

Creating Sustainable Innovation & Business Value





# High Value SOA

Leveraging Web Services to achieve agility, business value and efficient speed to market

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10:45-11:30 24 August 2010 Palos Verdes 6



## <u>Agenda</u>

- Marriott International Overview
- Rock solid foundations
  - CIC ( Corporate Intellectual Capital )
  - Heritage Systems
- High Value SOA: "Mind the Gap"
  - Challenges
  - The Solution
  - Benefits



## Marriott International Overview

- More than 3,400 Hotel & Resort, Timeshare and Corporate Housing Properties
- Approximately 137,000 Associates
- Operations in 70 countries
- A growing and profitable company
- Committed to Environmentally responsible operations and Conserving Energy



# Leading Lodging Brands

#### **Luxury Lodging**









#### Full Service









#### **Select Service**







#### **Extended Stay**









#### **Ownership Resorts**









### **Award Winning Technology Organization**



















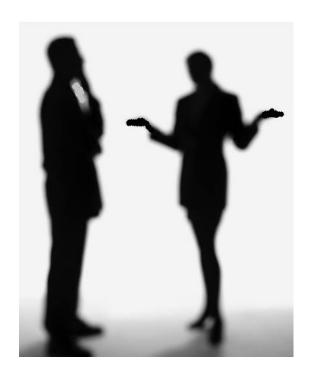
## Rock Solid Foundations

CIC

Corporate Intellectual Capital

Legacy Heritage Systems





"You *talk the talk* and you walk the walk, but ..."



