

Dubai World Central *Mapping SAP Solutions to DWC Business Needs*



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Initial Workshop Findings

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December, 2008

V: a.1

Agenda



1. Introduction for Dubai World Central

- ☐ Overall Project Objectives
- ☐ Current Project Status

2. SAP Experience with Master Developer in ME Region

3. SAP Industry Strategy

4. DWC Business & Solution Architecture Framework

5. APPENDIX

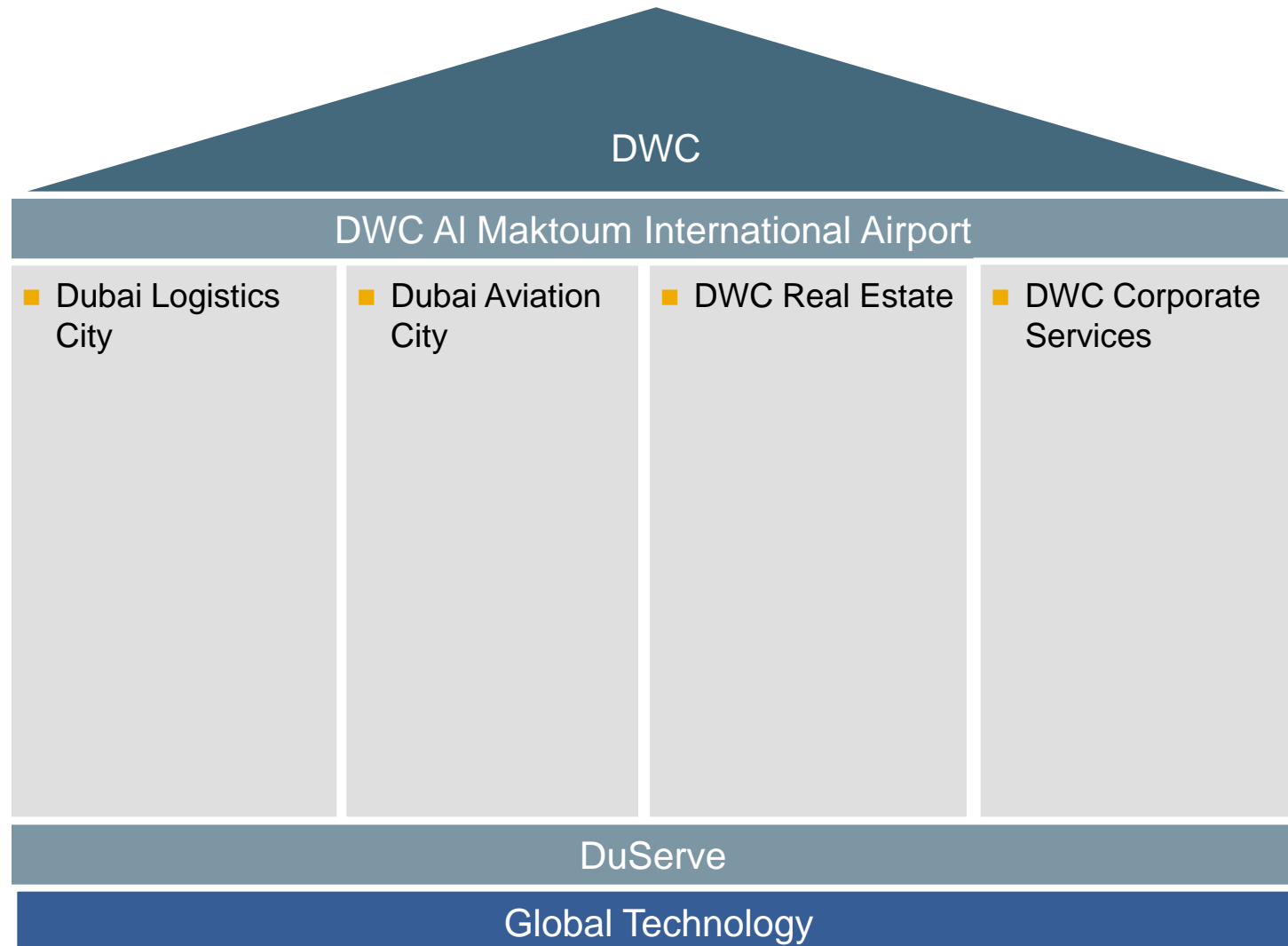
INTRODUCTION TO DWC



- DWC, designed to support Dubai's aviation, tourism, commercial and logistics requirements until 2050 with infrastructure costs estimated at \$33-50 billion
- The airport, which will be 10 times the size of the current Dubai International Airport and Dubai Cargo Village combined, will have six parallel runways and as many concourses
- DWC is Building the World's Largest Airport
 - 140 Million Passengers Per Year Volume
 - 12 Million Tons of Cargo Per Year
- This Airport will be Surrounded by an Airport City
 - More than 250,000 people will be working in this city
 - More than 1M people will live and work in this mega project

