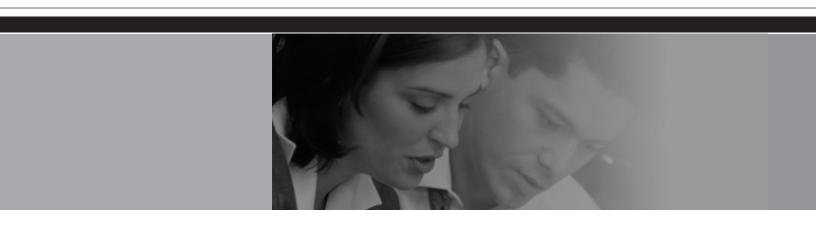1 Q.   Re p. B-70, what, if any, functions other than depreciation calculations will be

2   enhanced by implementing One World? Provide copies of all

3   communications from J. D. Edwards or others identifying implications of

4   retaining World Vision and not moving to One World.

5

6

7 A.   The functionality in OneWorld today that is not currently available in, and is

8   not planned for in WorldSoftware (Vision) is stated beginning on page 5 of

9   the attachment "Migration to OneWorld".

10

11   The attachment also discusses the support for WorldSoftware (Vision). The

12   implications of moving to OneWorld is a business decision and the purpose

13   of the proposed project is to do an assessment of Hydro moving to One

14   World.

JD **EDWARDS**®

MIGRATION TO ONEWORLD®:

———————————

*Compelling Reasons
and Business Value*

INTRODUCTION

The formation of the WorldSoftware Organization in mid-2000 resulted in a refocus on and a relationship renewal with our WorldSoftware customers. We are hearing your voices via the WorldSoftware Advisory Council, Migration Advisory Council, user conferences, and numerous customer focus groups.

As market demands become more complex and unpredictable, businesses and public service organizations find themselves more reliant than ever upon new information technologies. In response, enterprise software providers have developed new applications and technologies that help organizations manage the complexities of their environments.

As such, it would make sense for software providers to give their existing customers a relatively easy migration path to implement new solutions. Unfortunately, in the rush to bring new applications and technologies to market, most enterprise software providers have left their existing customers behind.

The release of OneWorld Xe marks significant improvements in technology and functionality. With this release, OneWorld functionality is near parity with that of WorldSoftware, and in fact, has exceeded it in some cases.

Leveraging Investment and Relationships

WorldSoftware customers now have the opportunity to leverage their existing investment and relationships while migrating to OneWorld, the new generation of J.D. Edwards enterprise applications. Your investments in application training and years of experience using WorldSoftware products are protected with your migration to OneWorld. Additionally, if you plan to retain the iSeries (formerly AS/400®) as your preferred platform for running OneWorld applications, you can also leverage similar time and knowledge investments with regard to the iSeries. This is especially important because the vendor relationships established with J.D. Edwards and IBM® will continue to strengthen as time goes on.

J.D. Edwards will continue to support our WorldSoftware customers. When the time is right for you, we will support you through your migration process to OneWorld with various migration strategy options that are designed to meet your specific needs.

Return on the Investment of Migration

Your return on investment (ROI) when migrating to OneWorld might be realized in various ways, and will be unique for every customer. What is deemed a compelling reason for one customer might not be of any value for another. J.D. Edwards is committed to working with you to build your business case once you have decided to pursue this direction. Some of your benefits will be quantifiable and others will be more subjective.
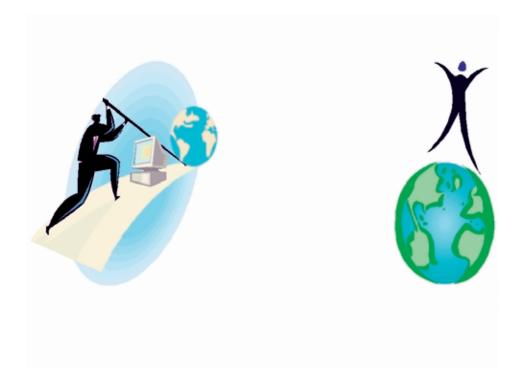
WORLDSOFTWARE

As part of your migration assessment, we believe you need to evaluate all of your options, including remaining on WorldSoftware.

WorldSoftware is being enhanced through the special interest groups (SIG) enhancement paper and software action request (SAR) processes, as well as various strategic initiatives. However, this enhancement strategy is founded on the principle that we continue to provide you with migration paths to OneWorld. That means that future WorldSoftware enhancements will be subject to those that will be delivered in OneWorld. These enhancements are front-end portions to the back-end applications and databases (such as self-service applications). We have licensed technology to allow our WorldSoftware customers to do real-time integration as well as outbound transactions from WorldSoftware through eXtended Process Integration (XPI™).