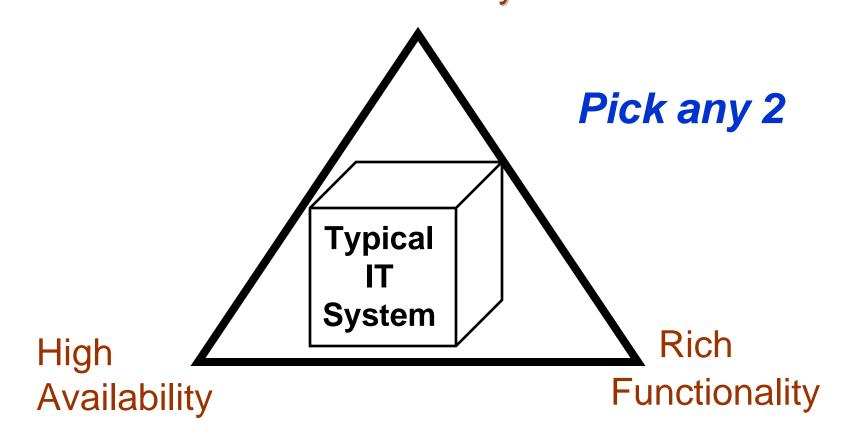


## "do you *listen the listen*?"



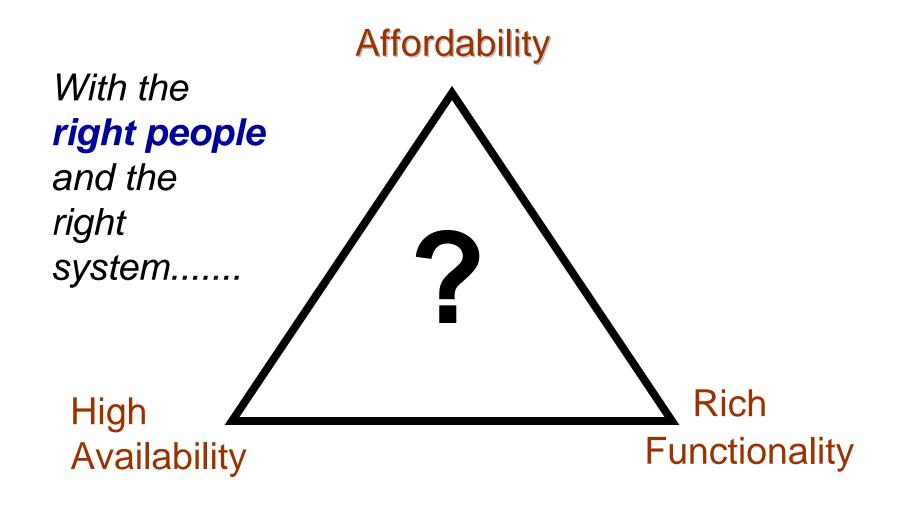
## The "triangle" dilemma

### Affordability





## How to get all three



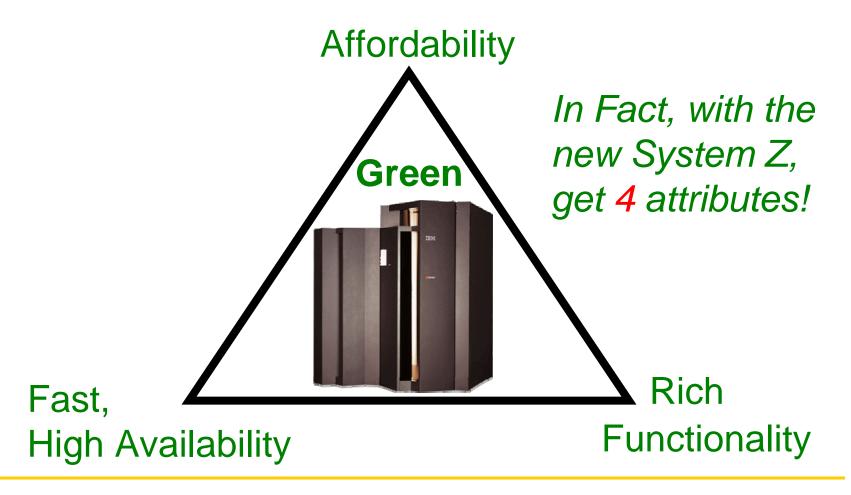


# Centralized Systems

## **Affordability** With new technology mainframes Pick 3 - Get 3! Rich High **Functionality Availability**



### How to square a triangle





# Legacy Heritage System

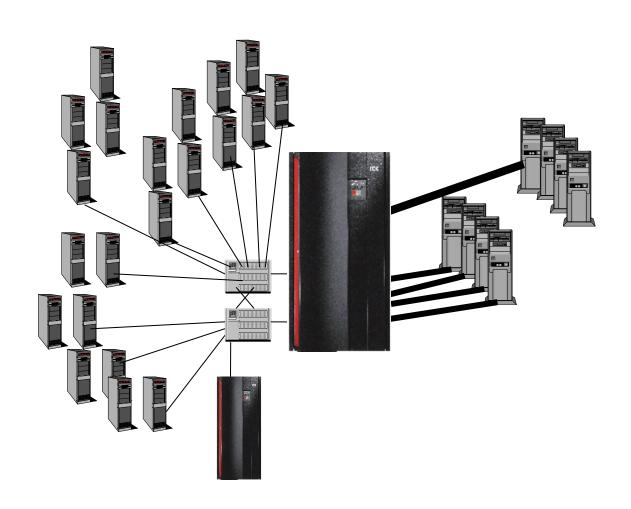


MARSHA is Marriott
International's
reservation booking
engine for all
properties and rooms