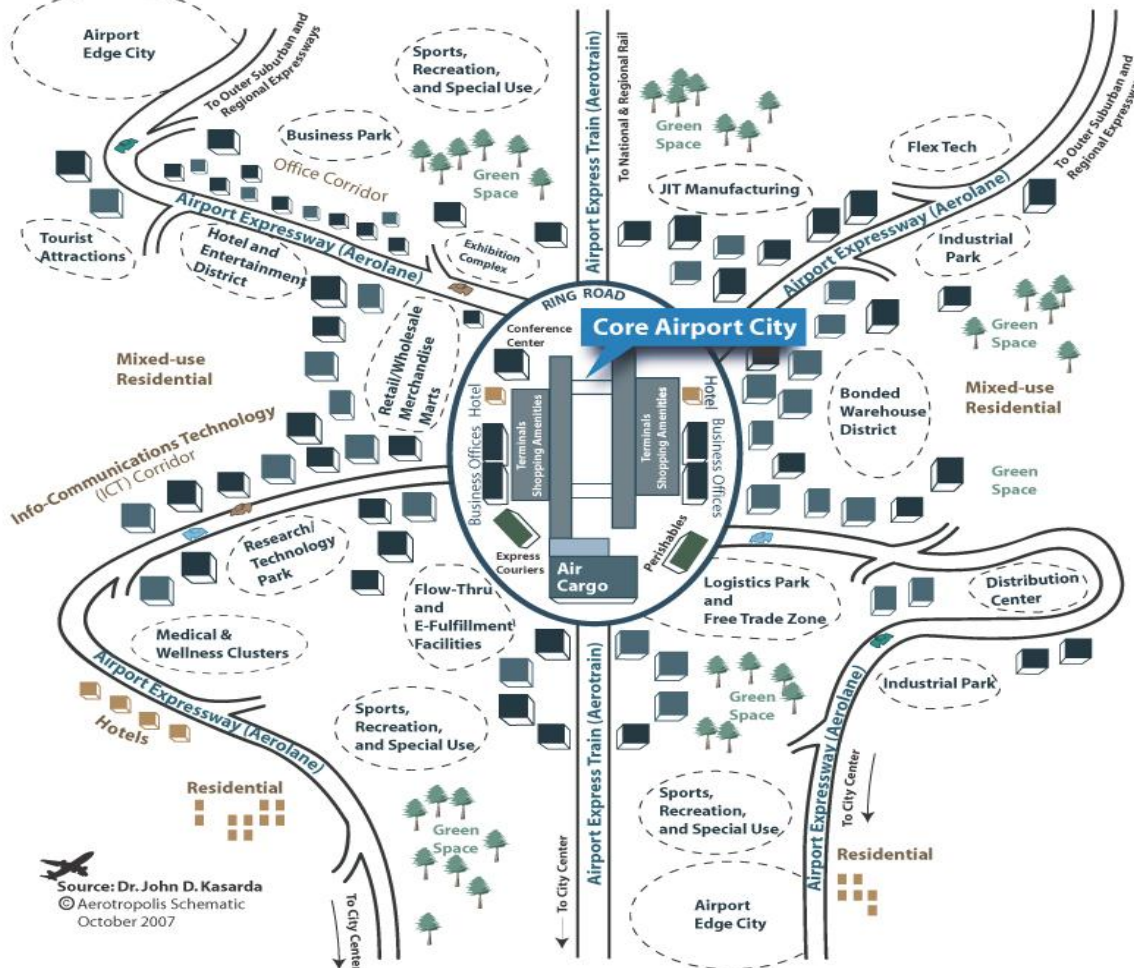


- Dubai Logistics City
 - Will Comprise 17% Of Overall Turnover
 - Already Partially Functioning-covers 25 Square Kilometers
- Dubai Aviation City
 - 3rd Party MRO Operators Signed
 - 5 Billion AED Investment
- DuServe
 - Establishing Standards For The Overall Project
 - Currently 60 Employees Which Will Grow To 1,000s
- DWC Real Estate
 - Commercial City
 - Most Lots Already Sold for phase 1 of Residential City
- DWC Global Technology
 - Smartworld JV Formed And Company Currently Has About 30 Employees
- DWC Al Maktoum International Airport
 - One Runway Complete
 - Have Scaled Down/Slowed Down Construction For The Time Being
- DWC Corporate Services
 - HR, Legal, IT, etc. group services



Aerotropolis – Airport Cities

Airport City and Aerotropolis Schematic



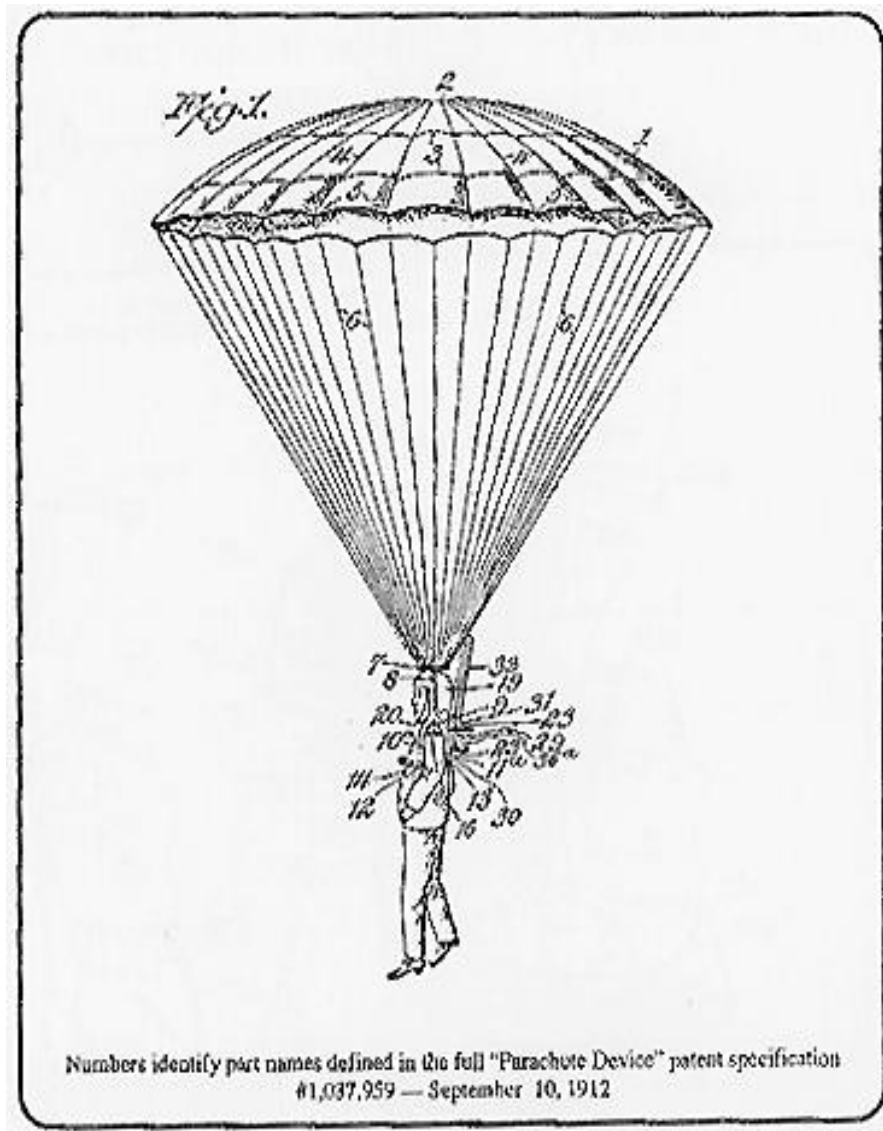
Source: Dr. John D. Kasarda
© Aerotropolis Schematic
October 2007

“Major airports are key nodes for global production and enterprise systems offering them speed, agility, and accessibility. They are also powerful engines for local economic development attracting aviation-linked businesses of all types to their environs. These include, among others, time-sensitive manufacturing and distribution; hotel, entertainment, retail, and exhibition complexes; and office buildings that house regional corporate headquarters and air-travel intensive professionals. As aviation-oriented businesses cluster around these airports and along transportation corridors radiating from them, a new urban form is emerging — the Aerotropolis — stretching up to 20 miles (25 kilometers) outward from the airports”

By Dr. John D. Kasarda

OUR EXPERIENCE WITH MASTER DEVELOPERS

**“The mind is like a parachute
... it only functions when it’s open.”**



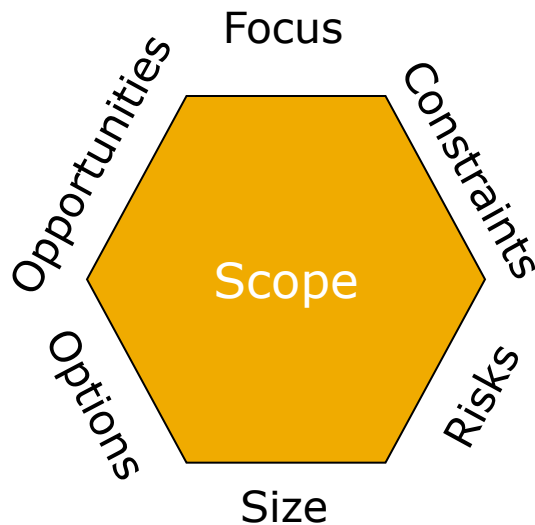
A photograph of a person in a field, holding a large, open parachute. The person is standing on a grassy hill, and the parachute is spread out behind them, creating a large, open shape. The background shows a blue sky with white clouds and a few birds flying. The image is framed by a dark border.

For most people the horizon is as far as they can see. But for us it represents the threshold to an unseen world of new opportunities. As one of the world's foremost managers of capital and risk, we are constantly searching for solutions that lie beyond the obvious. With financial and intellectual reservoirs of great depth and breadth to draw from, we combine insight, knowledge and original thinking to create new opportunities. We do it for ourselves. We can do it for you.

Solutions beyond the obvious. **Swiss Re**

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Understanding the Master Developer Business Eco-system



The scope of mega-scale Master Developers in the Middle East region typically covers the transformation of existing communities of trade, commerce, education and living spaces in select geographical locations...

into

Complete leisure and lifestyle environments focusing on innovative “branded” themes for product differentiation and ultimately increase in draw.

Existing components evolve to “World Class” Showcases for entertainment, business and lifestyle.

The scope and breadth of the Master Developers’ development projects allows new perspective for business evolution of:

- ❖ ***Business and Entertainment Parks***
- ❖ ***Planned Cities (Residential & Commercial)***
- ❖ ***Economic Free Zones***
- ❖ ***Advanced Healthcare and Education Institutions***
- ❖ ***Eco-City Building Standards*** ...etc.