As of November 2001, support for WorldSoftware has been extended indefinitely. With this indefinite extension of support, the compelling reason for migrating to OneWorld may no longer exist for some customers. Because there is no longer a sense of urgency, these customers may decide to delay their migration. But for other customers, the necessity or desire to move to OneWorld remains. The business case or compelling reasons will be different for each customer. This section will provide you with some ideas that might become your compelling reasons.

So, why would you contemplate moving to OneWorld? Perhaps you might find elements of your business case for migration in the following compelling reasons.

THE BUSINESS VALUE OF ONEWORLD

OneWorld Xe Quality

OneWorld Xe is the highest-quality release of OneWorld to date, and marks the debut of many technical and functional enhancements. According to Michael Madden, J.D. Edwards group vice president and chief technology officer:

"The development of OneWorld Xe included a stringent design process and increased levels of system and acceptance testing. During the qualification of OneWorld Xe customers had hands-on opportunities to use and provide feedback on the software from the alpha stage through general availability, beginning with the upgrade process. A number of new tools were utilized to improve both deployment time and the quality of deployments, such as visual specification merge in the upgrade area and Autopilot for developing tests scripts that were automated and run repeatedly. Actions such as these contributed to the quality of both the code base and surrounding implementation policies. As a result, we have enjoyed higher customer satisfaction ratings since the introduction of OneWorld Xe into the market."

Customers have been equally enthusiastic about this release. "From the very start, we rated OneWorld's architecture as the most technically sound and forward thinking — and we still believe that to be true," said Dan Flynn, vice president and chief operating officer of Pioneer Balloon. "As a long-time user of WorldSoftware, dating back to 1983, we also knew that J.D. Edwards offered the most flexible application set in the industry. Our original implementation in 1999 of a pre-Xe version of OneWorld was a challenge, however, after piloting OneWorld Xe we knew, once again, that we had a solid, robust ERP implementation. We upgraded to OneWorld Xe in early 2001, and that was one of the smoothest software transitions we have ever had. Today, the IT and implementation teams can focus on projects that initiated the migration to OneWorld in the first place — projects with ROI." In conclusion, Flynn said, "We're confident that OneWorld Xe gives us a solid, open, and extensible ERP solution that will make it easier for us to move our business in directions that would not have been possible before."

We currently have more than 1,360 customers live with OneWorld releases. With the release and proven abilities of OneWorld Xe, customers are increasingly upgrading from previous releases of OneWorld to the Xe release. We have also seen an increasing trend of WorldSoftware customers beginning to plan their migration to OneWorld. More than 300 WorldSoftware customers have completed, or are in the processing of, migrating to OneWorld.

Coexistence will not be available for future OneWorld releases, which means that the link to WorldSoftware will be broken after Xe. OneWorld Xe is therefore the gate for coexistence, the migration strategy that involves the least risk for migration from WorldSoftware to OneWorld. (More detail on this and other migration strategies is available in the *Migration Strategies and Considerations* white paper.)

Functional Advantages

There is functionality in OneWorld today that is not currently available in, and is not planned for, WorldSoftware. Some of the highlights of applications that were significantly enhanced with the rewrite of OneWorld are:

- **Accounts Receivable:** The OneWorld Xe Accounts Receivable system has been re-designed, tables have been added, and it has significant enhancements and new functionality compared to WorldSoftware. One example is in credit and collection management. You can review a summary of an account's credit status and identify if that customer is over their credit limit. You can create daily lists of customers who require credit attention.

  Another example is in standard receipt entry where you have the ability to set up equal or unequal payments with different discount percentages. Receipts can also be applied in an alternate currency.

- **Advanced Warehouse Management** has been significantly enhanced in OneWorld and includes such features as:

  - "Random" location replenishment processing, which is especially good for carousel or conveyor, resulting in significant improvements in warehouse productivity, location utilization, and order fulfillment.
  - Manual Planner, a feature that offers warehouse personnel the ability to "personalize" warehouse movements, yet continues to use the rules and processes consistent with fundamental and well-established warehouse operations.
  - The development of "opportunistic" cross-docking functionality now exists between the Procurement and Warehouse modules, reducing the effort and improving the warehouse operations. This feature is good for back orders that must be shipped out immediately and spare parts, MRO, or multiple line items against a single sales order.
  - The development of the multiple receiving and shipping locations feature provides enhanced and more flexible receiving and shipping operations.
  - Batch picking enhancements that support high volume items.
  - Freight costing that allows you to compare estimated versus actual costs.
  - Enhanced location management, which integrates with the Transportation Management system.

