

# Solution Architectures: The Hospitality Industry

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Application Development & Integration

# Andersen's Solution Architecture for the Hospitality Industry

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- Addressing issues in technology, Andersen's solution architecture can affect the business in the following ways:

## Increase

- Maintainability of solution
- Extensibility of architecture to integrate additional components
- Ability to enable field workers with technology
- Customer satisfaction due to process efficiencies

## Decrease

- Development time for integration of new application components
- Complexity of existing architecture
- Reliance on applications with a closed architecture



# State of the Enterprise Architectures in Hospitality Industry

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*82% of respondents believe that the closed architecture of the industry's technology has had a negative financial impact.*

*Hospitality 2000 – The Technology*

- Technology currently viewed as an enabler of an existing business model rather than the foundation for an updated business model
- Lack of strategic planning around the architecture for the enterprise is preventing established chains from being leaders rather than followers in the internet market
- Weak strategies exist to manage, mine, and react to customer information



# Future of the Enterprise Architectures in Hospitality Industry

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*The foundation of success increasingly is the ability to create new business models that leverage Internet technologies to deliver unique value to customers.*

*Ian Graham, Andersen, London*

- Technology will be part of an integrated business plan where the technology supports the plan
- Focus on fully integrated system that centralizes data and integrates property management, central reservation applications, and data warehouses
- “Single Image” view of the organization will become the next competitive advantage