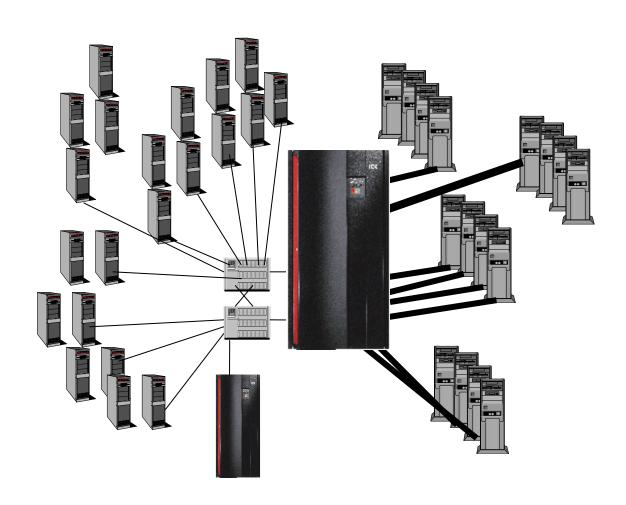


# Last century solutions



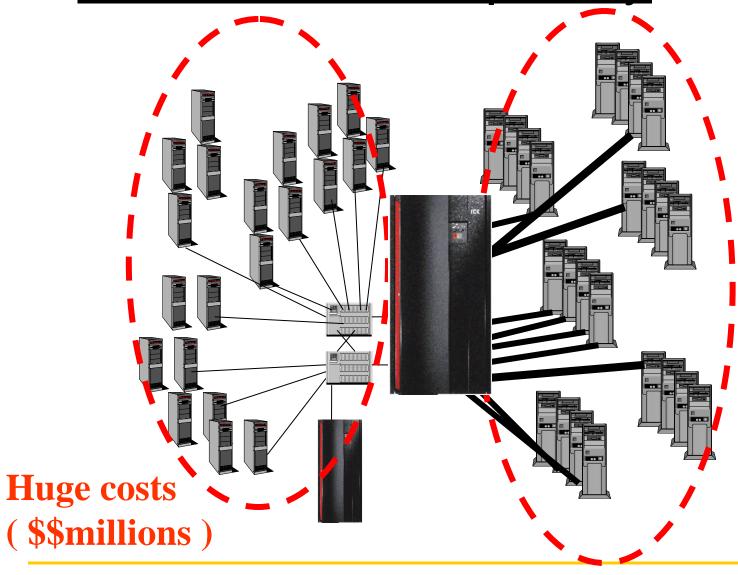


# Apparent simplicity .....

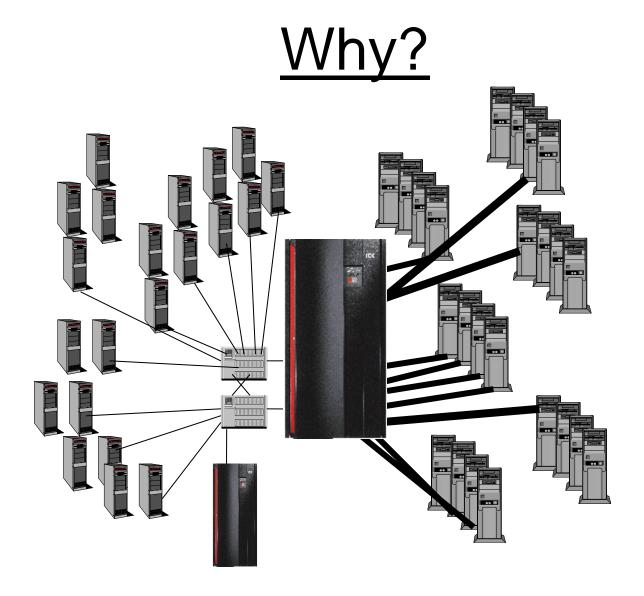


## Grows into complexity .....









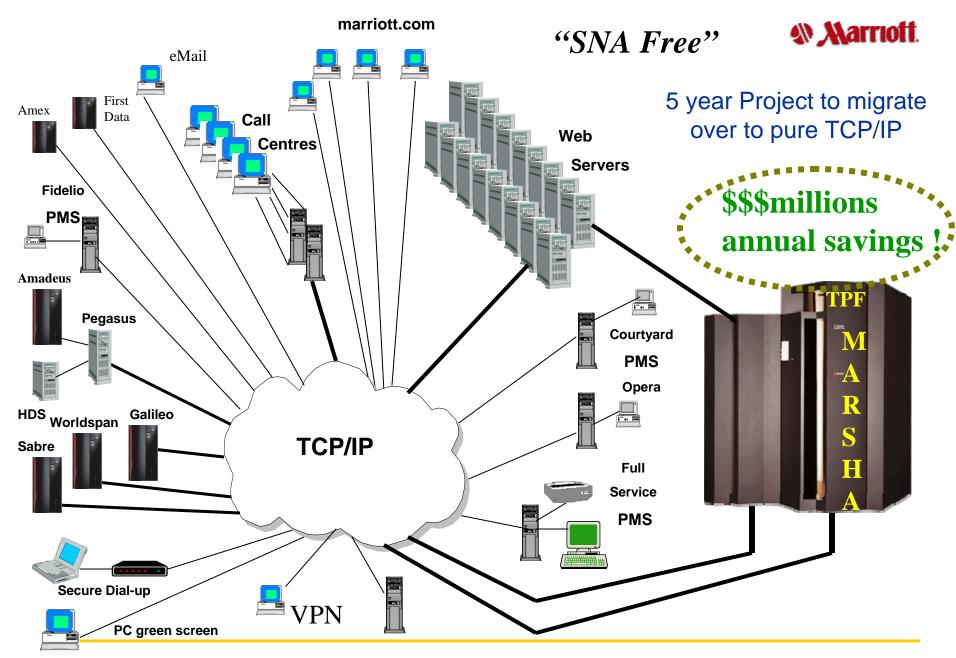


# Just say no!

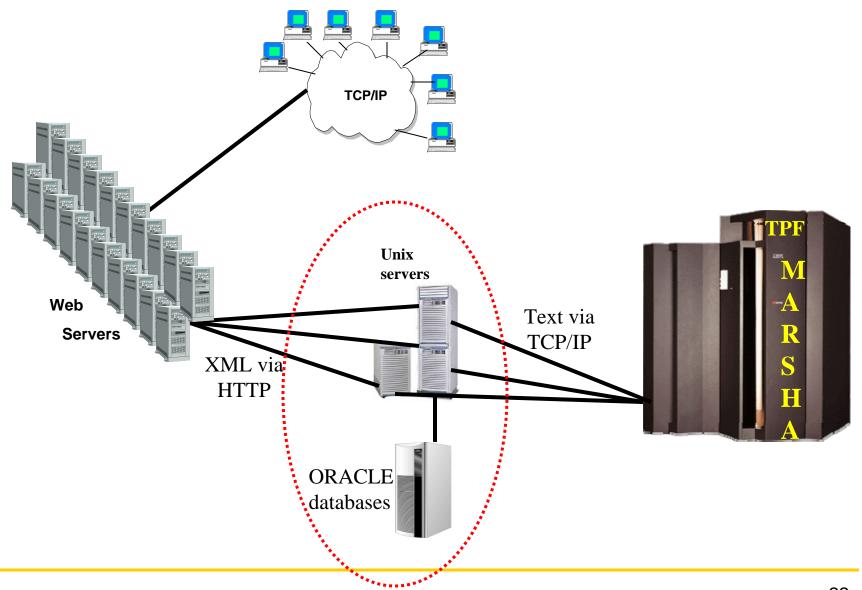




Modernize your Legacy
Heritage systems to gain
competitive advantage
and keep your IT and
Corporate Intellectual Capital