- **Advanced Pricing:** Advanced Pricing was designed around key concepts that support a wide variety of the seller's pricing strategies — ranging from simple product promotions to highly sophisticated customer deals. In WorldSoftware, this functionality is limited to Sales Order Management. But the success of Advanced Pricing has demonstrated the strategic importance of automating order pricing in other areas, and OneWorld Xe has added this functionality within Procurement. Integrating Advanced Pricing features with Procurement provides a buyer the ability to document the terms of the net purchase price with greater detail, sophistication, and accuracy.

- **Workforce Management:** There is functionality in OneWorld today that is not currently in, and is not planned for, WorldSoftware. Some of the highlights of Workforce Management that were significantly enhanced with the rewrite of OneWorld are:

  - Manager Self-Service
  - Performance Management
  - Enhanced compensation management
  - Job skills and competencies
  - Employee skills and competencies
  - Business process workflow templates
  - Time Card Automation
  - Enhanced overtime calculations
  - Timecard templates
  - Enhanced retroactive pay management

  In addition, there is added functionality planned for the next major release, including:
  - Global leave administration (FMLA plus much more)
  - Re-designed and enhanced payroll interims
  - Enhanced gross up (including group gross ups)
  - Employee assignment
  - Support for a new tax method

WorldSoftware integrations to the following J.D. Edwards solutions are available or planned, but the functionality will not be as inclusive as it is with OneWorld:

- **Customer Relationship Management (CRM):** This solution integrates J.D. Edwards CRM solution with WorldSoftware and OneWorld Xe using XPI technologies. Though similar functionality currently exists for both platforms, OneWorld CRM will utilize the robust Contact Center suite of products that are native OneWorld applications. WorldSoftware CRM will deliver Contact Center capabilities now contained in CRM 1.1, but it will not have the richness and high level of integration as compared with the OneWorld Xe Solution. In the future, OneWorld CRM will more aggressively enhance CRM capabilities to take advantage of major enhancements to ERP in future releases. WorldSoftware CRM will add capabilities such as Advanced Order Configurator, Order Promising, Quote Management, Self-Service, and additional sales force automation enhancements, but will not enhance CRM capabilities to the same level as OneWorld CRM.

- **Supply Chain Management:** This new application uses a combination of XPI and batch integration into OneWorld and WorldSoftware. Other than integration to Order Promising, both software platforms support the same supply chain functionality and your investment in this solution will be leveraged as you migrate from WorldSoftware to OneWorld. WorldSoftware will deliver Order Promising integration and will continue to enhance integration to Supply Chain Management applications. OneWorld will enhance integrations more aggressively to take full advantage of future enhancements to the OneWorld ERP system.

- **Advanced Order Configurator (AOC)** - This is a graphical tool that allows you to pull together a design for a specific product component and work with tools like AutoCAD to generate a drawing and a proposal. Currently, it is available in OneWorld, however WorldSoftware plans integration for this application as well.

Other applications that are only available in OneWorld include:

- **Enterprise Asset Management (EAM):** Many new features are included in this product. It enables reliability centered maintenance (RCM), including support for predictive maintenance, e.g., failure analysis. Also included is Service and Warranty Management to ensure vendors live up to their base and extended warranty obligations, service level agreements, and integration to the Intelligent Graphics Solution (IGS), which uses graphical views of plant and equipment to navigate through OneWorld. IGS increases user efficiency and reduces training costs. In future releases, you will also benefit from the EAM self-service portal to further increase user efficiency with access to critical Business Intelligence data.

- **Enterprise Profitability:** This application provides solutions for aggregating your organization's financials and determining enterprise profitability.

- **Expense Management:** This system is designed to help you effectively manage reimbursement requests. The system facilitates the expense report entry process and provides immediate error notification if information is missing or inaccurate. It also provides control mechanisms to monitor and audit expense reports, and provides the flexibility you need to tailor the system to evolving expense and travel policies.