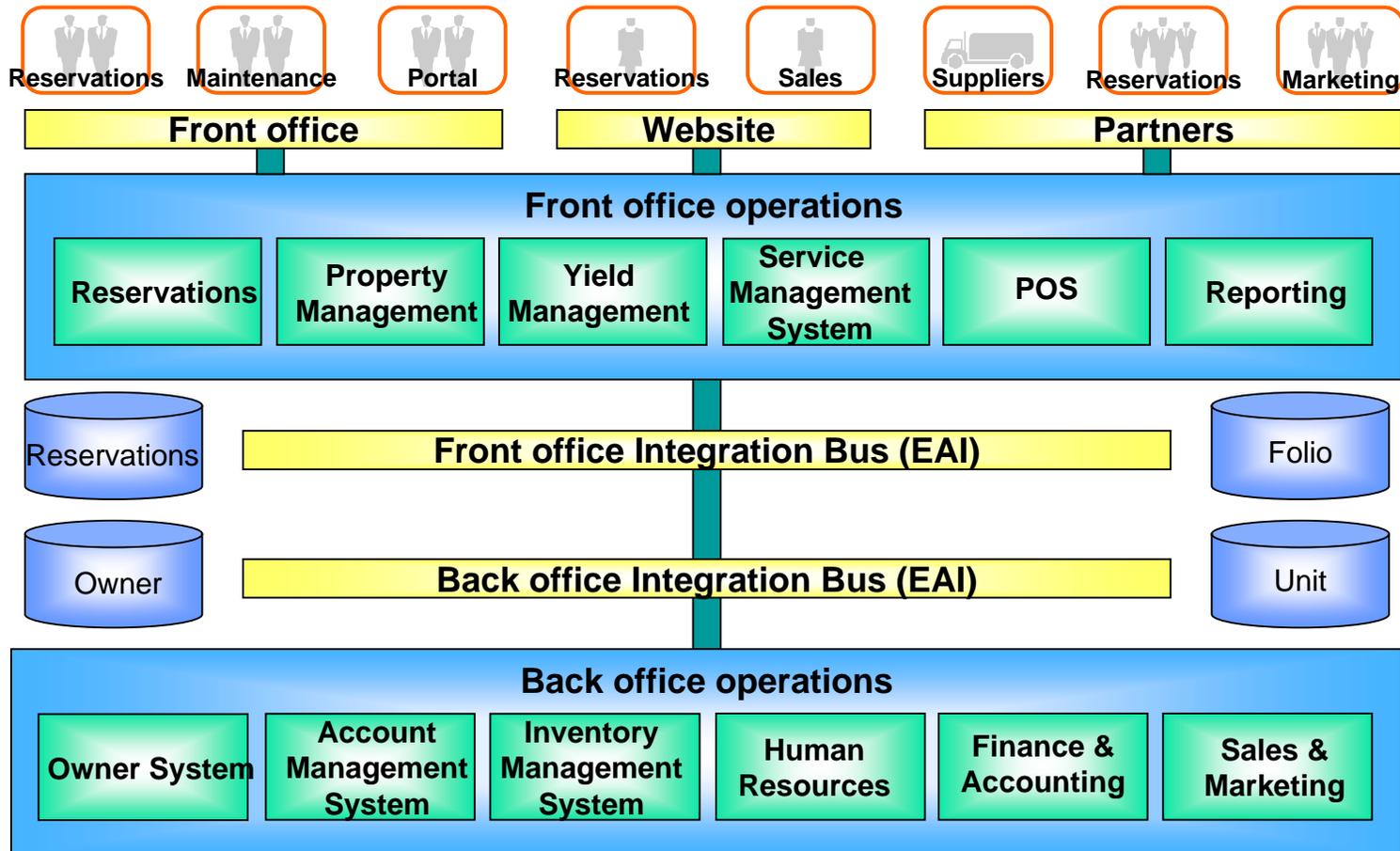
## Andersen's Architecture Approach

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“Adding new features and functionality should be constrained by the complexity of the new features and functionality, not the limitations of the existing architecture”

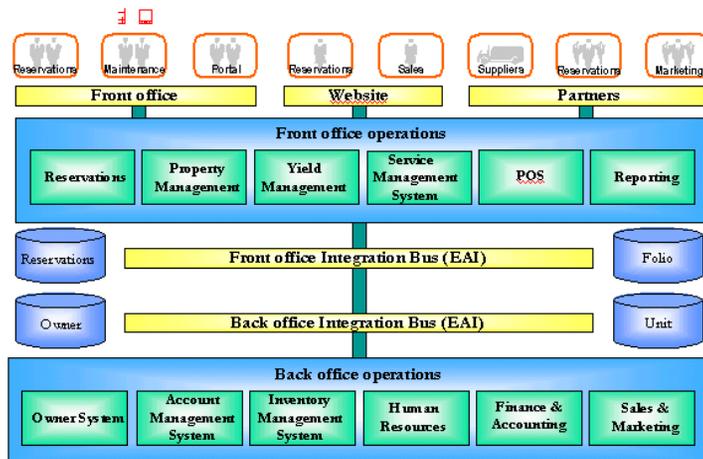


# Andersen's Solution Architecture for the Hospitality Industry



# Solution Architecture: Features

*Enterprise-caliber architecture that has already been proven to be effective*



- Distributed architecture can support centralized or decentralized operations
  - Scalable across most hardware and platforms from Windows to Linux to AS/400
  - 24/7/365 fault tolerant architecture
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- Extensible framework allows for easy addition of new components and functionality
  - Built using enterprise-quality market standards and tools



# Solution Architecture: Total Process Integration

## Front Desk Portal

### Reservations



Flight Status	Carrier	Flight Number	Class	Origin	Destination	Status
On-Time	AA	1111	Y	LAX	JFK	On-Time
Delayed	DL	2222	M	ATL	LAX	Delayed
Cancelled	UA	3333	Y	ORD	LAX	Cancelled
On-Time	SW	4444	Y	MDW	LAX	On-Time
On-Time	WN	5555	Y	MDW	LAX	On-Time
On-Time	B6	6666	Y	LGA	LAX	On-Time
On-Time	JET	7777	Y	LGA	LAX	On-Time
On-Time	DL	8888	Y	LGA	LAX	On-Time
On-Time	AA	9999	Y	LGA	LAX	On-Time

### Check-in



### Back Office Administration

Please provide the guest information for the new guest and click continue.

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

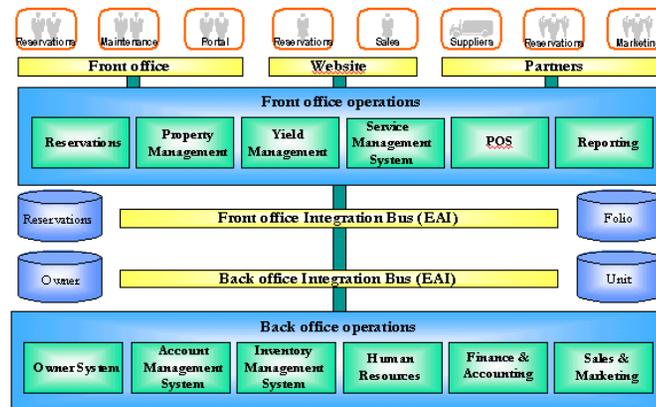
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Country: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Account Reference: \_\_\_\_\_

New Account  Existing



### Maintenance



Please provide the asset information for the new asset and click continue.

