Message: IMS is still evolving to meet the demands of the new era while still providing unsurpassed availability and performance.

IMS is unsurpassed in database and transaction processing availability and speed. IMS is meeting the demands of an evolving e-business environment and a marketplace working in Web Time. IMS is delivering the integrity, capability, and performance customers have learned to expect from IBM.

IBM has been enhancing the IMS Database Manager (IMS DB) and the IMS Transaction Manager (IMS TM) with enhancements which enable you to shape how you:

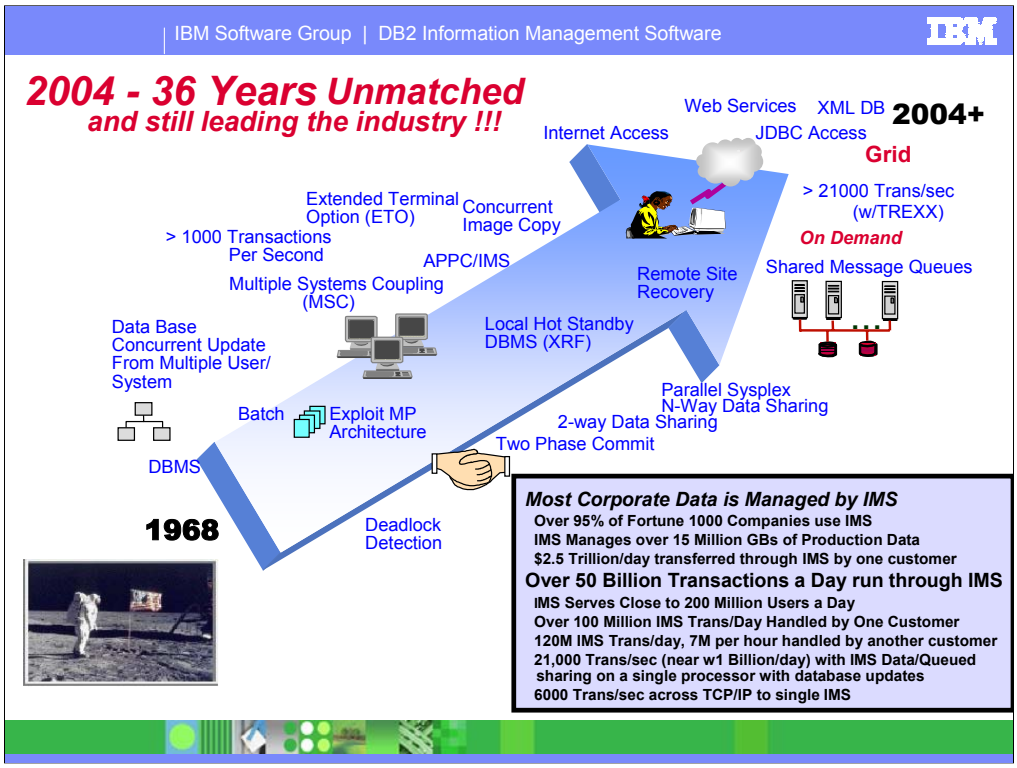
Transform the way you do business with integrated information

Build e-business applications that tolerate the rigors of doing business on the net

Run a scalable, available, safe, and easily manageable environment

IMS TM continues as IBM's premier transaction server for environments that employ relational and hierarchical data stores and require the utmost in integrity, capacity, availability, and performance for e-business and enterprise computing environments.

IMS DB continues as IBM's premier hierarchical database server to provide and enhance high performance/capacity, superior integrity, and continuously available database management solutions for IMS TM, CICS, and now WebSphere Application Server users.



Message: IMS continues to lead the industry and manage the world's mission critical corporate data and applications.

Since its inception, IMS has been at the forefront of technology in Database and Transaction Management. IMS has been the first at delivering IBM solutions. Some examples are:

Multiple Systems Coupling Facility - IMS has been distributing workload across multiple systems for a long time,

Datasharing -- IMS has been the first to provide 2-way and then N-way data sharing, and extended that to Message sharing and network sharing as well.

eXtended Recovery Facility provides a hot standby capability for IMS customers. IMS is the only DB/TM system to provide this level of high availability takeover support; the same is true for Remote site Recovery

IMS Fast Path continues to support the highest transaction per second database access solution

As we move further into the new era of computing, IMS is still leading the way. More than 35 years since the first IMS-ready message for the Apollo Space program, IMS and the zSeries are breaking technology barriers, but sometimes taken for granted. But we continue to lead the industry in performance, availability and e-business enablement.

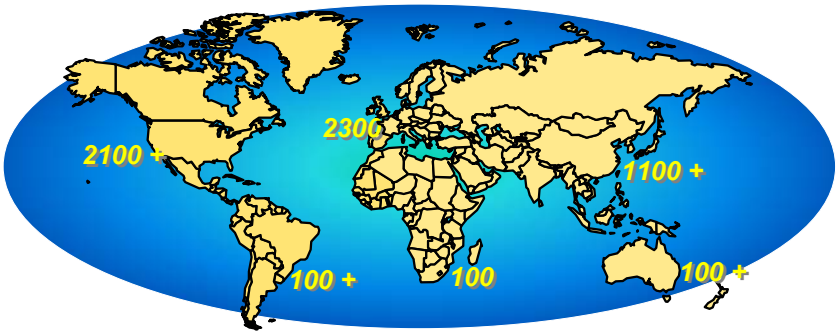
Industries worldwide rely on IMS to run their businesses. IMS is part of everyday life. Chances are you are using IMS when you turn on a light, make a telephone call, get a business loan, process accounting records, use your ATM card, put money in a bank, rent a car, purchase insurance, travel, send a package, track in-transit packages, trade stocks, control inventories, process payroll, update personnel records, control an assembly line, control a railroad, use corporate database, run a government agency, conduct international business/banking, and many more.

The IMS Solutions offer a major step for IMS customers wanting to provide commercial services over the Internet. Commercial services with access to IMS applications and data include travel reservations, home banking, delivery tracking, service support, etc. Examples today exist in many industries.

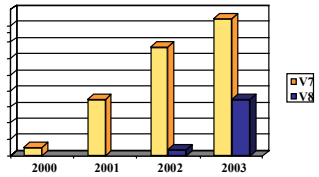
More than ninety-five percent of the Fortune 1000 companies use IMS. IMS serves 200 million end users, managing over 15 million Gigabytes of production data and processing over 50 billion transactions every day. IMS still owns the high-volume on-line transaction and database management environment. IMS customers have been driving their own growth and the world's business with IMS. One customer had transferred over $2.5 Trillion through IMS in a single day. Over 100 million transactions were handled by one customer in a single day on a single Sysplex system. 7 million Transactions/ hour and 120 million transactions/day were handled by another customer. IMS in-house testing has reached nearly 6000 transactions/sec across TCP/IP to a single IMS on a single machine. That equates to over 500 Million per day. And we have reached over 21,000 trans/sec (near 2 Billion trans/day) with IMS Data/Queued Sharing on a single zSeries machine (limited only by the size of the processor used in testing). One large customer has also indicated they have reached over 3000 days without an outage and still going strong.

IMS, IBM's premier hierarchical transaction and database management system, is the product of choice for critical on-line operational applications and data where support for high availability, performance, capacity and integrity, and low cost are key factors. Today, IMS manages the world's mission-critical data and has been at the forefront of the swing back to mainframe usage.