- **Transportation Management:** With this application, you can efficiently manage transportation modes, dynamically consolidate and optimize orders, and compress your supply chain, resulting in significant reductions in transit time and shipping costs. This fully integrated module also helps you to:

  - Create shipments directly from the Sales Order Management and Procurement modules.
  - Define carriers and their corresponding modes of transport/services, the routes/zones they serve, and rates.
  - Provide shippers with a wide variety of billable and payable freight options through the use of "exclusive" freight preference processing and also supports the creation and easy maintenance of accessorial charges and rate adjustments.
  - Create, rate, and process truckloads, inter-modal, and rail shipments.

The **Pick, Pack, and Ship** (PPS) functionality utilizes elements of both the Warehouse Management and Transportation Management applications to create an apparently seamless business process that significantly increases functionality of the UCC128 compliance process. This enhancement now allows you to quickly and easily manipulate shipping cartons and their contents prior to physical shipment. You can also automate the creation and/or update of the outbound UCC128 shipment pieces, and shipment tracking information in such key areas as warehouse cartonization and prior to TMS shipment confirmation. With this functionality, you can print carrier-compliant shipping documentation and labels during the cartonization process, thereby labeling the shipping cartons as they are picked up and/or anytime prior to the physical shipment.

Technology and Technical Advantages

OneWorld Xe is 100 percent *browser enabled,* which provides you with more flexibility in system access and connectivity. For companies that require outside viewing of certain master files (i.e., supplier catalogs, etc.), OneWorld allows that conductivity via the browser to offer storefront-type access. Security and configuration of the install can allow as much access as your company permits. OneWorld via the HTML / Web browser allows excellent access to the software for browsing and viewing files; however, it is not the recommended option for heads-down key entry and transaction entry of the system.

Although similar in concept to the four WorldSoftware reporting tools that allow data selection, sort, and sequence, the *OneWorld Report Design Aid (RDA)* extends report development capability to building and modifying business views, formats, and logic. RDA is much more robust and driven by a wizard to guide "power users" through the creation process. This type of report building would require an RPG development effort in WorldSoftware.

The *OneWorld Windows-based graphical user interface* is a significant gain for end users by enabling enhanced productivity via user-customized views without involving the IT department. Multiple views can be created and saved with tabs, and users can create their custom view with the columns that are the most meaningful for them. Query by example (QBE) is available for each column of data, increasing productivity of search. Data can be imported/exported to spreadsheet applications and charted (i.e., budgets). These Windows-based desktop features are now available in the HTML interface as well (except charting).

WorldSoftware introduced you to the concept of *workflow* with "Order Activity Rules" (i.e., purchase order approval flow, order processing flow, etc.). However, this type of workflow is hard-coded and non-reusable. OneWorld provides a very robust workflow engine with numerous activators that provide flexible flow and monitor the status of a transaction, escalate those transactions, track exceptions, send approvals out for multiple, etc. We have developed some of the activators for our delivered OneWorld applications, and provide you the ability to reuse the workflows and redefine for your additional workflow requirements. Use of these workflows will improve efficiencies in the flow and approval of business processes.

The *OneWorld Portal* is delivered with Xe and enables your organization to efficiently consolidate and manage your daily information requirements. We are increasing our use of this tool through our self-service applications, which include Employee Self-Service, Customer Self-Service, and Supplier Self-Service, among others. The portal is easy to navigate through alerts designed as components, making it easy to search for information.

Enhanced security within OneWorld includes the following features:

- Group security by level and profile
- Row and column security to secure certain fields and data from access
- Form level security by user group
- Security workbench
- Portal security
- Scroll to bottom of grid security
- Media objects security
- Several levels of security
- Just-in-time install (JITI) security (enable/disable)

Interoperability is another potentially compelling reason to move to OneWorld. Although some interoperability is supported for WorldSoftware, the extent and flexibility enabled by the OneWorld technology is far superior. XPI is the combination of Extended Application Integration (EAI) tools that tie in disparate systems within the enterprise and business-to-business (B2B) communications to enable electronic data interchange (EDI) over the Web or XML-based transactions with your customers and suppliers. Although the WorldSoftware enhancement strategy will offer XPI interoperability solutions in addition to the existing EDI and Z-file support, OneWorld offers additional support of interactive application programming interfaces (APIs), COM objects, CORBA objects, Java wrappers, MQ Series, and XML parsing. These additional options are part and parcel of the One World toolset. Because of OneWorld's structure, all business functions can be used for APIs. Conversely, WorldSoftware needs specific integration development of eXtended Business Processes (XBPs).