Asset Name: \_\_\_\_\_

Asset Type: \_\_\_\_\_

Asset Location: \_\_\_\_\_

Asset Category: \_\_\_\_\_

Asset Status: \_\_\_\_\_

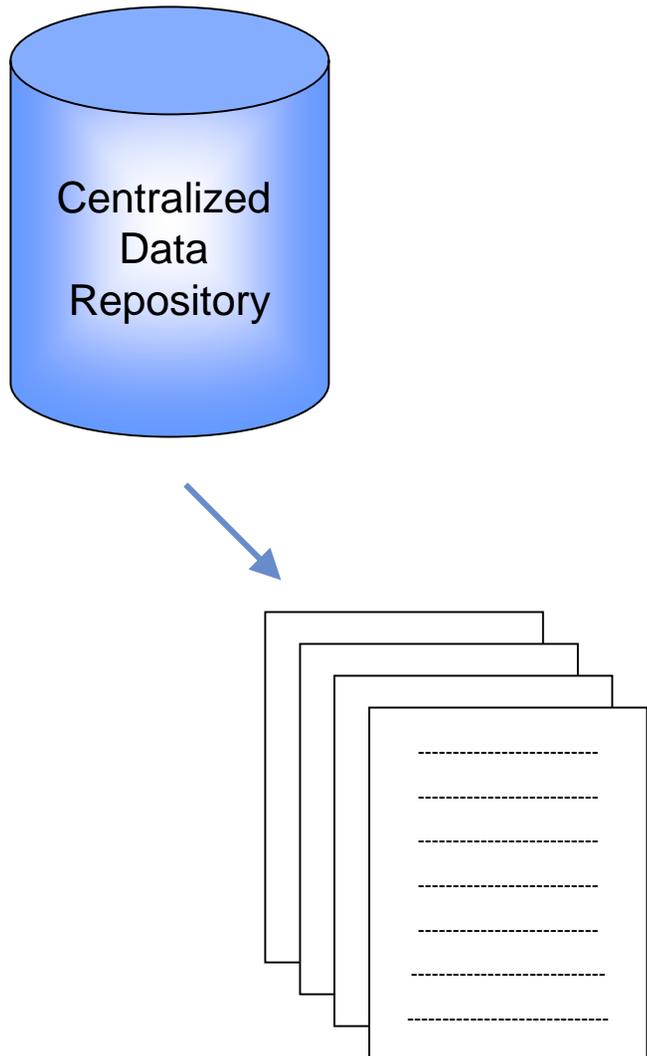
Asset Description: \_\_\_\_\_

Asset Reference: \_\_\_\_\_



# Solution Architecture: Focus on Data

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Shared data repository to be used across the enterprise

- Eliminate redundant data and errors in the manual process

Data mining across all functional areas

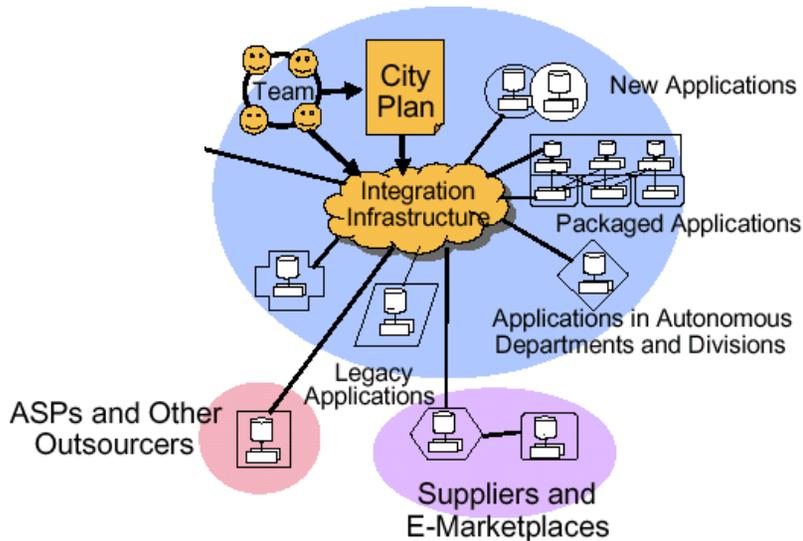
- Increase bottom-line results by identifying new revenue streams

Integrated reporting architecture

- Increase understanding of operations through ability to view integrated picture