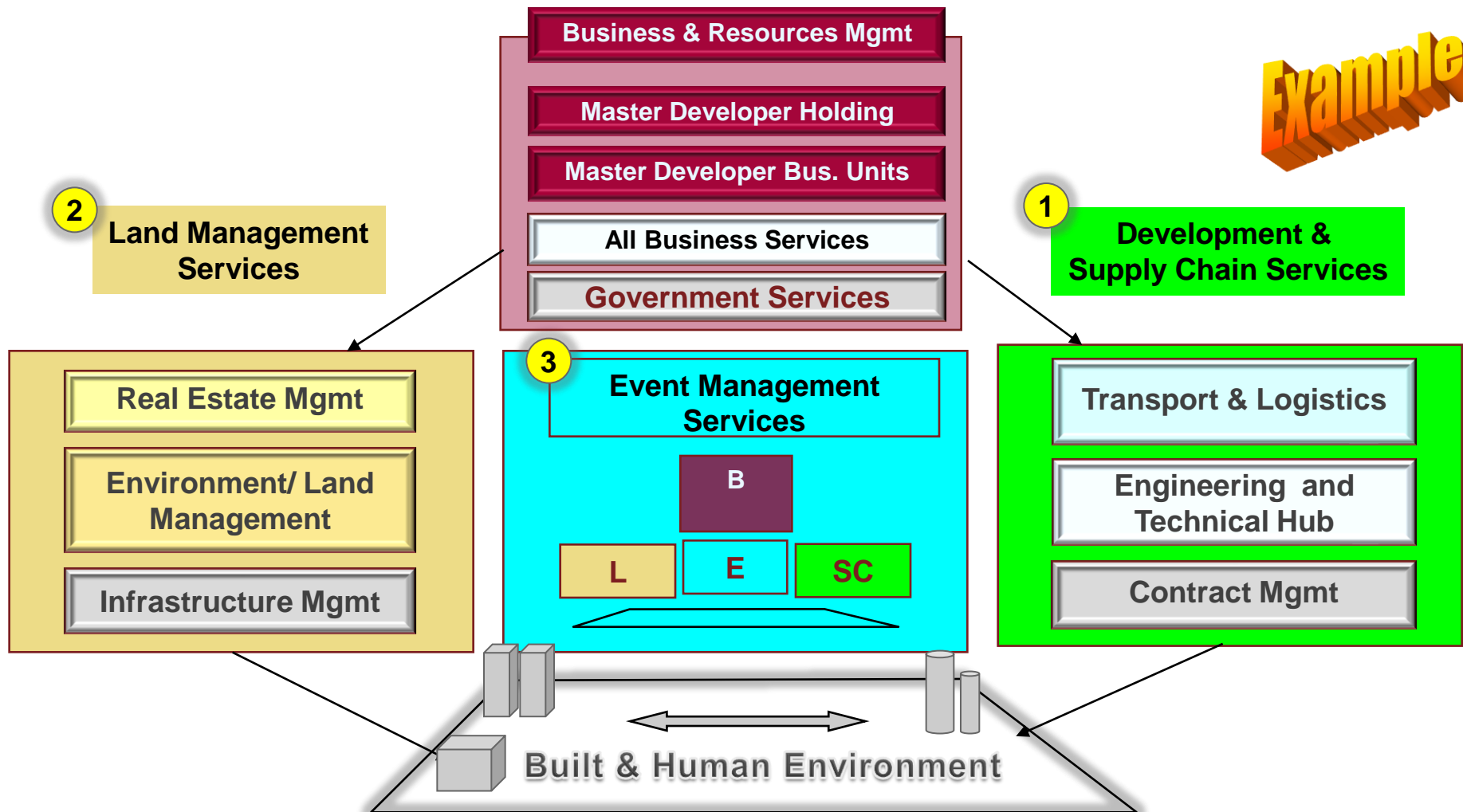
Example

Master Developer

Defining the Meta-model & Business Architecture



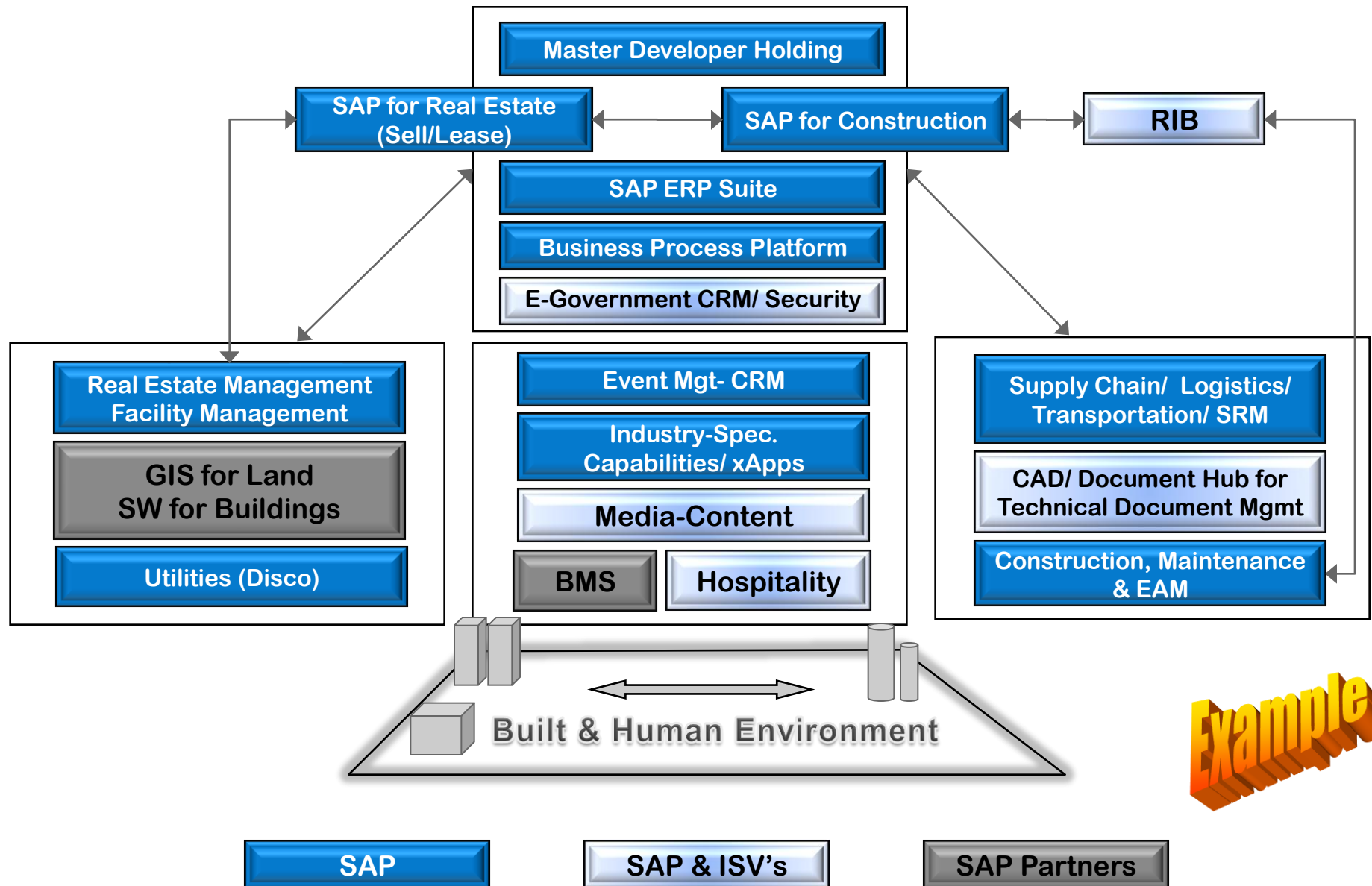
Example



The meta-model identifies a number of business and 3 core management services to operate the built environment to ensure efficient business commerce and operations.

