtually all industries. Mere survival, let alone success, requires that a business perform at unprecedented levels of effectiveness. The new pressures on business include:-

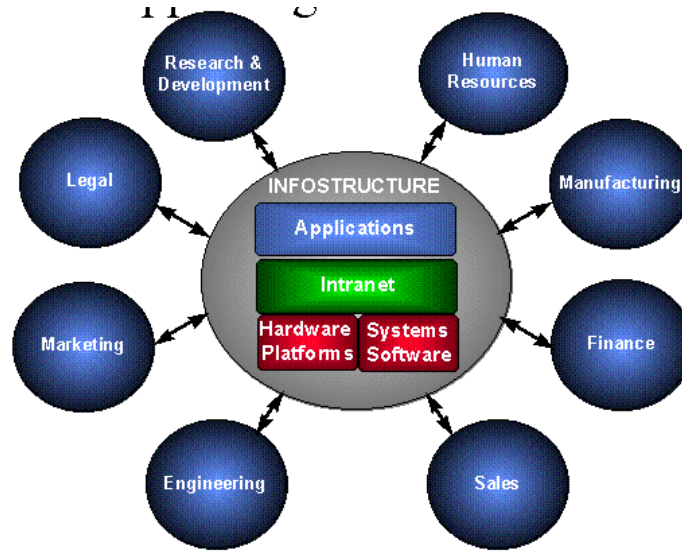
**Reduced Product Lifecycles:** Time-to-market is becoming an ever more significant factor on the ability to achieve market share, profitability and even survival.

**Decrease Costs:** The need to control costs, with the corresponding desire to improve productivity, continues unabated with renewed emphasis on the productivity of the knowledge workers.

**Increased Demand for Quality and Customer Service:** As competition builds, the increase in customer's expectations for responsiveness and personalised support is beginning to change the culture and operation of many industries.

**Increased Market Responsiveness:** The only constant for business is that things will change. The need and ability to respond to ever changing market forces continues to push the need to adopt and implement technology to be able to rapidly react.

**New Business Models** - constant change is now pushing into the very core of many corporates with corresponding new business models emerging for the way in which organisations and people work together. These include teleworking, virtual corporations, collaborative product development and integrated supply chain management. Figure 1 depicts an enterprise "infostructure" model and how it can facilitate communication among multiple functional departments.



While each issue requires multifaceted strategies, the common link is the need to enable and expand communications within the organisation, between partners and out into the marketplace. The internal adoption of Internet technology to create the corporate Intranet can make significant contributions to each of these critical areas.

### *The Internet Technologies*

The main technology components of the Internet are:

- Communications Protocol: The ability to connect and communicate between networks and individual desktop devices.
- File Transfer: The ability to transfer files between point-to-point locations.
- Mail: The ability to provide store-and-forward one-to-one and one-to-many communication between individuals or groups.
- Web Browsing: The ability to provide access to information on a one to many basis, on demand.
- Terminal Emulation: the ability to access existing infrastructure applications.
- User Interfaces: the ability to deliver the increasing technical complexity to the desktop in a transparent, seamless and intuitive manner.

The following paragraphs detail a few of these technologies:

#### **1. TCP/IP as both LAN and WAN transport**

Today, most enterprise networks are a mixture of many protocols: IPX, IP, SNA, and AppleTalk are perhaps the four most popular ones. Many IS shops have begun careful evaluation to replace these four with one protocol, and typically that protocol is IP. Why? IP can handle both LAN and WAN traffic well, it is supported by the majority of computing platforms from Macintoshes to Windows NT to the largest mainframes, it has a robust set of management tools and an active development community to enhance them, and it is the lingua franca of the Internet.

In the past, IP has been hampered by huge memory requirements needed to support the protocol, especially on DOS machines. With the increase of Windows-based operating systems, and with new versions this year of Windows95 and NT that offer tighter integration and better support of IP protocols, this is becoming less of an issue. Indeed, there are almost too many IP products available these days, either at low or no cost.