IMS: The World Depends on IT!



- *IMS Mips Growth 55% - 2 Years*
- *DM Tools +10% Growth*
- *Version to version upgrades*
  - *IMS V7*
  - *IMS V8*
- *"New license growth"*



Version 7 & 8 License Growth

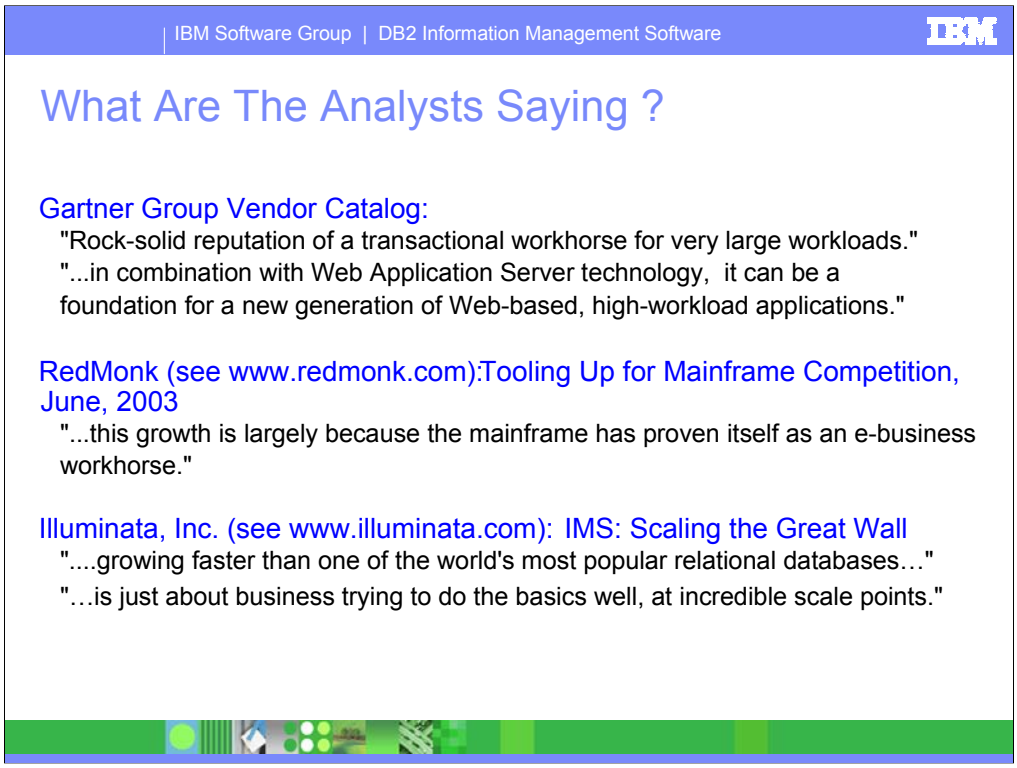
Message: IMS customer usage indicates continued growth.

There is no better way to show the value and strength of IMS to its customers and to IBM then through its increased growth.

Customer's IMS Mips have been growing rapidly over the past two years +55%.

IMS V7 and V8 installations have also been growing rapidly with greater numbers in production faster then predecessor versions.

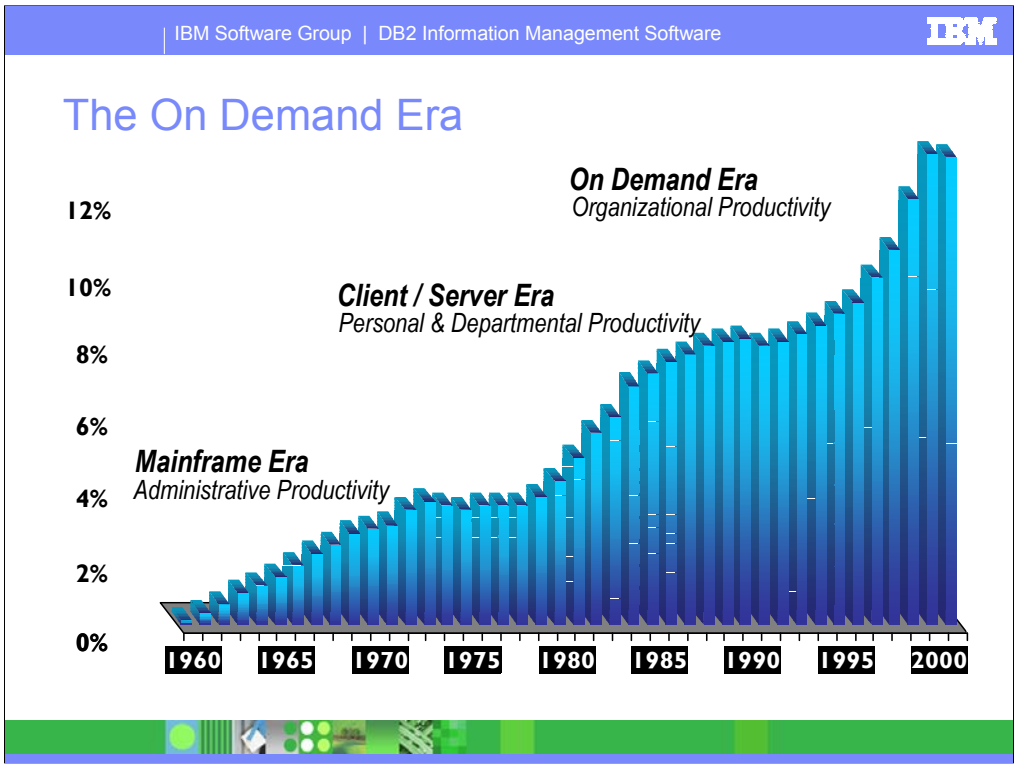
And the Revenue stream for IMS has been growing year to year with version upgrades and new license growth.



Message: Analysts reinforce this message of viability and growth of IMS.

Some web pages are showing what analysts are saying about IMS.

A recent Gartner Group Vendor Catalog entry stated "A large and loyal IMS installed base. Rock-solid reputation of a transactional workhorse for very large workloads. Successfully proven in large, Web-based applications. IMS is still a viable, even unmatched, platform to implement very large OLTP systems, and, in combination with Web Application Server technology, it can be a foundation for a new generation of Web-based, high-workload applications."



Message: IT continues to propel growth and deliver competitive advantage, we are at the beginning of the next journey.

Evolution across the industry has moved from a mainframe dominant era for administrative productivity to a client/server dominant era for personal and departmental productivity to the On Demand era for organizational productivity, which we are currently in. Each era achieves early growth and levels off as it becomes increasingly more difficult to find new ways to address demands.

IBM defines an on-demand enterprise as one whose business processes are integrated end-to-end across the company and with key partners, suppliers and customers. The on demand enterprise can respond with flexibility and speed to any customer demand, any market opportunity and any external threat. This need to respond with urgency must be addressed by an On Demand infrastructure.

This infrastructure greatly expands the requirements for Integration and openness. Internal systems need to integrate with the back-end suppliers, partners and outsourcers. They need to easily integrate with other heterogeneous sources. It needs to be rapidly responsive to change. The infrastructure must do things automatically, like re-configuration or recovery, that were previously done manually. The greater complexity must be made simpler. The infrastructure must be responsive to unexpected demand from customers, coming in from a web server or directly to an application. It must add capacity as required and it must do it non-disruptively. It must reduce the risk and cost of executing mergers and acquisitions through effective integration of incompatible systems and infrastructures.