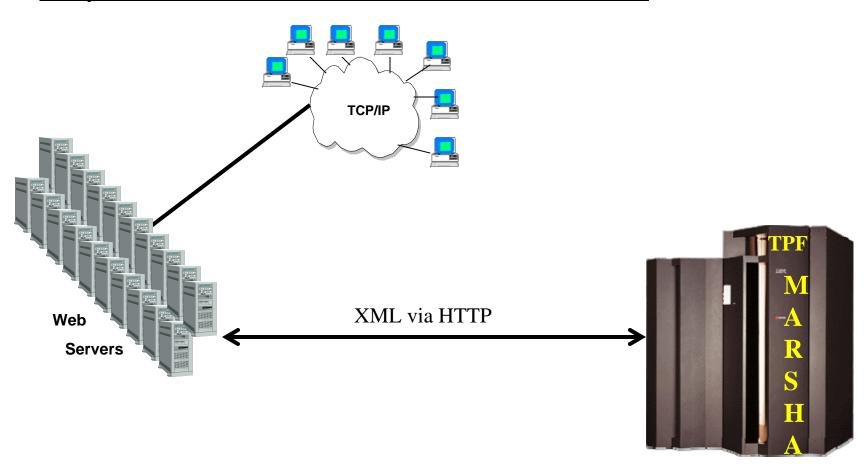


## n+ Tiers means complexity and huge costs \*\* Marriott



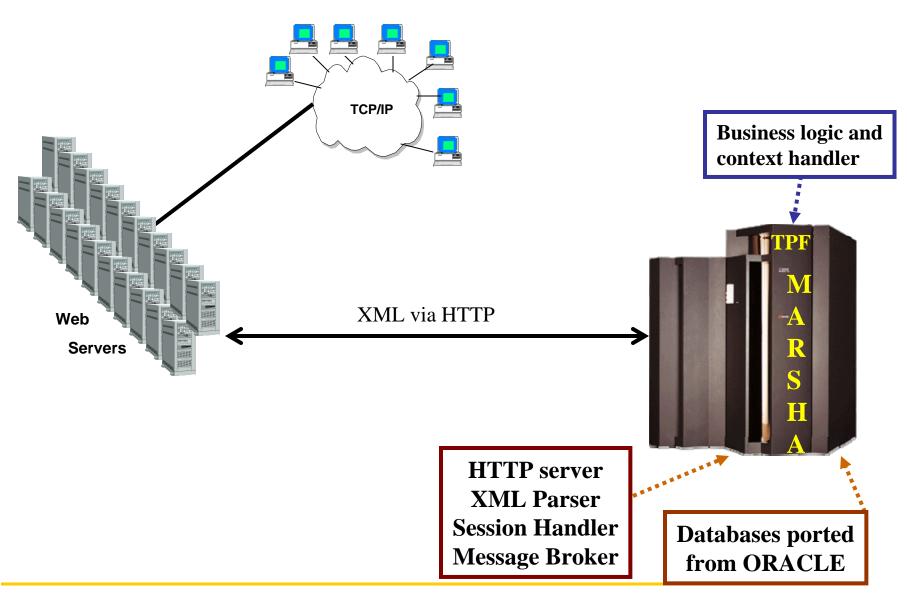
#### Superfluous infrastructure eliminated !!





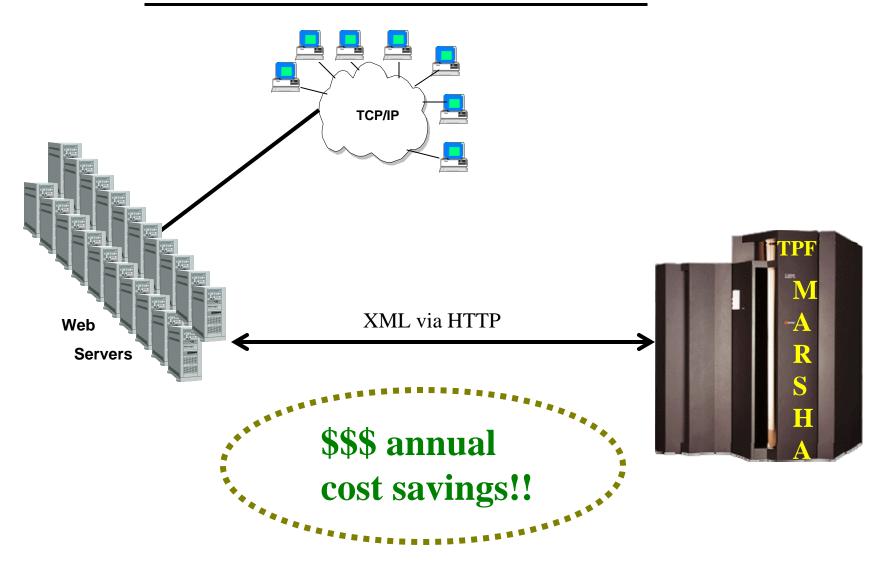
#### New marriott.com Architecture





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#### Virtualization allows cost efficient workload sharing

- Server Virtualization share Production capacity during off peak with Development/Test workload
- Clone the complete test environments at no incremental CPU hardware or software cost





#### Leveraging low marginal cost CPU cycles

Since the mainframe investment is fully amortized and funded based on the business benefits (lowest cost in the industry), marginal costs of adding additional workload are extremely low.

Running zLinux for other Production system workloads is very cost effective due to minimal \$ incremental costs.





System Z server

# Green Eco-Friendly Infrastructure

Running a Centralized IT System on the mainframe is extremely cost and power efficient.



Our current Z server runs our Production Central Reservation System, several cloned Test Systems, numerous smaller Test environments, Performance Test environment, Development SDLC infrastructure, numerous Linux Applications .........

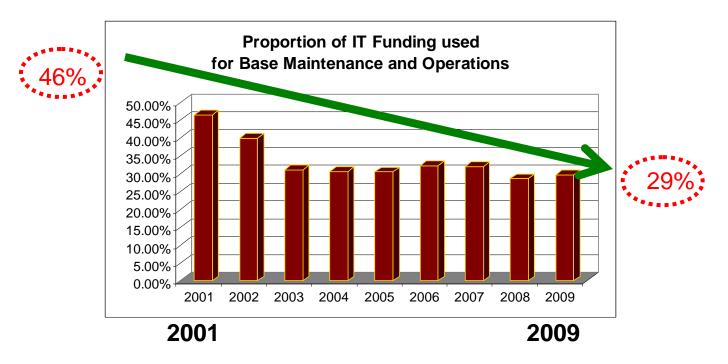
...and requires just 6.3kWh of power!