## **2. How will IP be deployed throughout the enterprise?**

Corporations are faced with running a mixture of protocols over various parts of their enterprise networks. There are numerous choices, depending on a number of factors such as which protocols are required to support which legacy applications, the resources of both staff and machines that are required to support each protocol, and the cost of purchasing new hardware to handle routing or gateway functions.

First, there is the matter of running IP throughout the enterprise network. Corporate IS groups have a series of choices for getting IP services to each desktop: the direct approach, where an IP stack is loaded on every machine in the enterprise is often the best but could be expensive, particularly if a great number of DOS machines need to be replaced or reconfigured. Such an IP stack is included in a variety of products and very often at no cost (e.g. Microsoft Windows Workgroup and Windows '95).

An improvement on the above approach is to deploy a server with DHCP (the successor to the bootp protocol), which manages "leasing" of IP addresses from a predefined pool. PC workstations are dynamically assigned an IP address during booting, and when the "lease" expires, the address is returned to the pool, which the server maintains.

Yet a third approach is to use gateway IPX/IP servers, such as the Firefox series of NetWare-to-IP gateways. These gateways enable desktop computers to still run their Novell-related protocols, while the server "translates" each IPX to the server's own IP address. This drastically reduces IP maintenance costs and simplifies network management.

## **3. HTML, SMTP and other open standards**

HTML is to the Web what IP is to the Internet: the language of how information is stored in Web servers. Until recently, HTML was an open standard, not under control of any single vendor. This means that Web browsers (the software that runs on each client that enables viewing of web server resources) can operate similarly whether it runs on a Unix minicomputer, a Macintosh or Intel PCs. This cross-platform capability is a powerful incentive for corporations that maintain multiple platforms.

That degree of openness has changed with the rise of Netscape and increased competition from other vendors. The latest version of Netscape's Navigator contains otherwise useful features that are, nevertheless, not defined in any HTML standards specifications, such as independent frames within a browser window.

Three reasons can help explain the popularity of Web, and conversely HTML: First, Web servers contain both text and non-text items: recorded speech, graphics, and even video clips are now becoming common. Most other Internet services are strictly for text. This means that web "pages" (as they are known) can range from the most mundane of lists to be sophisticated multimedia shows. Second, Web sites (or places where information is stored) can range from the personal to the most corporate, depending on the content, author, and effort. Prodigy, CompuServe, and America Online all began offering the ability to construct one's own personal Web page to their respective millions of customers this year, further popularizing the concept. And, as mentioned earlier, highly-visible companies such as Disney, ESPN, and Hershey's Chocolate have begun using the web to provide both corporate information as well as to extend the value of their identities and services.

Finally, each Web server contains information that can be cross-linked to others, whether they are located around the world or just down the street. It is this ability to link multiple, distributed sources of information that deliver much of the Web functionality, as a distributed corporate information resource.

But the Web isn't the sole piece of corporate Intranets. Along with this technology are support for other standards, such as ftp servers, SMTP and other pieces that were originally developed for Unix computers and have spread throughout a corporate enterprise. For illustration purposes, we will use e-mail: ten years ago,

PROFS and DISSOS were the IBM heavyweight defacto standards: running on VM or MVS hosts, proprietary and closed systems. Now, those products seem like dinosaurs, and many corporations are looking towards Internet-based e-mail as the more appropriate systems for their enterprise. This is because practically every email product now in use has Internet or SMTP gateways, making those e-mail exchange between different vendor's products feasible. Most corporations either have in place or are moving towards such a common messaging backbone in an attempt to integrate their own disparate email systems.

### *The Internet vs the Intranet*

During the evolution of the Internet, a series of applications have been created to meet the specific needs of each component area. Within each of these areas the survival of the fittest has brought several specific best-of-breed applications and standards. For example, the FTP protocol standard for file transfer, the Mosaic technology for Web browsing, the MIME standard for transparent distribution of file formats, the HTML syntax as the language of the Web, etc.

The individual component areas which make up the Internet are not necessarily new to corporate IS. It is the fact that, in the context of the Internet, these mechanisms, methods and technologies follow consistent, vendor-neutral interoperability standards.