This operating environment is open standards based, it is heterogeneous, it is integrated and freely enabled with self-managing capabilities.

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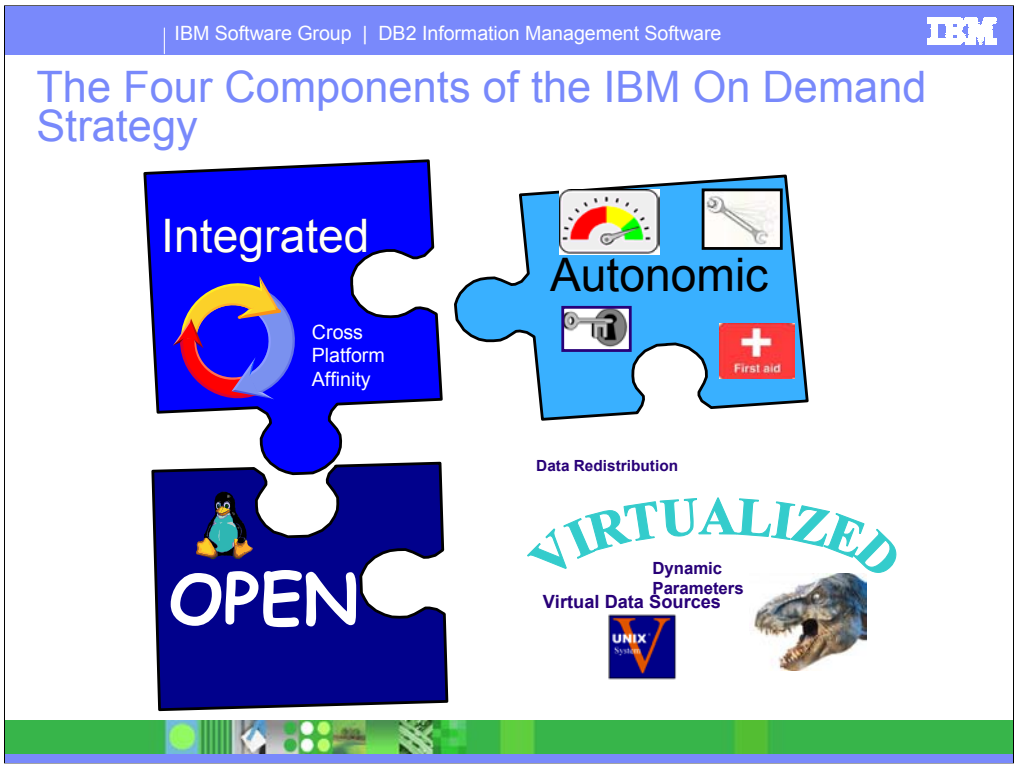


Message: IMS is addressing the Four Components of the On Demand strategy
These are the components of the On-Demand strategy that we need to be addressing:
Integrated - integration with other products within IBM and with other products and platforms within the industry.

Open – standards for portability and ease of development, helping customers programmers and their programs interact smoothly.

Autonomic – offering ease of use, elimination or reduction in outages, reducing the education curve for new people

Virtualized – providing flexibility for growth and expansion, and the ability to exploit new resources as they become available.

IMS is addressing all of these.

Open Integrated e-business Application Development/Connectivity

- **Application programmer productivity**
  - **Java access to IMS input/output message queues**
  - **JDBC to access IMS data**
  - **Uses Visual tools for development**
  - **Supported by IBM's "Eclipse Based" J2EE Tools**

JDBC = Interoperability for Application Developers

- **Environments**
  - **The ability to enhance zSeries architecture**
  - **Runs native, in an LPAR, or on z/VM**
  - **Unmatched scalability**
  - **Designed to support multiple, diverse workloads**
  - **Simplified System Management**
  - **Ability to run large numbers of Linux servers on a single zSeries**

Message: IMS supports the Open Standards

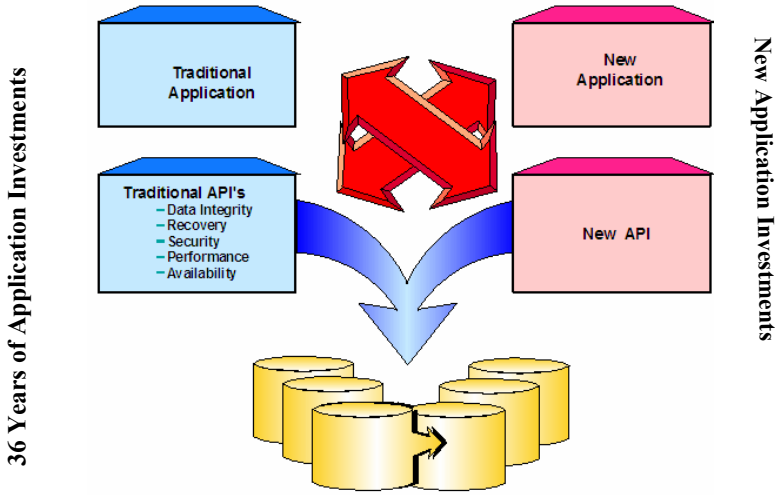
Java is the basis for Open application development with IBM and throughout the industry. IMS introduced Java support in Version 7 and has enhanced it in Version 8 and will in Version 9, as well as via the maintenance process. IMS Java application support provides the ability to write Java applications and run them as IMS applications. Support is provided for IMS DB access from CICS Java applications, DB2 Java Stored procedures and WebSphere enterprise java beans, opening IMS DB up to better integration and use across platforms and across application environments. Since IMS Version 7, IMS Java application support enhances the ability of our customers and business partners to provide integrated e-business application development with IMS.

Access is provided to IMS TM message queues and to IMS DB and DB2 data through JDBC.

Enhancements have been provided to the initial support, opening IMS DB up to better integration and use across platforms and across application environments. Enhanced tooling support for developing these Java applications to run in IMS or access IMS DB data is also provided.

Open / Integrated

Data Access - Favorite Tool on Favorite Platform with Data Store efficiency

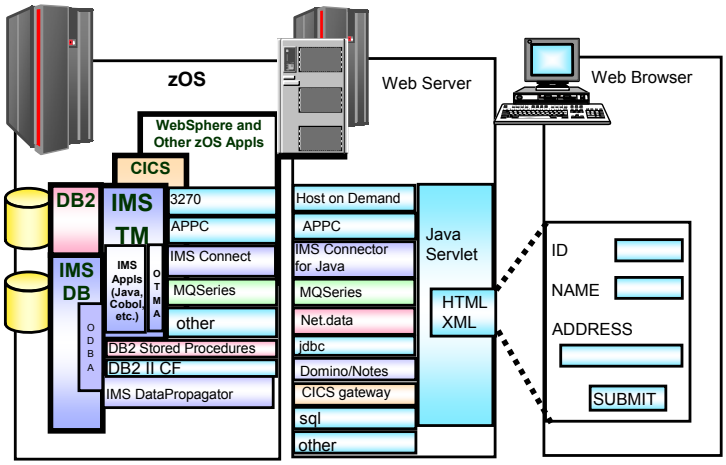


Message: Open/Integrated access to heterogeneous data is also important.