Equivalent to the power required by 4 toasters

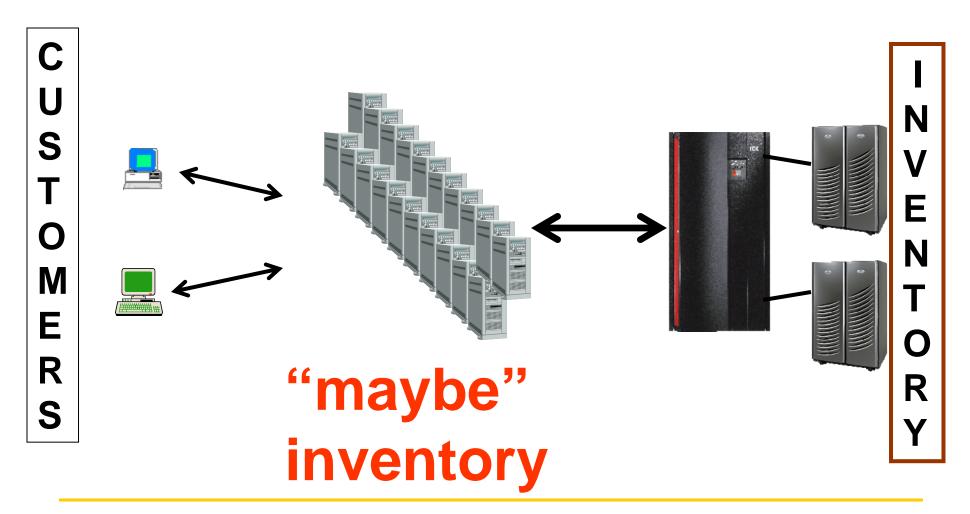




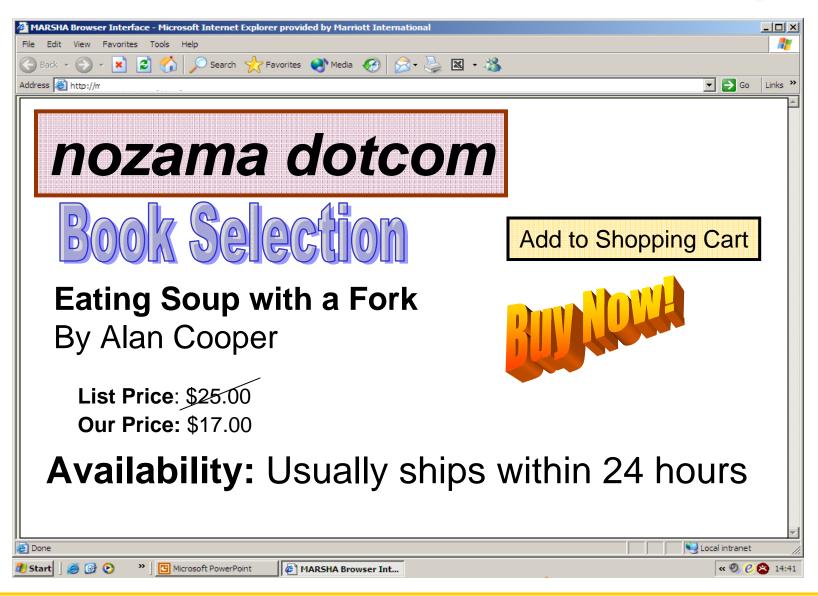
Investments in software and hardware capabilities to enable consolidation onto a single platform plus relentless attention to reducing cost of Base Operations has resulted in additional \$\$\$millions released for Initiatives!



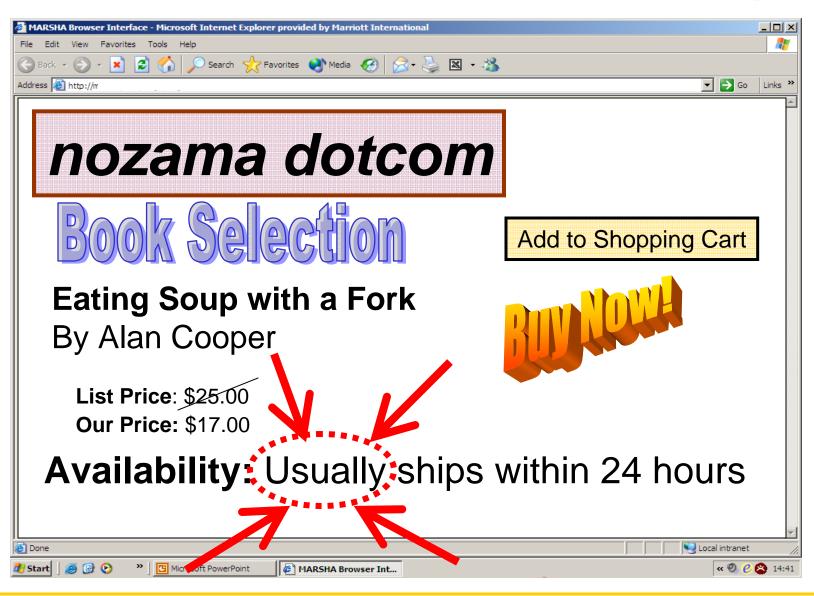
## The Perils of Cache













## Marriott Single Image Inventory

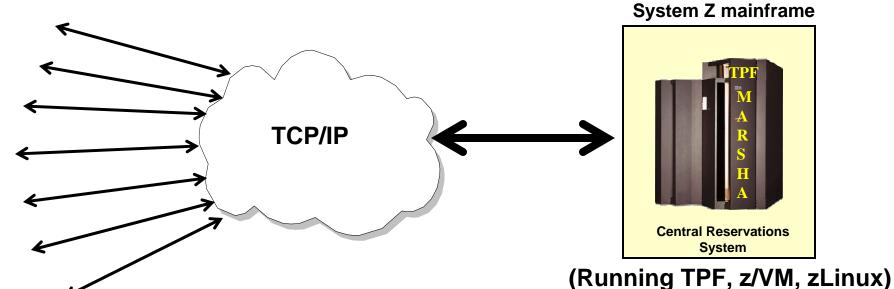




#### The MARSHA Reservations System

An "Open System"

(provider of SOA services)



Pure TCP/IP
(Easily Connects to any "Open System")

Supports; XML, SOAP, MQ, SSL, HTTP, "C++" lang.