There are several main reasons why the Internet technologies have such a dramatic impact on the scope of business networking applications. These include:

- **Universal Communication:** Any individual and/or department on the Intranet can interact with any other individual/department and beyond, to partners and markets.
- **Performance:** On inherently a high-bandwidth network, the ability to handle audio clips and visual images increases the level and effectiveness of communication.
- **Reliability:** Internet technology is proven, highly robust and reliable
- **Cost:** Compared with proprietary networking environments, Internet technology costs are surprisingly low
- **Standards:** The adoption of standard protocols and APIs such as MIME, Windows Sockets, TCP/IP, FTP, and HTML delivers a fast-track series of tools which allows infrastructures to be built, restructured and enhanced to meet changing business needs as well as allowing standards-based intercommunication between external partners, agencies and potential customers.

The chief distinction between the Intranet and the Internet is more one of semantics than actual technology: both use the same tools and techniques, protocols and products; drawing heavily on the standards of the TCP/IP world. In some cases, Intranet projects began as pilots or skunk-works efforts and have since been exposed for public view on the Internet as a major strategic computing effort. However, there are some differences between the two.

First, much corporate data is not for public consumption. Payroll, sales projections, internal discounts and client memos are all examples of information that corporations don't want broadcast over the Internet, and need to protect carefully, just as they have in the past with their IMS databases and ACF security programs. DEC's Intranet, for example, is accessible by its employees with the proper series of encryption and authentication routines.

Second, many Intranets begin with pilot projects to test out the technologies and understand the skill levels required. They quickly grew into full-time, production-quality information systems that have taken on a particularly corporation's culture and methods. Finally, many corporations want their private Intranets to have the same level of service as their existing SNA networks, and this is only possible when the networks are under complete corporate control from end to end.

One method for developing a corporate Intranet is to combine groupware applications with Internet technology. One such product is Attachmate's Open Mind, which makes use of Internet technologies such as HTML, TCP/IP, and Web browsing to augment the publishing, discussion, document management and general information sharing functions often wanted in a robust corporate Intranet. Version 2.0 of the product offers an integrated Web browser which allows users to permanently attach to and share information on external Web sites. Another example of this is Lotus' InterNotes products, which allow departments to track discussions and record conferences and other group collaborative efforts.

So is the Internet actually competitive to the Intranet? The answer is obviously a resounding No! To put it all in context, the Internet continues to define the technologies available for external communication, whereas the Intranet is the application of these technologies within your organisation and centred around the corporate LAN.

### ***Intranet Applications***

Within the early Intranet adopters, the application of this hot technology is being typically used as follows:-

1. Publishing corporate documents

Along with oft-mentioned human resource guides, these documents can include newsletters, annual reports, maps, company facilities, price lists, product information literature, and any document which is of value within the corporate entity. This is one area where significant cost control can be achieved as well as much more efficient, timely and accurate communication across the entire corporate organisation.

2. Access into searchable directories

Rapid access to corporate phone books and other similar directory services. This data can be mirrored at a Web site or, via CGI scripts, the Web server can serve as a gateway to back-end pre-existing or new applications. This means that, using the same standard access mechanisms, information can be made more widely available and in a simpler manner.

3. Corporate/Department/Individual pages

As cultures change within organisations to the point where even each department moves towards their own individual mission statements, the Internet technology provides the ideal medium to communicate current information to the Department or Individual. Powerful search engines provide the means for people to find the group or individual who has the answers to the continuous questions which arise in the normal day-to-day course of doing business.

4. Groupware applications

With HTML forms support, sites can provide sign-up sheets, surveys and simple scheduling. As the Intranet technologies continue to evolve, the press have been positioning the technologies as alternatives to major groupware applications (eg. Lotus Notes) to such a point that this type of rhetoric only serves to cause confusion as to the appropriateness of each area of technology. As always, it is not black and white. The Intranet technology can be used to complement or as an alternative to such groupware products. It all becomes a matter of scale, cost, timescale, openness and taste.

5. Software distribution

Internal Administrators can use the Intranet to deliver software and up-dates 'on-demand' to users across the corporate network. This will continue to gain momentum as new technologies such as Java become

more widely available from Sun, which will allow the creation and transparent distribution of objects on-demand rather than just data or applications.