Data is growing in all the database types and coexistence becomes critical through propagation, common application interfaces and access gateways. An application written in one context must run with another. Both new and existing applications must be able to run with existing and new data. Data Access is being provided with transparency and consistency for this. Data provided in a particular database, accessible by a particular application type through a given interface can be propagated to another database, or accessed by a different application, using a different interface, and vice versa. This allows for new and traditional heterogeneous data and application types to work together side by side.

Integrated...

- IBM Solutions provide Integration and Leveraging of IMS Applications and Data



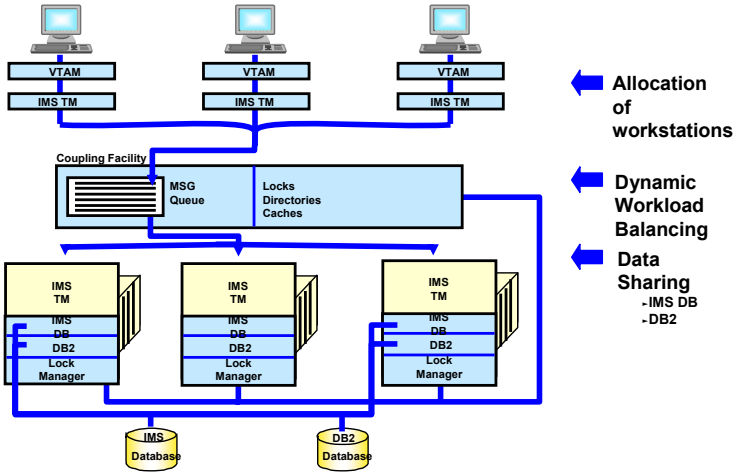
Message: IBM provides support for a variety of connectivity and integration solutions with IMS.

Connectivity and Integration has always been a priority with IMS. IMS has provided solutions that can use workstations or servers to access IMS data. Information can be retrieved from the server system in a two-tier environment or in a three-tier environment. Our strategy here is to support standard connectivity solutions as well as those tailored to the IMS environment. IMS tooling shipped with WebSphere can provide connectivity with IMS applications and data as well as to other environments regardless of the tools used or what they want to connect with.

IMS views integration as a continuing journey and continues to support and enhance new technology for connectivity and e-business enablement into the foreseeable future.

Virtualized...

- Parallel Sysplex support provides virtually unlimited growth with easier access and management of enterprise applications and data



Message: IMS provides scalability in ultra high performance/capacity/availability with virtualized solutions today.

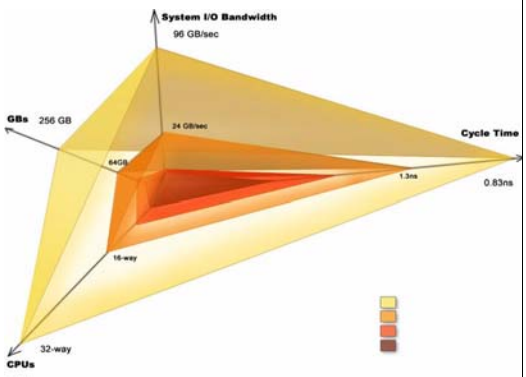
Just as with integration, IMS support of Virtualization via the Parallel Sysplex environment is an on-going endeavor, which can be traced back to IMS Version 5 using the coupling facility for storing lock information and for easy availability of that information by all systems in the Sysplex environment and thereby enhancing existing IMS data sharing capability. IMS also provides support for enhanced workload balancing of resources across the Sysplex, message routing between systems, enhanced message sharing with Shared Queues support, and Remote Site Recovery support (which allows backing up an IMS system with another at a different location). All this provided for improved availability and increased capacity. The exploitation of Parallel Sysplex by IMS continues through Version 8 where significant Operational enhancements are being added.

zSeries Servers : Breaking New Barriers in Server Performance

Z990 VS z900
Almost 3X total system capacity

z990 – Broad range of scalability and increased performance – 9000 MIPS

Up to 256 GB (max was 64GB)
Up to 512 Channels (was 256)
Up to 30 LPARS (was 15)
16 HiperSockets for high speed TCP/IP access (was 4)
11,000 Secure Sockets Layer (SSL) transactions/second (57% improvement)



MESSAGE: The zArchitecture will continue to provide growth and protect your enterprise computing investment well into the future

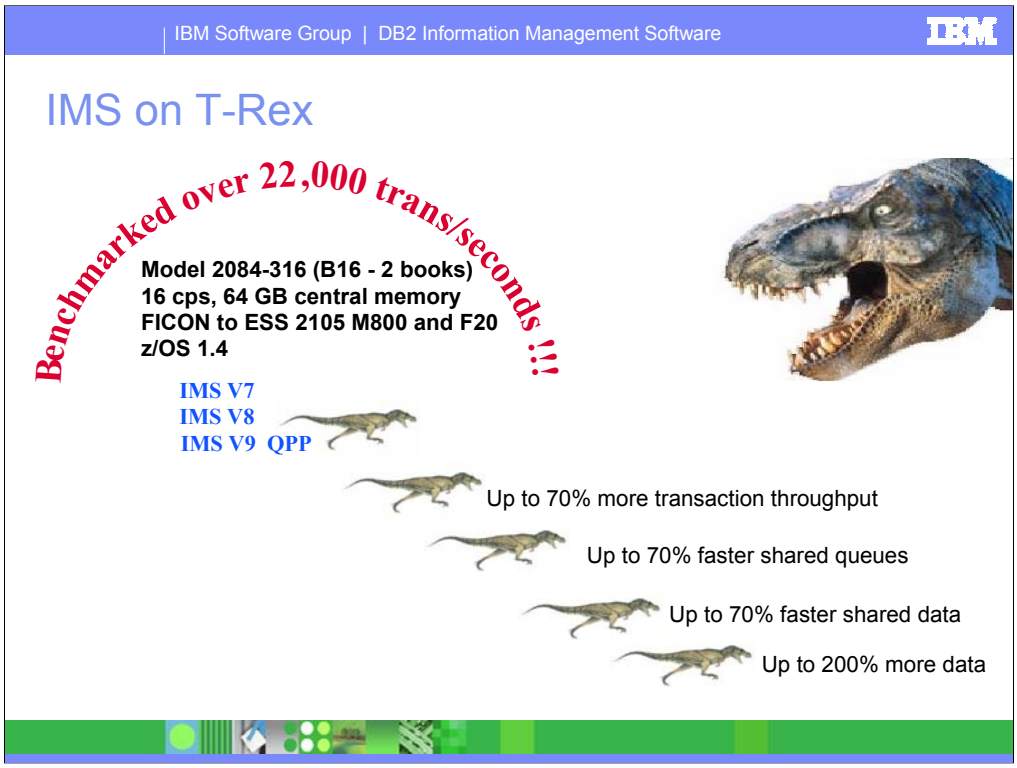
KEY POINTS:

1. The growth in the past few years, since the introduction of G5, has been impressive e.g. on the CPU axis: G5 is 4-way; G6 8-way; z900 16-way; z990 is 32-way

2. The growth along each axis going from z900 to z990 is almost phenomenal, in just two years....we're just starting to exploit the new architecture. what can be accomplished along each axis in future years?