The event-based businesses require “a complete embedded model” to ensure that their full business potential can be reaped . The next slide will explore specific aspects of that business.

“Perfect City” Dimensions for Solutions



SAP INDUSTRY STRATEGY

Vision

To enable every **customer** to become a best run business

Achieve undisputed **market and platform leadership** in all industries where we compete

Mission

Executing industry growth strategies by assembling SAP and partner applications into industry-leading solutions

- ❑ Translate industry trends and best practices into solutions and business opportunities for customers, partners and SAP
- ❑ Assemble complete industry solutions based on industry, generic, and partner applications
- ❑ Demonstrate thought leadership around E-SOA and deliver on the promise – early!
- ❑ Building a healthy industry ecosystem for the SAP platform
- ❑ Develop critical industry-specific applications

Designed for Your Industry

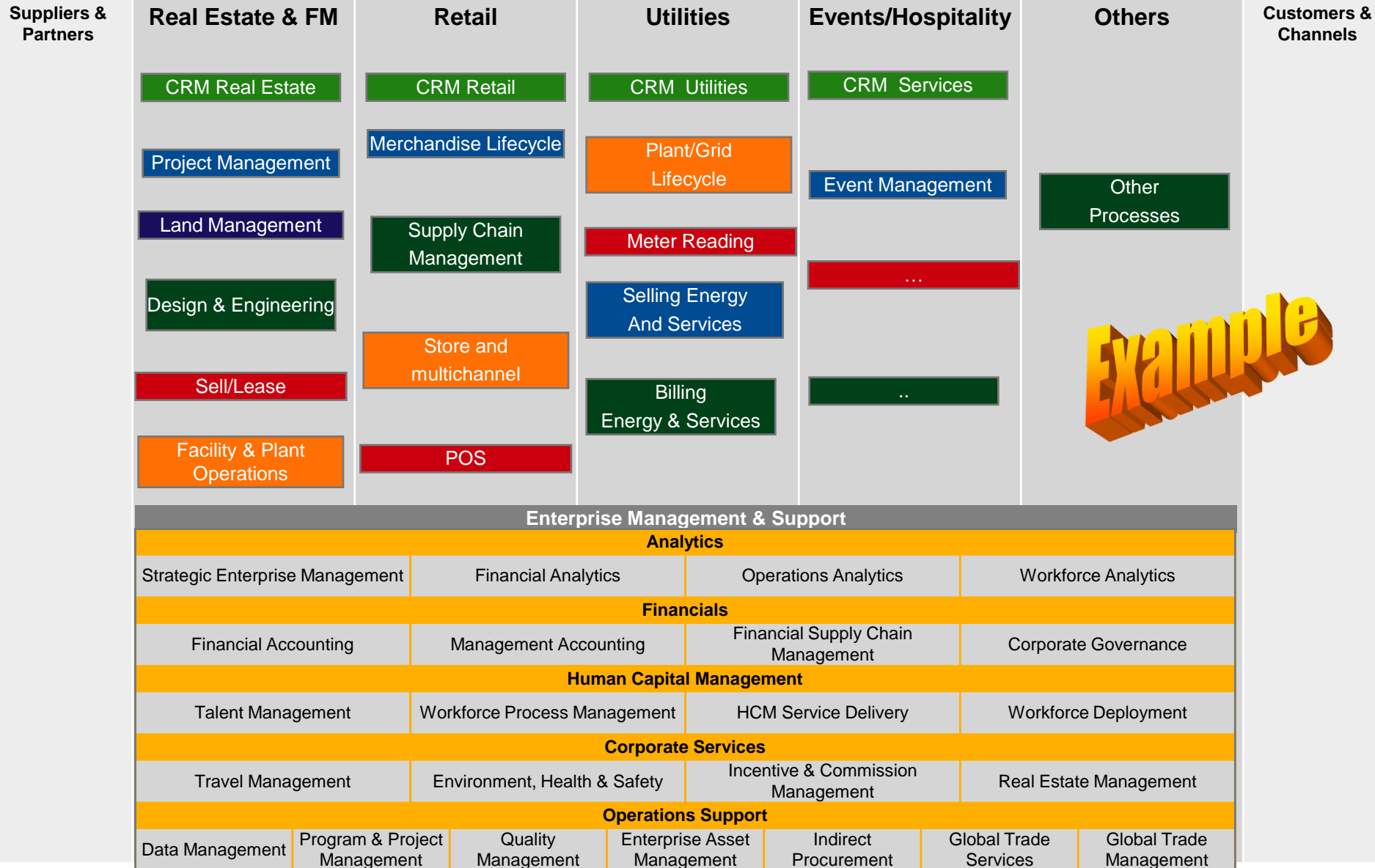


- Tailored to the standards, processes, and challenges of a specific industry
- Based on best business practices developed with industry leaders
- Portfolio of 28 industry solutions
- Built on consistent technology and application stack

SAP Industry Solutions for ...

- Aerospace & Defense
- Automotive
- Banking
- Chemicals
- Consumer Products
- Engineering, Construction & Operations
- Financial Service Provider
- Healthcare
- Higher Education & Research
- High Tech
- Industrial Machinery & Components
- Insurance
- Media
- Mill Products
- Mining
- Oil & Gas
- Pharmaceuticals
- Professional Services
- Public Sector
- Retail
- Real Estate
- Service Providers
- Telecommunications
- Utilities

Master Developer Solution Landscape



Example

The Business Process Platform to Bridge Two Worlds



DIFFERENTIATION

Customer Application

PRODUCTIVITY

Partner Application

SAP Application

SAP Application

**ENTERPRISE
SERVICES**

Enterprise
Services
Repository

SAP NetWeaver

**REUSE PROCESS STEPS AND
ENTERPRISE SERVICES IN
CUSTOM PROCESSES**

ERP

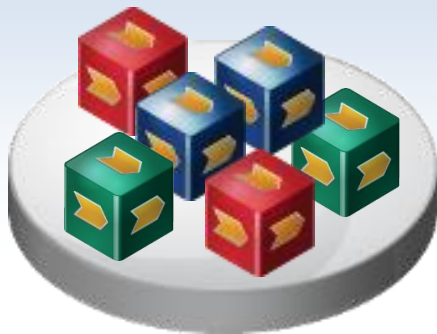
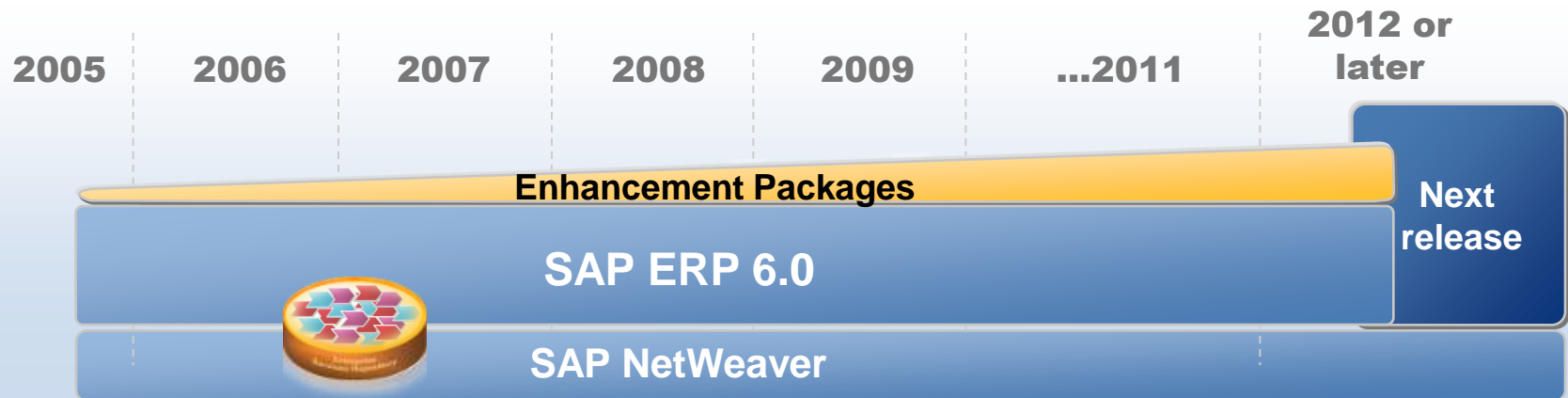
CRM