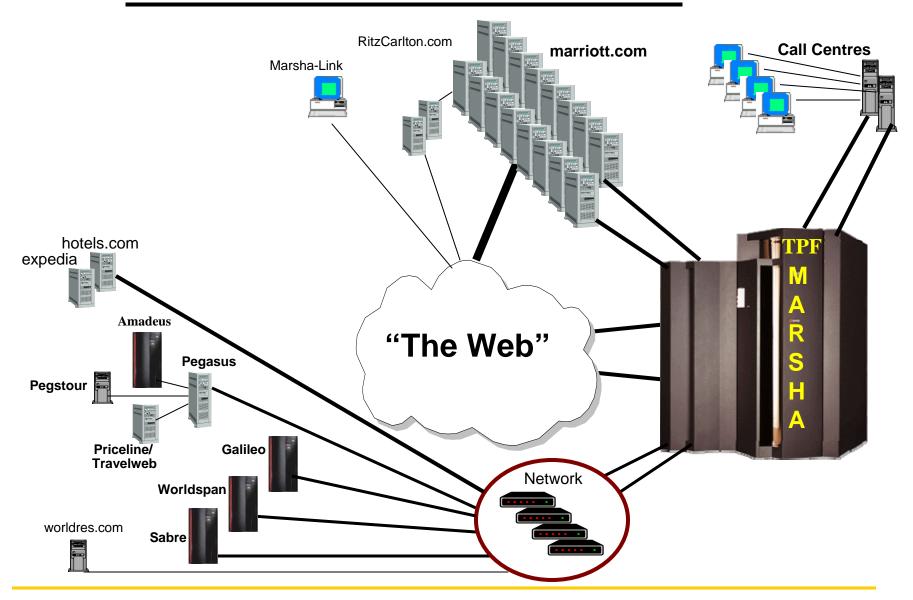






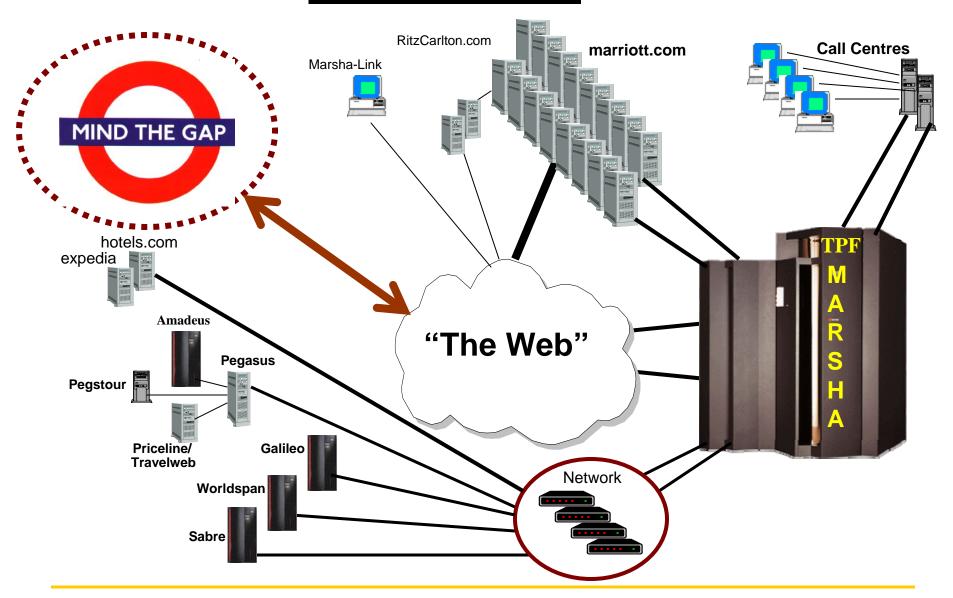
#### Past B2B and B2C connections





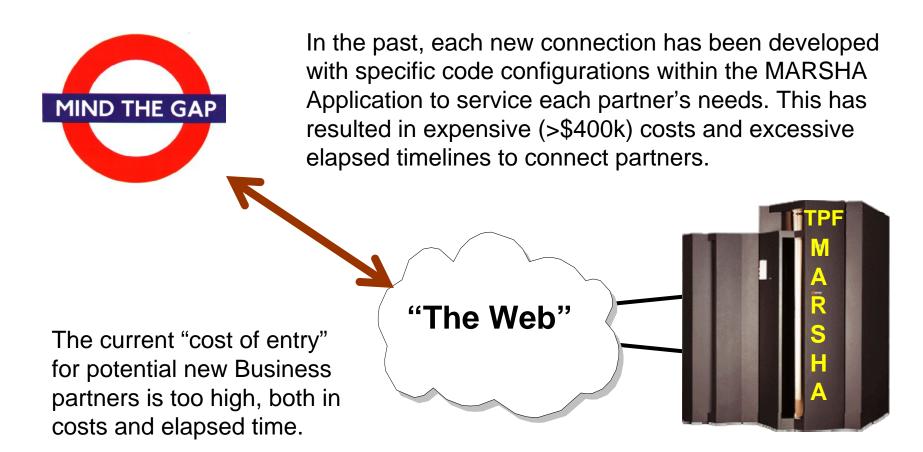
#### Mind the Gap !!