3. Your predecessors have to feel very good about their investment in S/360...what if they had chosen Burroughs or Univac or NCR or Control Data Corp or Honeywell....or RCA or Philco or Xerox ...all venerable names that delivered value in te past but none that had the staying power of IBM

4 Looking at this chart, today, why would you ever consider investing your future in anything else??



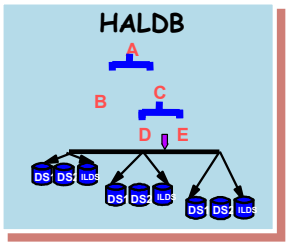
Message: IMS together with the mainframe provide the highest in transaction/database performance

Our testing found that IMS in general runs about 40% faster on a T-Rex than on a Freeway processor. This is due to the faster cp speed in the T-Rex books. The increase in data quantity is due to the increased number of channels on the T-Rex. A single book T-Rex will have the same storage device capacity as a Freeway processor (256 channels) but a fully configured T-Rex will have up to 512 channels available, thus 200% more data.

Our T-Rex has only 1/2 of the possible central memory. Up to 64GB can be installed for each book. We have 2 books but only 64GB installed.

We have 256 channels available of the maximum 512.

HALDB (High Availability Large Database)



- **Large Database**
  - **Databases are partitioned**
    - **Up to 1001 partitions per database**
    - **Partitions have up to 10 data set groups**
- **High Availability Database**
  - **Partition independence**
    - **Allocation, authorization, reorganization, and recovery are by partition**

Up to 10,010 data sets per database!
(Greater than 40 terabytes)

Self healing pointers

- **Reorganization of partition does not require changes to secondary indexes or logically related databases which point to it**
- **Prefix Resolution, Prefix Update, and secondary index rebuilds are eliminated**

Message: And IMS provides virtually unlimited database size

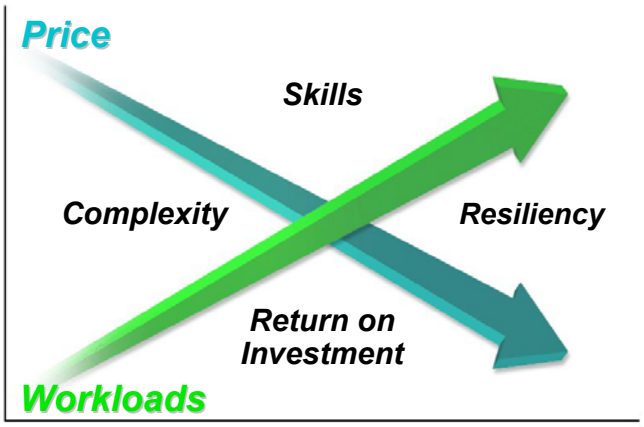
IMS V7 High Availability Large Data Base Support allows for 1001 partitions to a max capacity of 40 gigabyte each. This means you can have over 40 Terabytes OSAM and VSAM databases. That would be 20,000 3390 devices. This works out to 6600 bytes for each person on earth. This compares to V5/6 when we just expanded to allow 8 gigabyte databases

This support also allows for a partition to be taken offline, have something done to it and be independently brought back online. This means each partition could be individually unloaded and reloaded and while offline a batch reorg could be done to on it. Or the entire database could be taken offline and each partition could be reorged in parallel, greatly speeding up the offline reorg process.

Since delivery of IMS V7 HALDB we have been providing additional enhancements for performance and manageability to ensure this as the base for any future database activity.

e-business IT Infrastructure Challenge

Price performance gains in technology are more than offset by scale and complexity of deployments



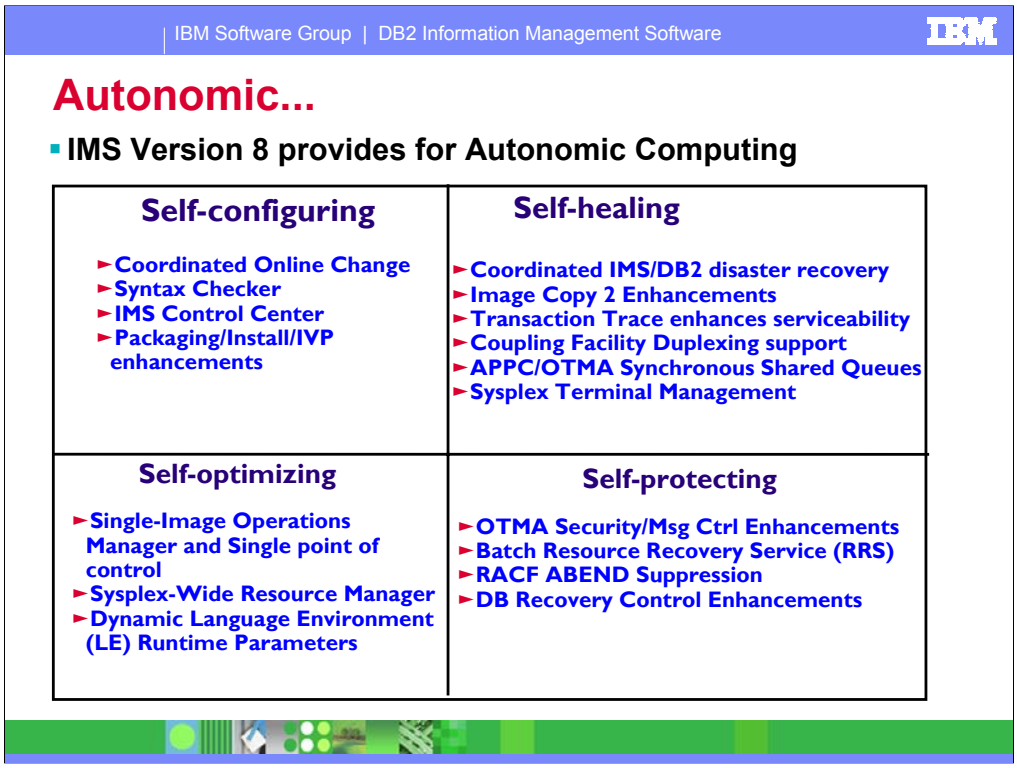
Message: But customers are being challenged with complexity, cost and skills problems that must be addressed.

Perhaps the greatest challenge for all of us in today's environment is cost containment. While the unit cost of computing technology is constantly decreasing, the role of IT in the enterprise is being greatly expanded and with that, expectations for IT have also been rising. Increasing complexity drives requirements for more/stronger IT skills. The added costs associated with managing today's IT complex environments are greater than the savings associated with lower price and increased performance.

Therefore it is necessary to look beyond price and examine total cost of ownership and value delivered.

IMS and the zSeries are providing compelling value. Customers can obtain better mean time between failures, times more secure transactions, reduced network costs, reduced floor space and energy requirements, and lower administration costs They can also achieve the highest average resource utilization. Higher utilization leads to fewer servers, lower complexity and superior cost of ownership. While the cost of computing is constantly decreasing, expectations for IT have been rising.

Increasing complexity drives requirements for more/stronger IT skills. e-business is driving greater dependence on IT environments. The added costs associated with managing today's IT environments are greater than the savings associated with lower price and increased performance.