PLM

SRM

SCM

SAP ERP 6.0 – Stable Foundation



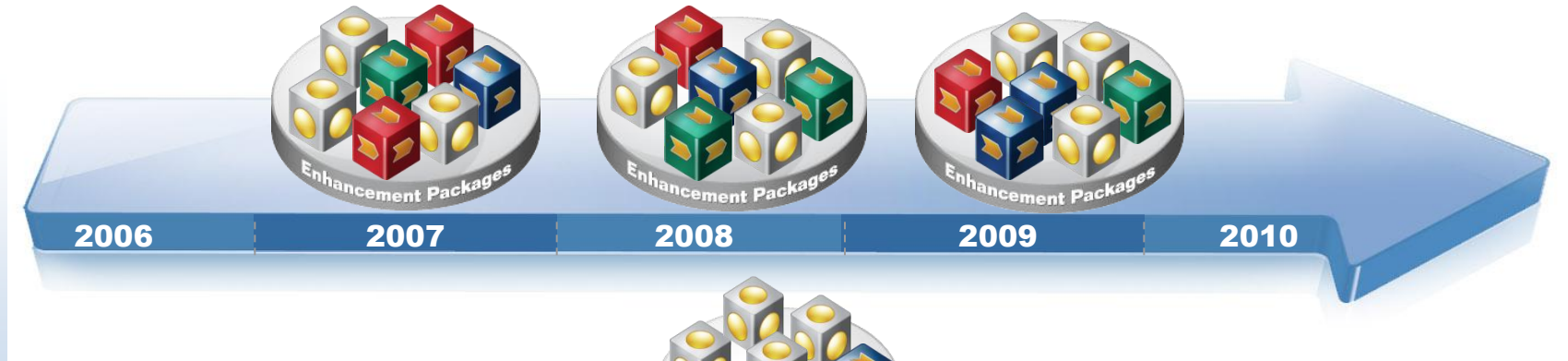
Enhancement packages deliver continuous innovation without upgrades and can include ...

- ➔ Technical and functional enhancements
- ➔ New enterprise services
- ➔ Composite applications

Delivery of new developments and continuous without a release upgrade!

Introducing... Enhancement Packages

More innovation, more quickly, more accessible to customers



■ Legal Changes

■ Enterprise Services

■ Areas
of
innovation

■ Functional
Enhancements

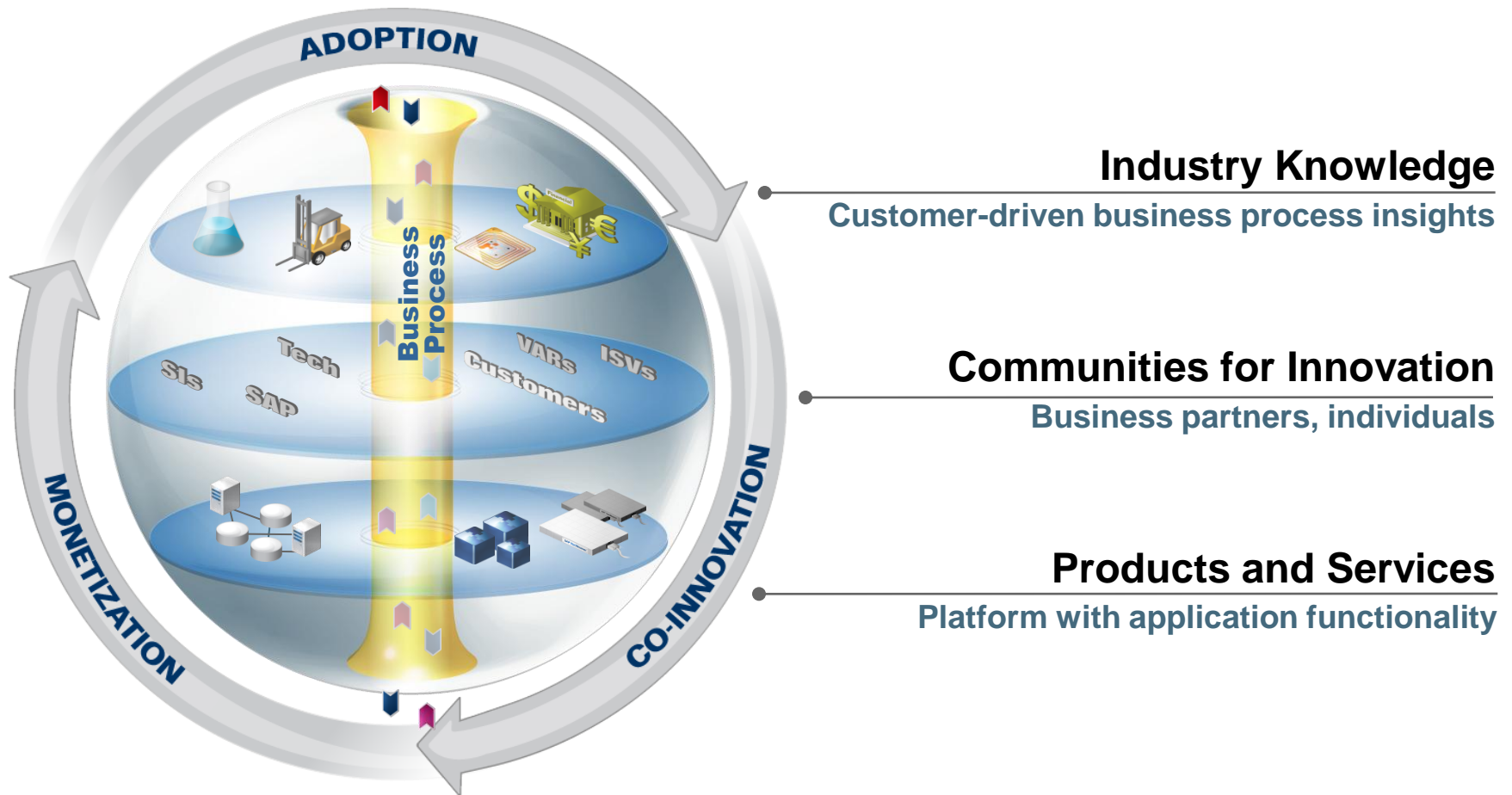
■ Composite
Applications

Mandatory
Core-modifying

Optional
Non core-modifying

SAP Ecosystem

New dimensions of collaboration



The Industry Value Network for EC&O & RE



Engineering, Construction & Operations



Industry Value Networks



The Industry Value Network for Airports

SAP

SAP

Airports

Industry
Solutions
SAP

Technology
Infrastructure

Customer as
Co-Innovator

Business
Processes

ISV Solutions

SI Services

Enterprise SOA

Industry Value Networks

SkyBilling

BlueSky – IBM Partner Solution

Fraport
Frankfurt Airport
Services Worldwide

unique

Hamburg Airport

CPH

Los Angeles
World Airports

FLUGHAFEN
LEIPZIG-HALLE

AÉROPORTS
DE MONTRÉAL

Aeroporti
di Roma
ADR

M

Flughafen
München
GmbH

TATA

IMPROVING THE QUALITY OF LIFE

accenture
High performance. Delivered.