OneWorld provides tools such as the *Solution Explorer* and the *Solution Modeler* that allow you to implement OneWorld based on process flow rather than application towers. We took all of the process flow within OneWorld and put it into a tool called the Solution Modeler. This application enables you to drill into the OneWorld screen and processing options selection directly from a node in the process model. As you are implementing OneWorld, you can do it by process flow in a conference room pilot environment. As a result, when you want to change the processing options at a later date, you can easily make the necessary changes.

OneWorld Solution Validation Tools offer productivity gains in the area of software modification and upgrade testing. These tools include:

- **OneWorld Scripting Tool:** This tool allows you to capture and then replay interactions with OneWorld. The intent of this tool is to check application functionality. In addition to capturing your input keystrokes and mouse-clicks, the scripting tool allows you to embed testing and if-then-else type logic into a script to test the actual output coming back to the screen from the OneWorld application. Using this tool, you can build up a bank of self-checking test scripts that can be run as a batch overnight or unattended. This tool bypasses the screen and goes right to the middleware. These can be used subsequently as regression tests to be run after any and every change to the system, e.g., modifications, service pack changes, or upgrades. There is no longer a need for manual scripting and testing. This is a very powerful tool in certain industries such as pharmaceuticals or medical instruments, where the Food and Drug Administration mandates stringent change management procedures for testing software changes.

- **Virtual User Tool:** With this tool, you can stress test a system by simulating multiple users at the same time. Once a change has been tested for functional correctness, you may want to test the change under real-life workload conditions. Rather than requiring all of your users to log in concurrently, this tool can be set up to run multiple scripts, as necessary, to simulate your actual working environment, in a repeatable manner. In addition, OneWorld has tools that provide a graphical view of the test results and helps determine the source of the bottleneck, e.g., application server, database server, network, etc.

Enhanced productivity with the *OneWorld Toolset* has proven to be a significant benefit for our own development staff. We have leveraged the technology of point-and-click to generate applications that can be quickly deployed to various platforms and client types, which protects your solution in the future. Our business functions are all coded as C components for performance, portability, and reusability. The Form Design Aid will generate an application that can be used on a Windows client or on a browser.

Your developers can act as business analysts, designing the specifications with the users and developing the customization with this OneWorld toolset, using a mouse to aggregate components and design. As a result, you don't need to know the language, you just need to know how to use our tool and what business problem you're trying to solve. Programming in C++ is only necessary if the development specifications require components that have not already been developed and provided by OneWorld.

Additionally, a major improvement of OneWorld is the process of protecting your customization and modifications at upgrade. *Object Management Workbench (OMW)* is a complete change management system built into OneWorld for overall control of OneWorld development process. It leverages the concept of Activity Rules to enforce change management procedures. OMW uses an integrated and simplified graphical user interface for OneWorld development (add/change/delete/transfer) to provide better control of OneWorld objects. OMW simplifies development for you by providing the system administrator with complete control of changes to OneWorld path codes and data source.

OneWorld provides *platform options,* whereas WorldSoftware runs on the iSeries, exclusively. The flexibility with platforms is in response to some of the evolving industry standards and technologies. OneWorld is supported on:

- UNIX® running the IBM pSeries/AIX, HP/UX and Sun/Solaris. The databases supported on UNIX are either IBM DB2 UDB (our preferred UNIX database) or Oracle8*i*.
- IBM iSeries/OS/400 with DB2/400 as the database manager.
- Windows/Intel® running Windows 2000 and Windows 2000 Datacenter. Our preferred databases on the Windows platform are Microsoft SQL Server 2000 or IBM DB2 UDB. Oracle8*i* is also supported.
- Client platforms supported are Windows 2000 or XP, Windows 2000 Terminal Services, Citrix Metaframe on Windows 2000 Terminal Services, Microsoft Internet Explorer, Netscape Navigator, and Windows Pocket PC.

The Configurable Network Computing™ architecture allows you to add hardware as required in order to meet increased demands and the needs of the business.

We have also enabled *wireless devices* using Windows CE and Pocket PC to integrate with OneWorld. All of the OneWorld applications will run on these devices. However, the screens are SVGA-sized, which require scrolling. To resolve this issue, you can go into OneWorld's Forms Design Aid, and easily resize and re-purpose some of the screens to better accommodate the limited transactions you might perform through a wireless device. As a result, you do not need to run it through another front end; rather you make use of the browser inherent in your wireless device.

More detail on these potential compelling reasons is available in *Net Change Guides.*

Future OneWorld Releases

The next release of OneWorld is planned for late 2002. This release is slated to bring enhancements in the areas of Workforce Management, Property Management, and Real Estate.