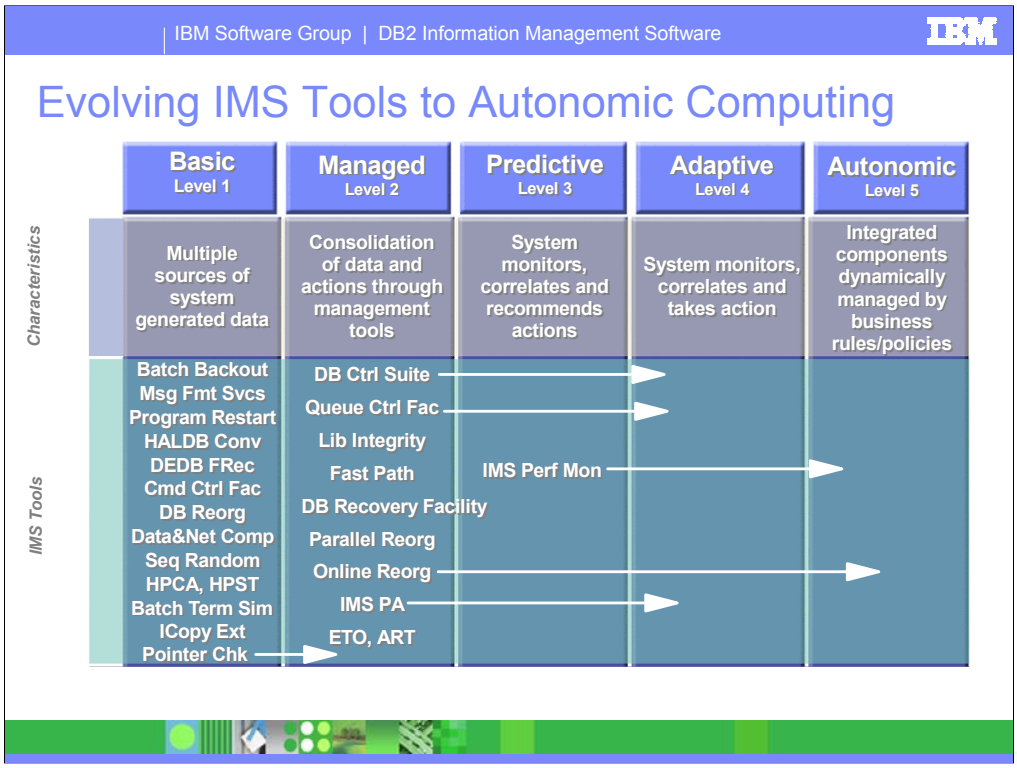
Message: For this, IMS is focusing on this with Autonomic Computing enhancements with its Version 8.
Autonomic computing systems are self-configuring, self-healing, self-optimizing and self-protecting. Self-configuring systems increase IT responsiveness/agility. Self-healing systems improve business resiliency. Self-optimizing systems improve operational efficiency. Self-protecting systems help secure information and resources. Some of the new features in IMS V8, mapped against the autonomic computing model are:

Coordinated Online Change eases, manages, and automates change across the IMS Sysplex -- commands can be entered on one IMS and request that the new IMS Resource Manager coordinate an online change across all the IMSs in the IMS Sysplex, replacing the earlier manual coordination process.

Syntax Checker is a new addition to the IMS installation process, helping reduce the system generation effort by assisting the system programmers in defining and maintaining the system. It eliminates the risk of parameter errors during a start-up of IMS and the time-consuming process of tracking down and correcting parameter syntax or value errors.

The Resource Manager is a new IMS address space maintaining global resource information accessible by IMSs in the IMS Sysplex. It enables a user to resume work on another IMS and to enforce single active user signon in and IMS Sysplex, if requested.

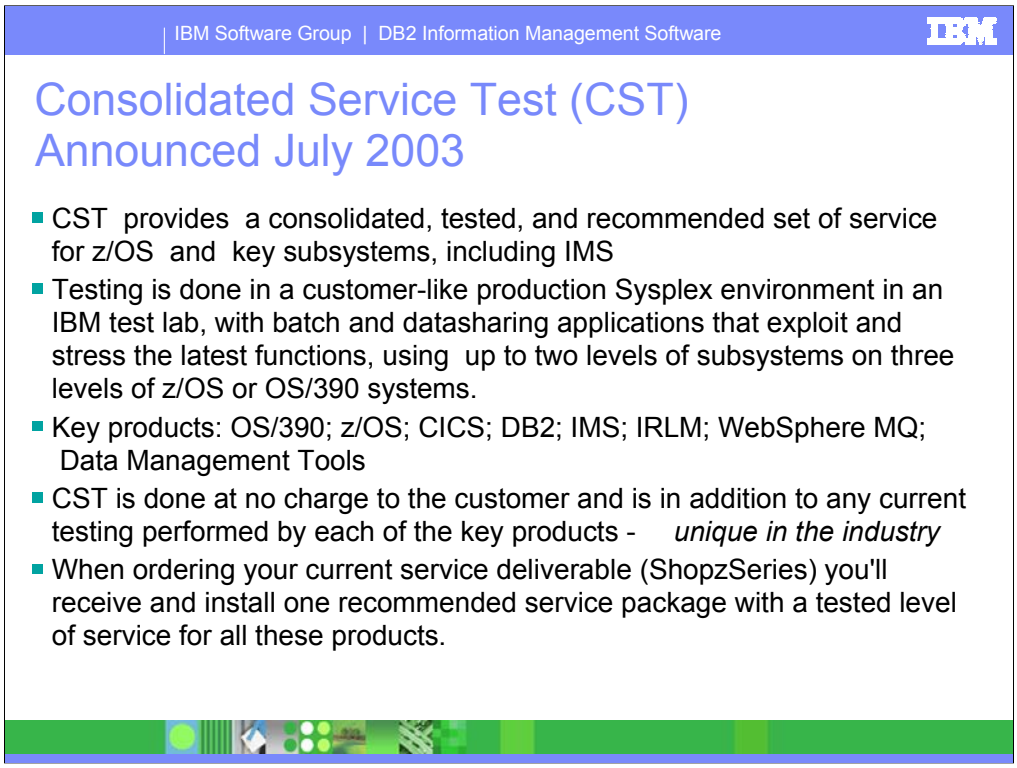
Sysplex Terminal Management allows VTAM to manage Generic Resource affinity while IMS can maintain VTAM terminal and user state data, if requested. It uses the Resource Manager (RM) to share VTAM terminal-related resources in the IMS Sysplex.



Message: A large number of IMS Tools are also provided to help ease Manageability, and being enhanced for Autonomic Computing.

IBM is providing a wide range of price/performance, competitive Systems Management tools for IMS. The tools provide support for speeding up and reporting on performance, extend the functions of and assist with testing of IMS, and provide system tools for querying, validating, managing, and tuning the IMS Database, These include for example tools necessary to maintain and repair databases. Many tools serve multiple purposes. IBM offers tool functionality like IMS Control Suite that is not available from any other vendor. IBM offers high performance tools that are competitive within the industry at an affordable price. In fact when taken together "price/performance and functionality", IBMs IMS tool can be considered the best in the industry.

There are over 30 IBM products to support all aspects of IMS usage. Utilities for full function and fast path database provide a high performance solution that improves IMS availability. Administrative tools make managing large and small IMS systems easier and faster. Performance management tools help you tune IMS systems and avoid outages. Recovery and replication tools enable fast and effective transfer of data from transactional to informational systems. And application management tools make application runtime environments more effective.



MESSAGE: IBM is also driving continual improvement in quality and customer satisfaction; Consolidated Service Test (CST) is the most recent example of that ongoing commitment.