FUJITSU
SIEMENS

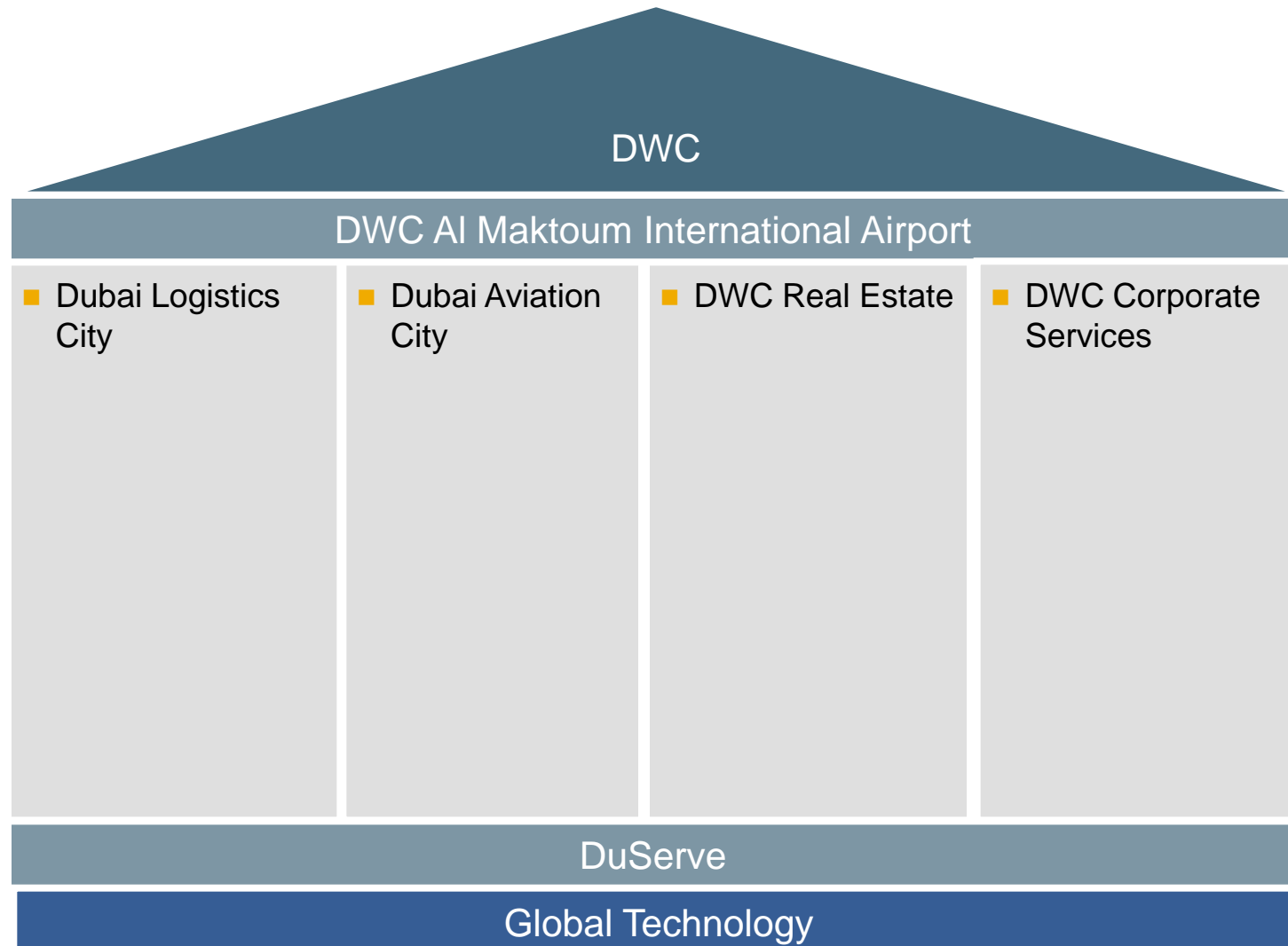
IBM

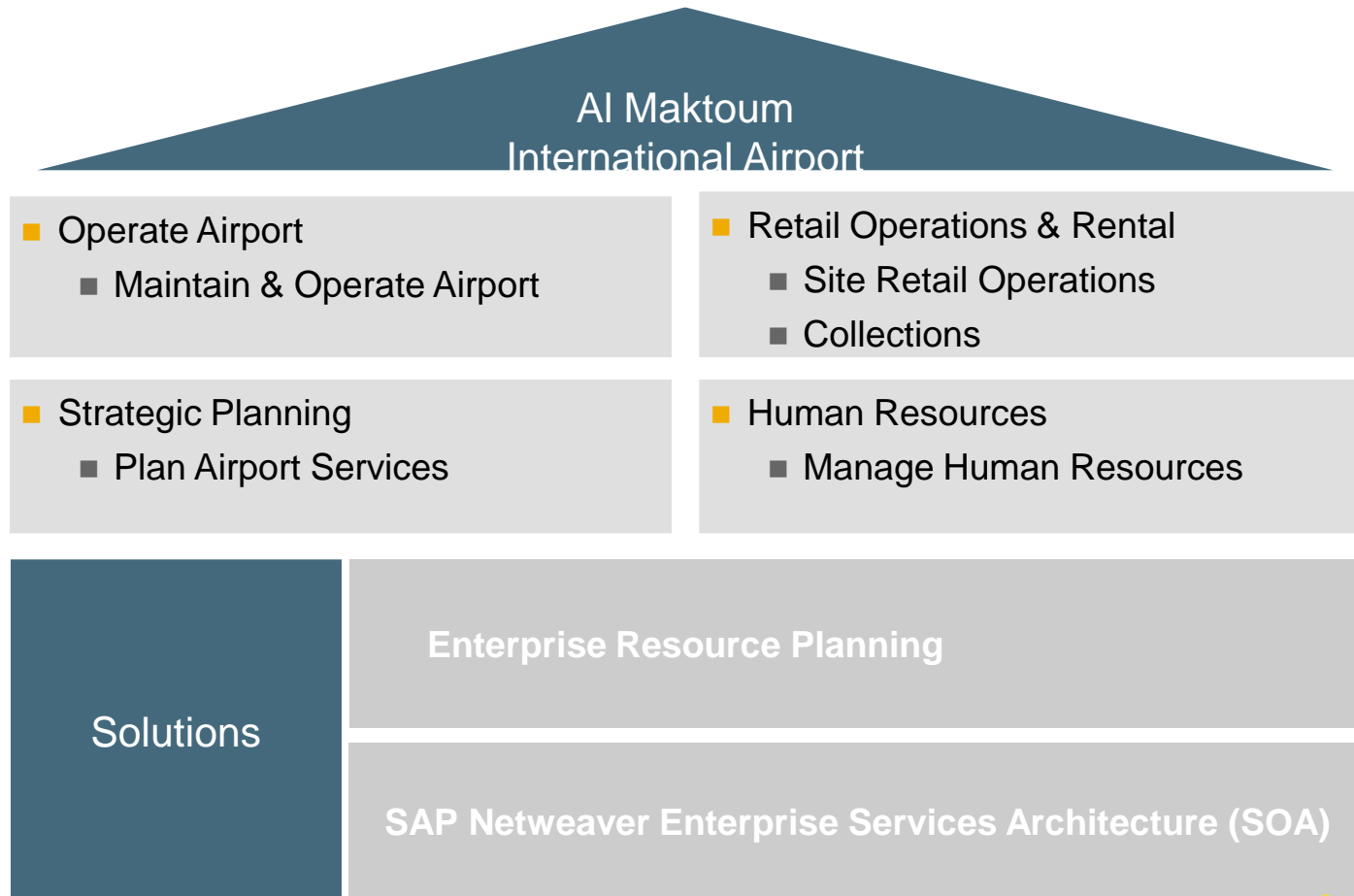
HORVÁTH & PARTNERS
MANAGEMENT CONSULTANTS