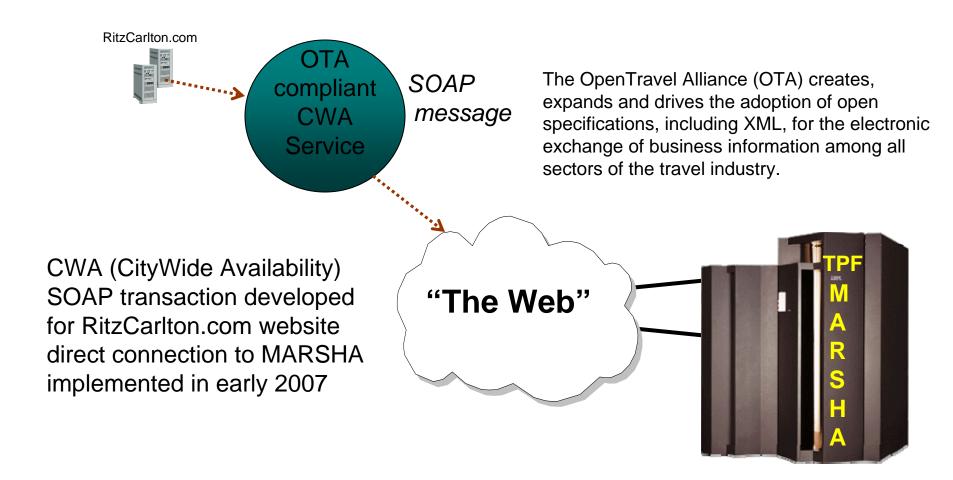
### Why has this gap been difficult to fill?





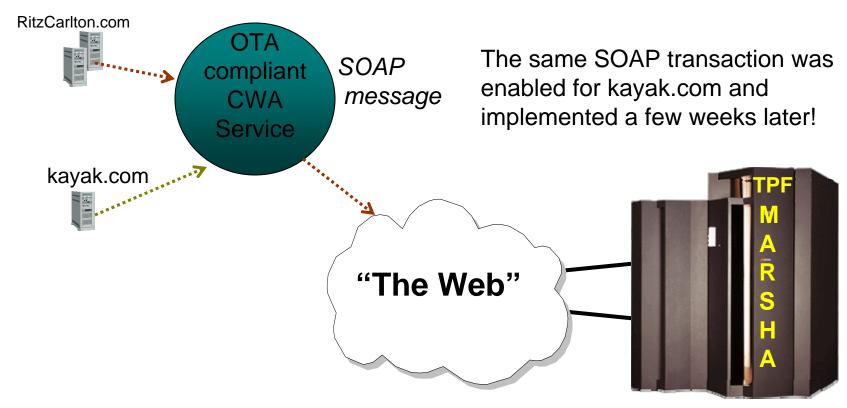
### Proven ROI and agility with SOA





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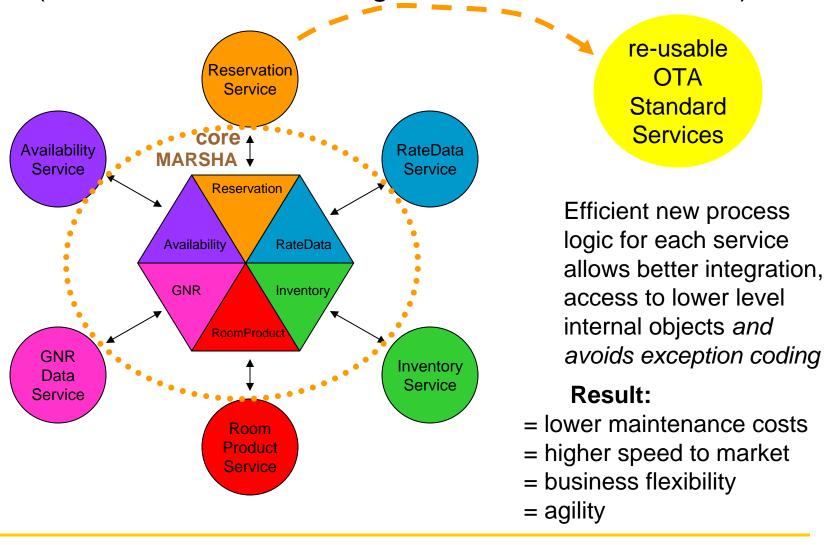


This *required no* MARSHA Development or QA regression, with only Firewall, Security and configuration settings needed, resulting in an approximate <\$2,000 cost for *rapid* enablement of this new B2B connection!



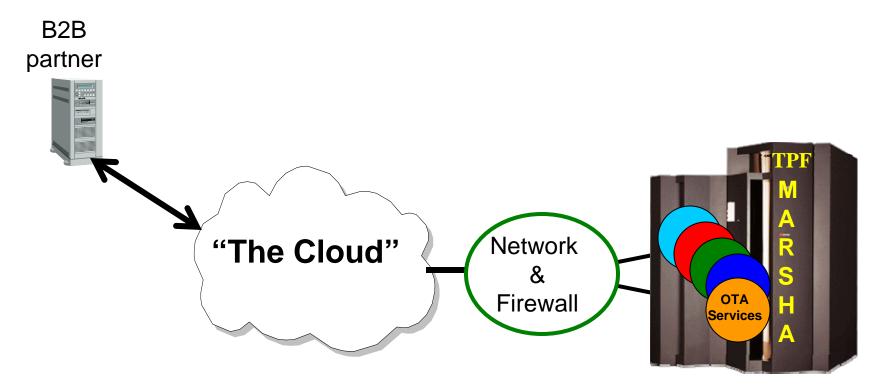


(re-usable Services integrated into core MARSHA)