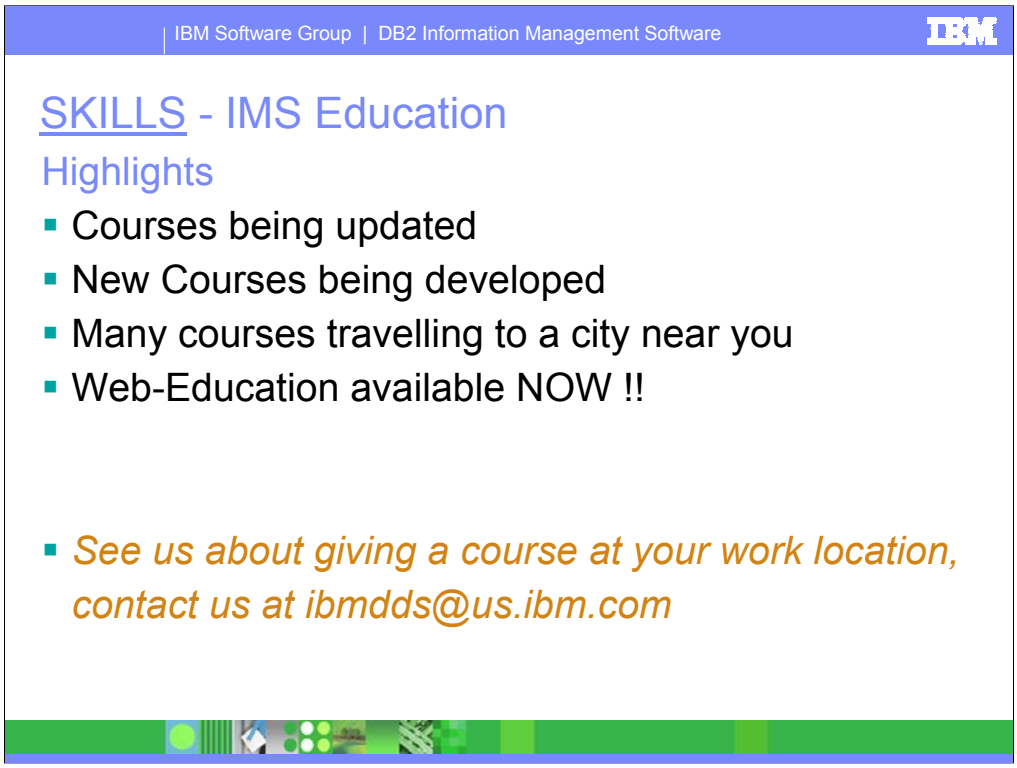
1.CST provides a consolidated, tested, and recommended set of service for z/OS and key subsystems, including IMS, and publishes results on a quarterly basis

2. CST is done at no charge to the customer and is in addition to any current testing performed by each of the key products - unique in the industry

The old way, key product families had different recommended maintenance strategies, with little or no coordination between them.

Testing is now done in a customer-like production Sysplex environment in an IBM test lab, with batch and data sharing applications that exploit and stress the latest functions, using up to two levels of subsystems on three levels of z/OS or OS/390 systems. The Key products are: OS/390; z/OS; CICS; DB2; IMS; IRLM; WebSphere MQ; Data Management Tools

When customers order their current service deliverable -- they should use ShopzSeries and they will receive and install one recommended service package with a tested level of service for all these products.

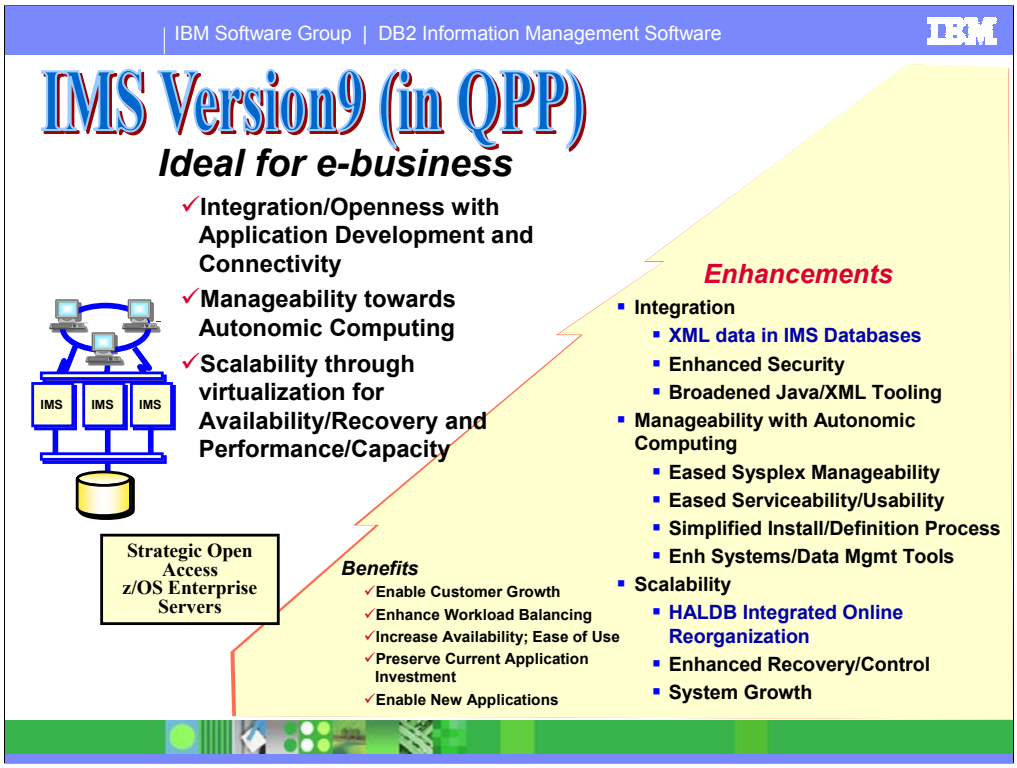


Message: IMS is also providing new courses and new ways of delivering them.

IMS Education is critical to our customers and we have been updating courses and developing new ones. Many courses are traveling to a city near you. And web 4eduation is being made available. If you are interested in a course at your location, please contact us at ibmdds@us.ibm.com

Message: The new IMS Mastery Certification program is being made available to help you evaluate your skills.

We have also begun an IMS Mastery Certification program to demonstrate your IMS Expertise. Beginning last fall, at the IMS Technical Conferences, you can register and be tested to receive certificates in IMS Fundamentals, Database Administration, and Systems Programming. Additional information on this and on the preparation for these exams is available on the IMS website at www.ibm.com/ims.



Message: IMS continues to enhance its integration/manageability/scalability with Version 9, which began its early customer support program last winter.
IMS continues to focus on further strengthening its leadership role, helping customers in their enablement of new environments with the growth, availability, systems management and cost measures they require. IMS focus is on providing Information Integration with open access and supporting tools for the e-business environment, continually improving, systems management/usability, and system scalability with increased availability, performance and capacity. IMS V9 provides the next stage of this function, providing enhanced availability of IMS High Availability Large Databases (HALDB) introduced in V7, with fully integrated Online Reorganization support. This would provide concurrent online update and availability of data.

IMS has been providing Sysplex support to ensure the highest in availability/performance for Systems growth. IMS continues to enhance support for this environment and provide support for new capabilities in it. IMS is also extending its XRF network switchover capability to newer SNA controllers using VTAM Multinode persistent sessions technology.

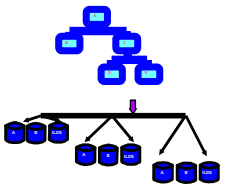
Systems Management through autonomic computing continues to be a key area with IMS customers in managing their systems. IMS continues to enhance its single system image with expanded standard user-friendly commands and interfaces accessible across environments. IMS continues to ease the installation process, reducing/eliminating the gen requirement. Enhanced security and serviceability for application access and database usage are also being provided.