PRICEWATERHOUSECOOPERS

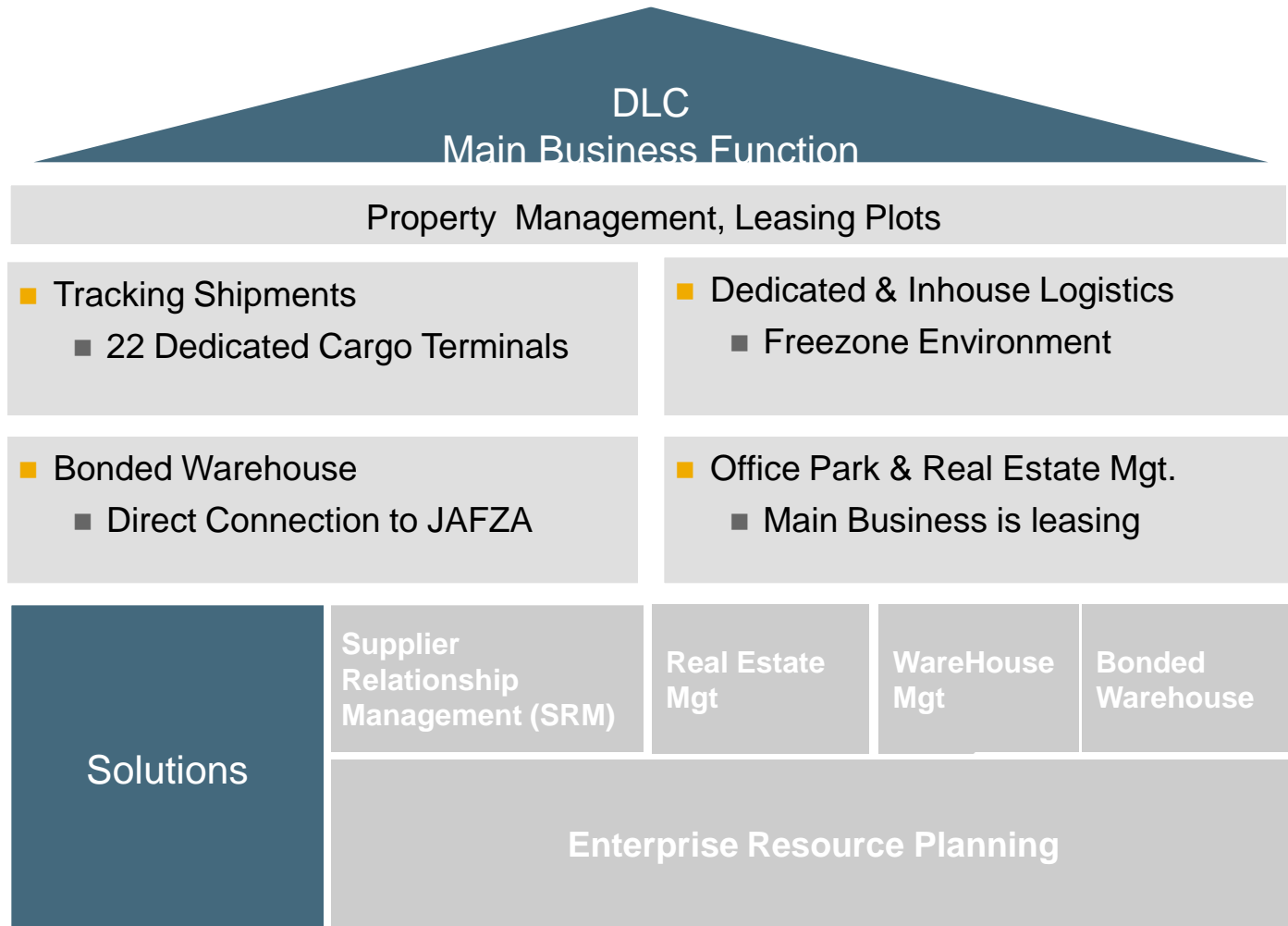
..T..Systems

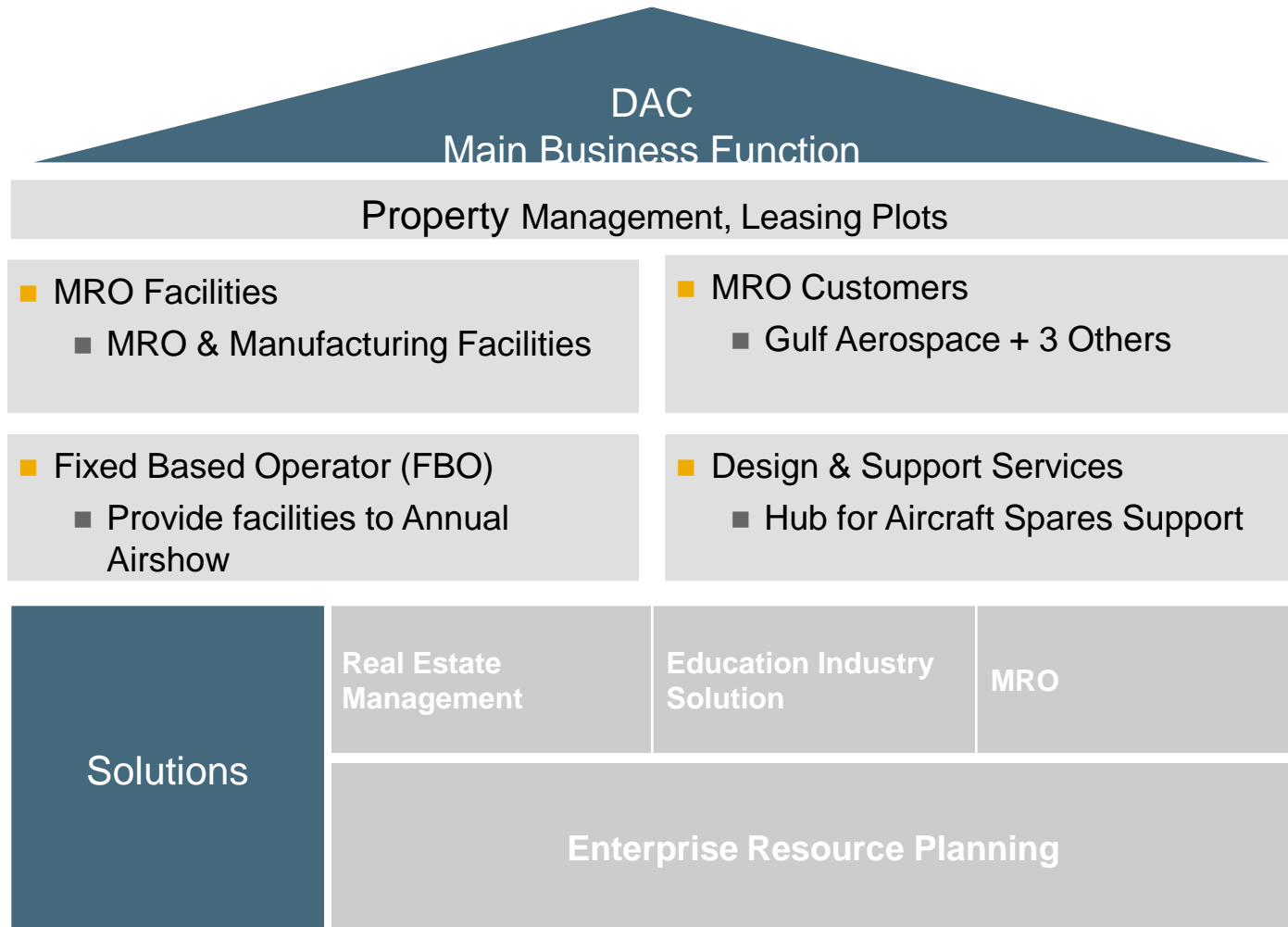