Later, in 2003, we plan to deliver an even richer, enhanced release of OneWorld. There are major application and technology enhancements included in these releases that may provide the ROI and business value justification for your organization's migration to OneWorld.

Currently, our customers running J.D. Edwards OneWorld solutions internationally have been faced with common code page restrictions. Double-byte languages such as Japanese, Chinese, and some European languages cannot run in the same database instance, requiring customers to establish multiple databases with synchronization challenges. *Unicode* is scheduled to be delivered with the anticipated 2003 release, and will allow you to put all environments into one database, reducing your system administration tasks. The concept of a hosted site, an application service provider (ASP) for the enterprise where you are running all your users off a common site, globally, is more realistic with the implementation of Unicode.

From an application and individual industry standpoint, our *development initiatives* have been focused in the consumer, industrial, and services sectors.

The *consumer sector* includes packaged goods (e.g., food and beverage), energy and chemical, and pharmaceuticals. The Pinnacle Project, a joint effort with our business partner Accenture, has focused enhancements for the consumer packaged goods industry with expanded functionality to enhance profitability management, promotions, and fund management.

Development plans include enhancements for multi-attribute items (dual units of measure or catch weight), cross-docking, pricing, sales order, lot tracing, and tracking enhancements. Textile industry requirements for actual size, style, and color are included enhancements. These are significant enhancements that required major database changes.

From an *industrial sector* perspective, planned enhancements include high-level configuration management. For example, with sales order configurator, there is a graphical representation of forklift and forklift options that allows the end user to pick and choose the options and generate drawings (such as partitions in an office building), which will generate a bill of material. This graphical tool is tied to a back-end configurator and is synchronized with the rest of the system. Once the design is captured, the system generates a proposal, which is linked into OneWorld to place the order.

Configuration management is an engineering project management tool that is useful in a job shop environment where constant bidding on work and changing the process and context of projects occurs. Engineer-to-order is another term for engineering project management. OneWorld provides more Web enablement for these configuration options and complex configurations.

Functionality that will help optimize processes on the plant floor includes workbench configurator, quote-builder, project billing, line design, graphical work instructions, demand smoothing, sync-line, and sequence products. These features help identify and solve bottlenecks that might be present on the assembly line.

Enhancements planned for the *automotive sector* are in the areas of EDI, demand scheduling, release accounting, queue management, and engineering changes. For example, we are making enhancements for release shipping sales order entry, EDI, and a bar coding interface for existing modules. That means you can now take advantage of XPI to interface to other products like Future 3, which has many customers in the automotive industry. Much of what we do here also applies elsewhere in electronics or industrial fabrication and assembly.

From a *services industries* standpoint, for professional services, we are planning to enhance Time Accounting, Contract Billing, and Service and Warranty Management while offering a new Field Service solution. If you need to dispatch a crew using wireless devices to clean a building, for example, these applications help you track the performance and billing of these services in real time — anytime, anywhere. In addition, integration to a resource scheduling and optimization application was completed in April 2001 with OneWorld Xe as well as Workforce Management enhancements to better aid in better recruiting and retaining your most valuable assets — your employees.

The *real estate industry* and the *construction industry* will also find new functionality added to the already robust solution offerings.

We plan to deliver a brand new homebuilder offering sometime in the near future. Significant functionality and technological advances will include a CRM solution tailored for the home-builder industry and an AOC solution to assist in configuring homes and assembling options specifically to a customer's requests.

Significant enhancements are already in progress for the *real estate industry*. For example, J.D. Edwards is currently moving forward with a multi-family front-office solution, a real estate-centric CRM solution, Advanced Real Estate Forecasting, and a Portfolio Analytical (Asset Management) solution. In terms of recent achievements, we are proud to announce that our advanced retail functionality was released in OneWorld Xe in 2001.

Conclusion

So, why would you contemplate migrating?

With OneWorld Xe, customers have the opportunity to take full advantage of the next phase of e-business in the connected economy. Real-time applications exploit shared business processes among companies and deliver a higher value. Collaborative solutions allow you to streamline the entire process. Simplicity and speed of setup is our goal, by not just linking them together, but by making sure we have enhanced our applications to work in this new way.

OneWorld is the platform for application enhancements. It is the platform for collaboration. It is the B2B solution for collaboration. It is the future.

Your ability to leverage your investments in your relationships with J.D. Edwards, as well as that of the experience you have within your organization with these solutions, enables you to do it once, do it right, and make it last.

The choice to migrate to OneWorld is yours. The opportunity to assist you in building your business case is ours.

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