IMS is also providing continued enhancements to eliminate bottlenecks and impediments to growth in the IMS systems and in connectivity to the IMS systems. IMS is improving availability, performance, and capacity in the Fast Path and Database Recovery Control (DBRC) areas of IMS.

Java continues to be a key area for new application development. IMS Java support and the IMS Connector for Java are enhanced for the latest in standards and ease of use to allow customers to take advantage of the latest in tooling. IMS is also providing enhanced performance for this environment, and providing better integration with the WebSphere development tool set. Enhancements include providing client-side access to a WebSphere z/OS EJB from an IMS Transaction. IMS is also providing support for XML in IMS databases. New Technology as it evolves with XML and Web Services are also continuing to be exploited to enable new Application Development tooling. IMS is forging a strong alliance with the AD community to provide an integrated tool solution for supporting IMS Java and connectivity to the Internet.

Additional IMS Tools are also being provided to better integrate and ease use of IMS as an e-business server. As tooling evolves we will continue to take advantage of the latest technologies for our customers to enhance their ability to use our products with these tools. In addition we continue to provide whatever we can for education and usability of our products. We would also be continuing to enhance the way our users use our information

IMS V9 HALDB Integrated Online Reorganization for IMPROVED AVAILABILITY



- Making 100% of data available 100% of time
- Providing Data Availability during reorganization
  - **Integrated IMS online reorganization by partition of HALDBs with concurrent online update and availability**
  - **Providing recovery from system, IMS, media failure**
  - **Users can adjust pace of OLR to minimize online impact**
  - **Data Sharing with other online and batch environments**
  - **Coordination through DBRC**
  - **Base for even better Manageability/Scalability enhancements**

Message: IMS V9 continues to address ultra high database availability with an integrated Online Reorganization capability

With IMS Online Reorganization (OLR), we plan to provide a fully integrated online reorganization by partition of HALDBs with concurrent online update and availability. This is the next phase of the original HALDB functions.

OLR provides recovery from system, IMS, media failures. There is no outage. Users can adjust pace of OLR to further minimize their online impact.

Data Sharing with other online and batch environments, but all must be at least on V8

Coordination is provided through DBRC.

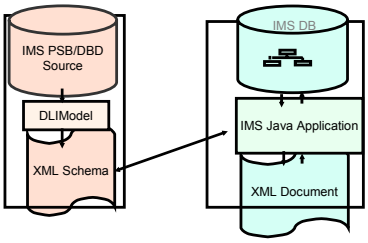
There would continue to be phasing of HALDB/OLR function overtime in subsequent IMS Versions.

OLR would be the base for future development enhancements for performance/availability of IMS, providing, for example, automated recognition and initiation of reorganization for improved systems performance

IMS V9 XML DB Support for IMPROVED INTEGRATION

Providing for

- Retrieval of existing IMS data in standard, easily exchangeable XML format
- Storage, Indexing, Search and Retrieval of valid new XML documents into new or existing IMS DBs
- Rapid deployment of XML in IMS DB
- Data exchange with other applications
- Ease of use and standard tooling through support of growing industry standard XML



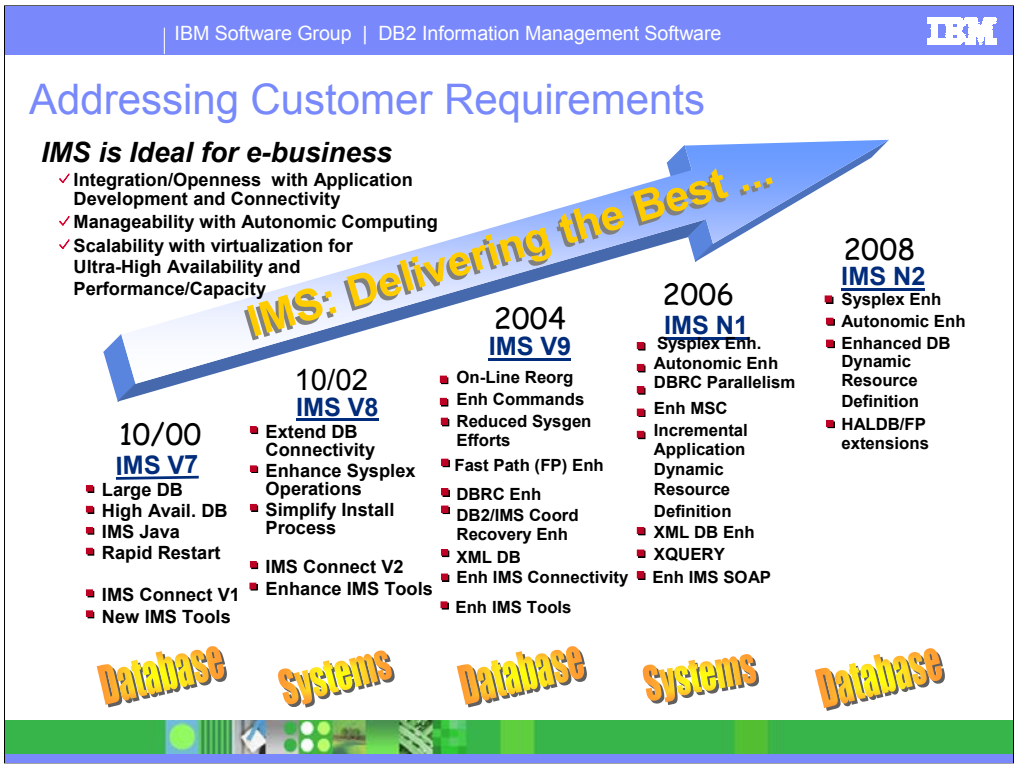
Message: IMS V9 continues to provide improved integration/openness through its XML Database support

XML is a standardized, simple, and self-describing markup language for documents containing structured or semi-structured information. There is a natural mapping between hierarchical XML data and hierarchical IMS database definitions. XML Schema Definition Language defines the legal building blocks of a valid XML document.

The IMS Java component of IMS V9 provides some new capabilities to store, retrieve, and query XML in IMS databases. You also have the capability to generate XML schema for existing IMS databases via the DLIModel Utility as well as create new IMS XML databases.

IMS Java in IMS Version 9 supports the storage of XML in an IMS database. Some of the user requirements for this support include the need to retrieve existing IMS data in a standard, and easily exchangeable XML format and the ability to store, index, search, and retrieve valid, new XML documents into new or existing IMS databases.

There are many benefits to these new enhancements. You exploit the ease of use and Open standard tooling available with XML. Examples are transformation tools to other formats like PDF and HTML and validation tools that check that the XML schema matches the document. These allow you to rapidly deploy XML in an IMS DB. Other applications are able to access this data, promoting data exchange between applications. IMS joins the worldwide movement of using XML as a data interchange language, which is important for providing future transparent application integration.



Message: IBM is continuing to enhance IMS while easing manageability, providing this in regular, staged, deliverables for the future.

As we roll out over time, we continue to provide enhancements to IMS alternating our bigger requirements across the different areas of the product. IMS continues with each new deliverable to provide enhancements for Integration/Openness with Application Development and Connectivity solutions, while easing Systems Management, and ensuring customer growth with Continuous Availability and Performance/Capacity enhancements.