## 6. Mail

Although email has been seen as being a 'killer application', its uses have tended to be limited and over-complicated. With the move to the use of Intranet mail products with standard and simple methods for attachment of documents, sound, vision and other multimedia between individuals, mail is about to be pushed further forward as a simple, de facto communications method. Mail is essentially individual to individual, or individual to small group, communication. With the emergence of Web technology, there are now better and more appropriate tools for one-to-many communication which historically is where mail systems have been over-burdened and over-burdening to the point of reducing their effectiveness.

## 7. User Interface

The Intranet technology is evolving so rapidly that the tools available, in particular HTML, can be used to dramatically change the way we interface with systems. The GUI has been defined by Microsoft as an iconic desktop. But, although this might be what technicians like - and like to believe it's what users like - it is definitely not the interface that most business people are comfortable with. Microsoft's Windows 3.x and Windows 95 created tremendous volumes of functionality, but individuals probably only need a fraction of the total functionality. The remainder extensive support and high maintenance costs. By contrast, Intranet tools allow a lot more flexibility in the design and number of features while providing an in-context and uniform front-end to all computer-based resources. In doing so, not only can you create interfaces that users can use and appreciate, you can also remove the excess functionality and access to elements that specific users don't need.

### ***Key Intranet Products to Watch***

Our final section of our analysis of the Intranet includes our list of key technologies that are worth examining. There are several groups of products that any IS professional should become familiar with.

1. Discussion/conferencing groupware: *Attachmate Open Mind, Netscape/Collabra Share,*
2. Web server creation tools: *O'Reilly Website, Compuserve Internet Office Web Server*
3. Web server management tools: *Vermeer Front Page, Netscape Server, Attachmate Internet Access Server*
4. Network management tools: *Peregrine Open Administrator*
5. Web content search tools: *Verity, Personal Library Software PL/Web, WAIS Inc. WAISGate*
6. IP on-ramp products: *Frontier Cybersearch, Netmanage Chameleon, Wollongong Emissary, FTP Software Explore, Attachmate's Irma for Internet.*
7. Turnkey Internet server products: *Sun Netra, Performance Technologies Instant Internet*

Note that we have not mentioned any HTML authoring tools. In our opinion, most of these products are over-rated and not truly useful as a product category. Perhaps the best HTML authoring products are one's existing word processor, as long as it can produce unformatted text. However, two products worth examining are Microsoft's Windows Word Internet Assistant and Novell's WordPerfect Internet Publisher.

### ***Adopters and Preliminary Results***

- According to the Business Research Group's report, Web Servers and the Rise of the Corporate "Intranet," DEC has over 400 internal web sites while Sun Microsystems has over 1,000. Interestingly, many of these servers were created outside of the traditional IS domain.
- "Meta Group analyst Stan Lepeak estimates that three-quarters of the Web servers going up today are for internal corporate use," quoted in an editorial by Eric Lundquist in *PC Week*, 7/24/95. "Does the use of internal Web sites make sense in many applications? Yes. Are there still hurdles to be overcome? You bet. Should you seriously consider building your own internal Web? Absolutely." he says.
- Even one of the inventors of Ethernet has gotten the Intranet religion: "Suddenly I saw Web browsers as, yes, client/server middleware for Internet screen scraping. Multithreading and APIs are features of operating systems, and they bring us to this week's conceptual breakthrough: Web browsers are now viewed as a hot new application category.... Every [operating system] will have one," says Bob Metcalfe in his *Infoworld* column, 2/27/95.

### ***Conclusion***

Intranet technologies provide the tools, standards and new approaches for meeting the problems of today's business world. The beauty about most of these technologies is that they are simple and, in their simple elegance, phenomenal power can be unleashed. Due to the fact that these technologies are still moving from adolescence to maturity, there are many rough edges. The route ahead, however, is being well-defined and the new generations of Intranet products designed specifically for corporate use will address these. Communication is the key to business success. Exploitation of the Intranet is the key to effective and efficient communications.