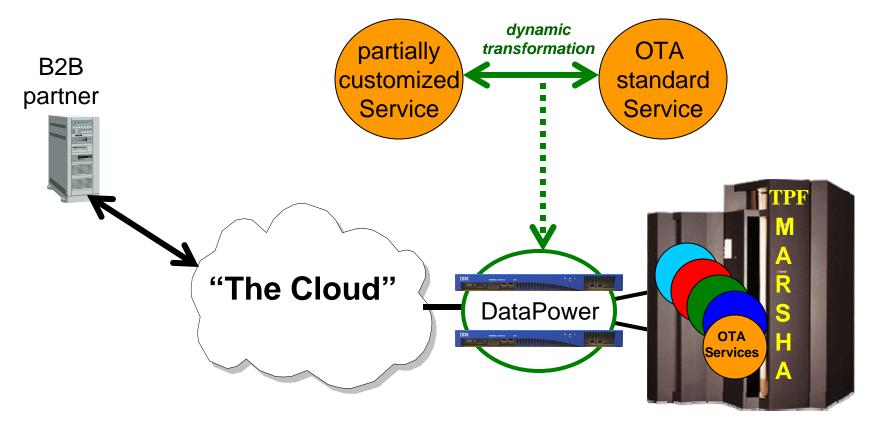
### Ready to "Mind the Gap"



Suite of "core" SOA services (transactions) in Open Travel Alliance industry standard format ready to quickly and efficiently connect to new B2B partners with *business value determining decisions – not IT costs & complexity!* 

## B2B Partner customization performed on external "wire-speed" SOA Appliance

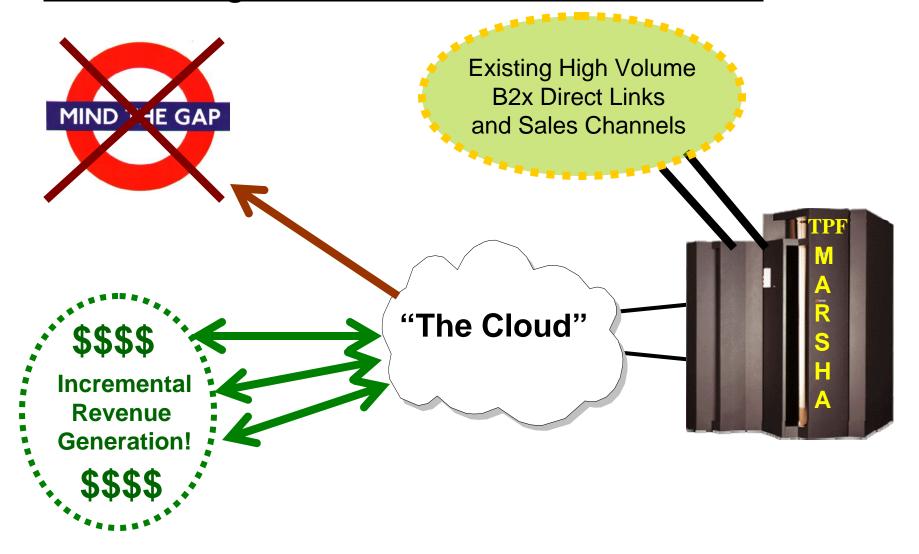




Changes to XML transaction data formats are easily changed or customized on the DataPower Appliance instead of within MARSHA so does not need any TPF changes or QA testing unless core functionality customization required for partner









### "Direct Connect" Project Goals

- Create Industry standard suite of Reservation "services" which can be reused for many new B2B partners
- Deliver capability to quickly implement new B2B connections without excessive code development and long elapsed times

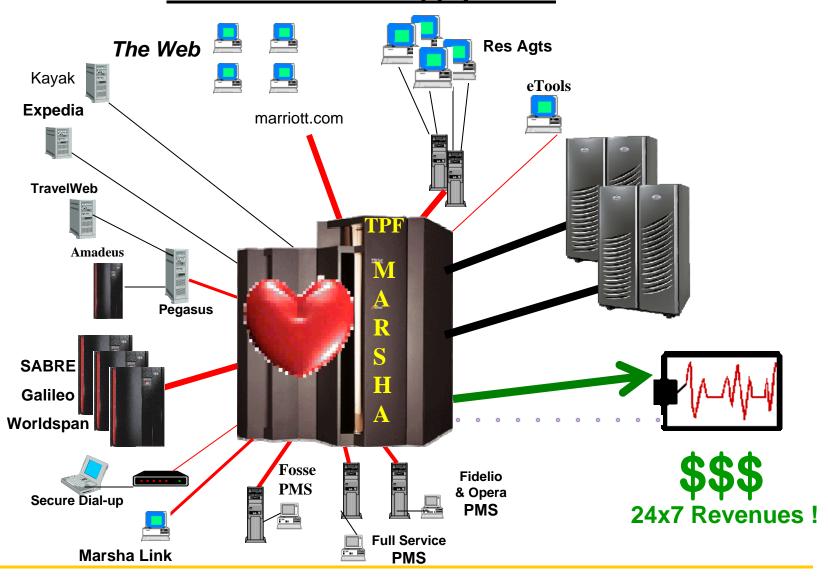


### "Direct Connect" Project Benefits

- Drastically reduce costs and time of implementing new connections with new or existing business partners
- Simplify the standard APIs by moving the "customization" layer out of the mainframe
- Increase Revenue Generation potential by lowering the "cost of entry" to participate in direct connections with Marriott International

## Marriott International Worldwide Sales Supply Chain







# Questions?