# Solution Architecture: Focus on Integration



## Standard integration architecture

- Eliminate redundant data and errors in the manual process

## Integration with Partners

- Increase sales through dynamic integration

## Tight integration between applications and processes

- Better interaction reduces processing time and increases customer satisfaction



# Solution Architecture: Focus on Distribution

webServices for remote system integration

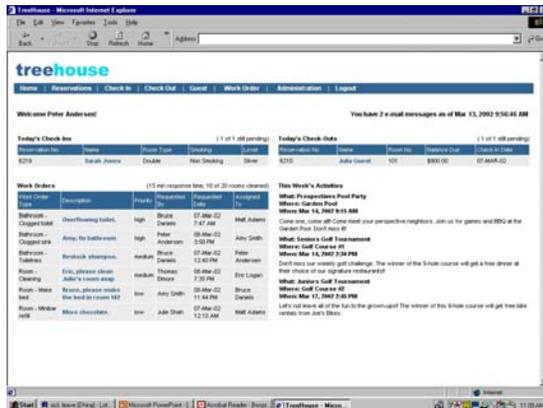
- Use of industry standard protocols allows for easy integration with remote systems

Anytime, anywhere access

- Use of handheld and wireless devices allow employees to update the system from the field

Allow customers to update the system

- Creation of secure interfaces to allow customers to work with the hotel at their own pace



# Breakthrough thinking: The Front Desk Portal

## Today's check-in

Instant access to pending check-ins.

Welcome Peter Andersen!

**Today's Check-Ins** ( 1 of 1 still pending)

Reservation No.	Name	Room Type	Smoking	Level
6219	Sarah Jones	Double	Non Smoking	Silver

**Work Orders** (15 min response time; 18 of 20 rooms cleaned)

Work Order Type	Description	Priority	Requested By	Requested Date	Assigned To
Bathroom - Clogged toilet	Overflowing toilet.	high	Bruce Daniels	07-Mar-02 7:47 AM	Matt Adams
Bathroom - Clogged sink	Amy, fix bathroom	high	Peter Andersen	08-Mar-02 3:58 PM	Amy Smith
Bathroom - Toiletries	Restock shampoo.	medium	Bruce Daniels	07-Mar-02 12:40 PM	Peter Andersen
Room - Cleaning	Eric, please clean Julie's room asap	medium	Thomas Elmore	08-Mar-02 7:35 PM	Eric Logan
Room - Make bed	Bruce, please make the bed in room 102	low	Amy Smith	08-Mar-02 11:44 PM	Bruce Daniels
Room - Minibar refill	More chocolate.	low	Julie Shah	07-Mar-02 12:10 AM	Matt Adams

## Maintenance/Room cleaning

View outstanding work orders, average response time and room cleaning status

## Message system

Quick access to emails

You have 2 e-mail messages as of Mar 13, 2002 9:56:46 AM

**Today's Check-Outs** ( 1 of 1 still pending)

Reservation No.	Name	Room No.	Balance Due	Check-In Date
6210	Julia Guest	101	\$900.00	07-MAR-02

## This Week's Activities

### What: Prospectives Pool Party

Where: Garden Pool

When: Mar 14, 2002 9:15 AM

Come one, come all!! Come meet your perspective neighbors. Join us for games and BBQ at the Garden Pool. Don't miss it!!

### What: Seniors Golf Tournament

Where: Golf Course #1

When: Mar 14, 2002 2:30 PM

Don't miss our weekly golf challenge. The winner of the 9-hole course will get a free dinner at their choice of our signature restaurants!!

### What: Juniors Golf Tournament

Where: Golf Course #2

When: Mar 17, 2002 2:45 PM

Let's not leave all of the fun to the grown-ups!! The winner of this 9-hole course will get free bike rentals from Joe's Bikes.

## Upcoming activities

Get instant information about upcoming activities, schedule changes, maintenance work and much more

Today's check outs

All check outs are pushed to the user



# Andersen's Solution Architecture for the Hospitality Industry

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*The next big technology cycle will focus on the fully integrated system that brings customer, statistical, and financial information together through an integration of property management, central reservations, data warehouse, and distributed database systems*

*Hospitality 2000 – The Technology*

- Andersen's architecture adheres to industry standards and uses common scalable technologies
- Interface-based integration will allow the addition and replacement of components with ease
- Reduction in effort to maintain applications will allow the business to focus on what is important – the customer



# Questions?

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# Solution Architectures: The Hospitality Industry