DWC BUSINESS & SOLUTION ARCHITECTURE FRAMEWORK

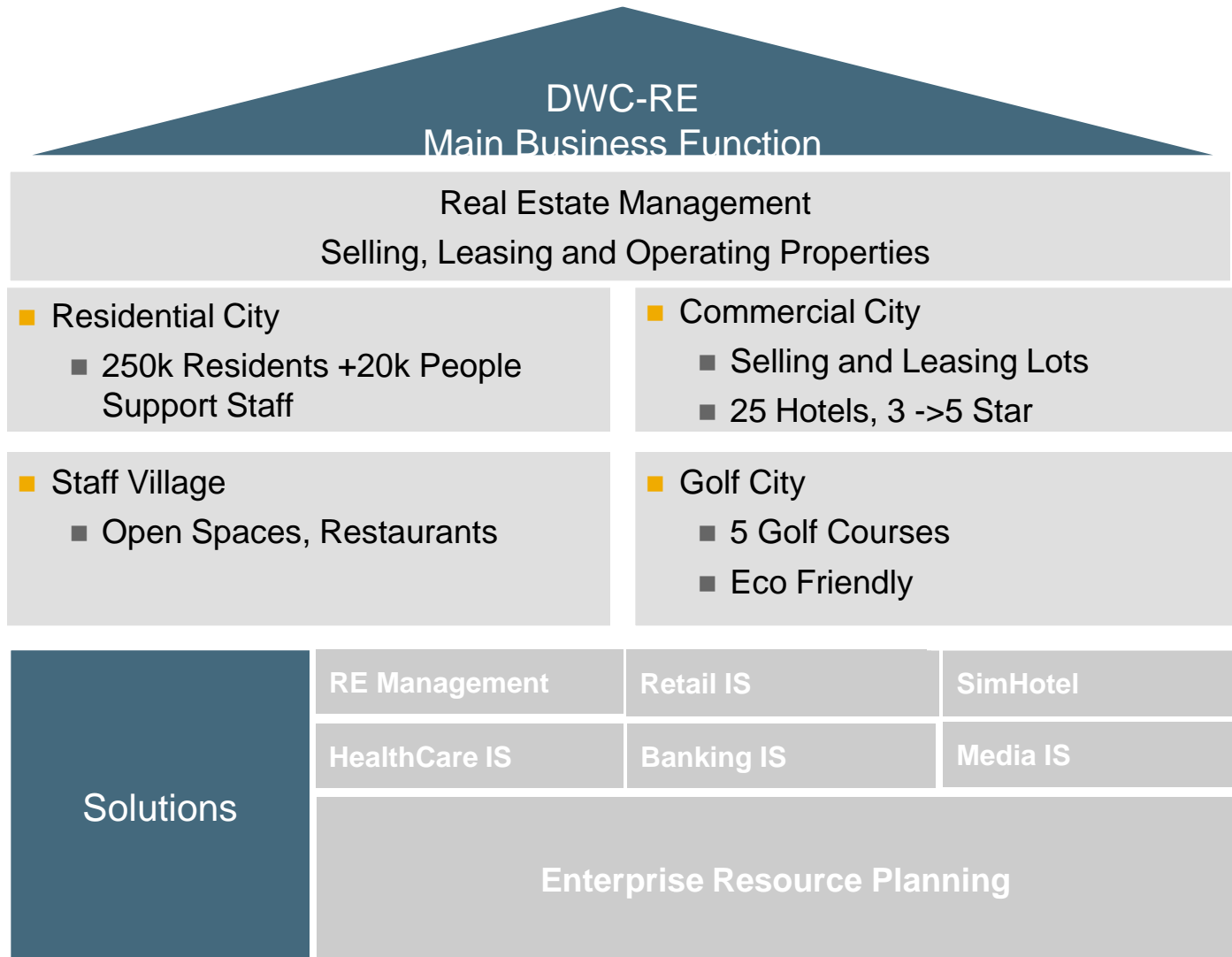


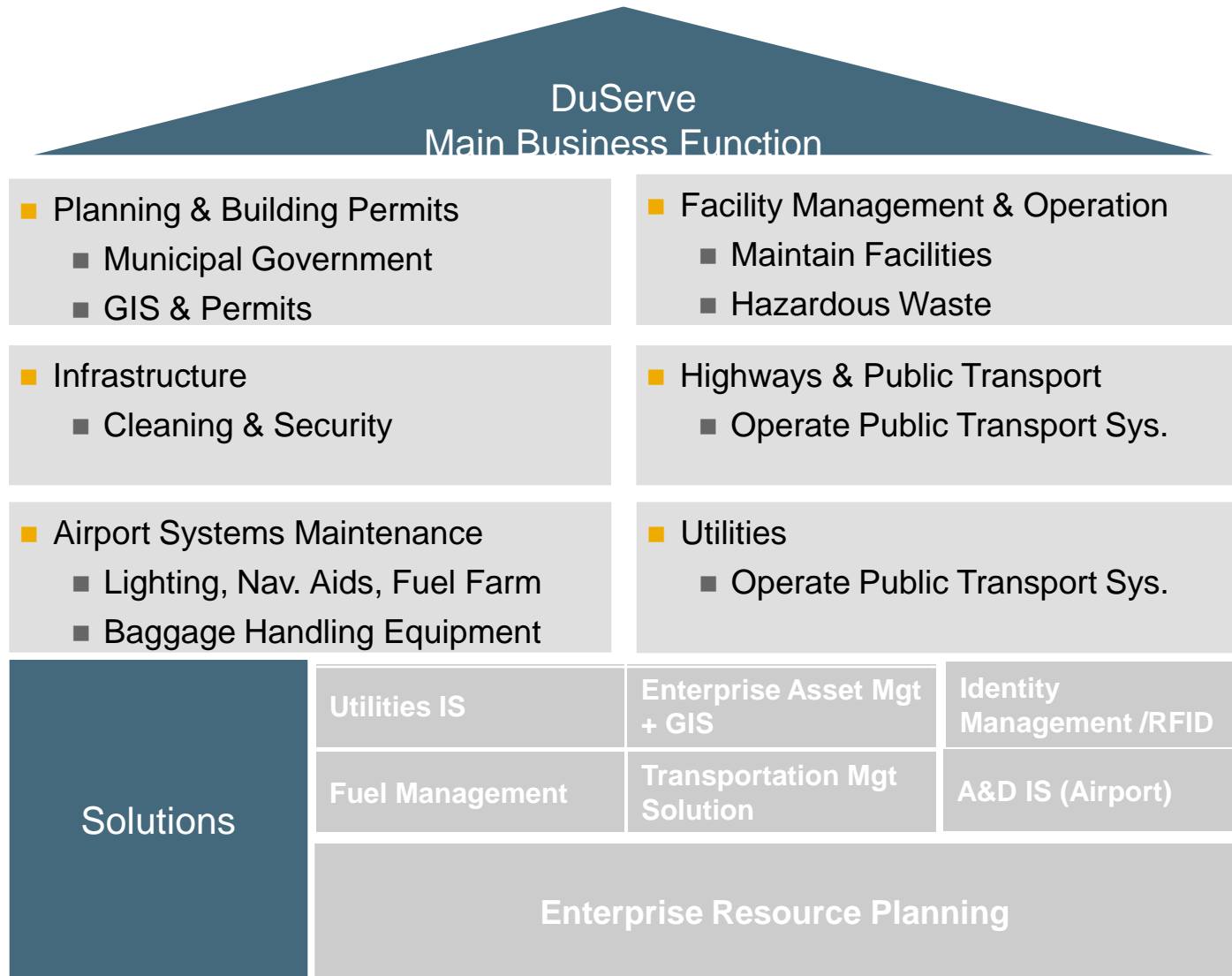


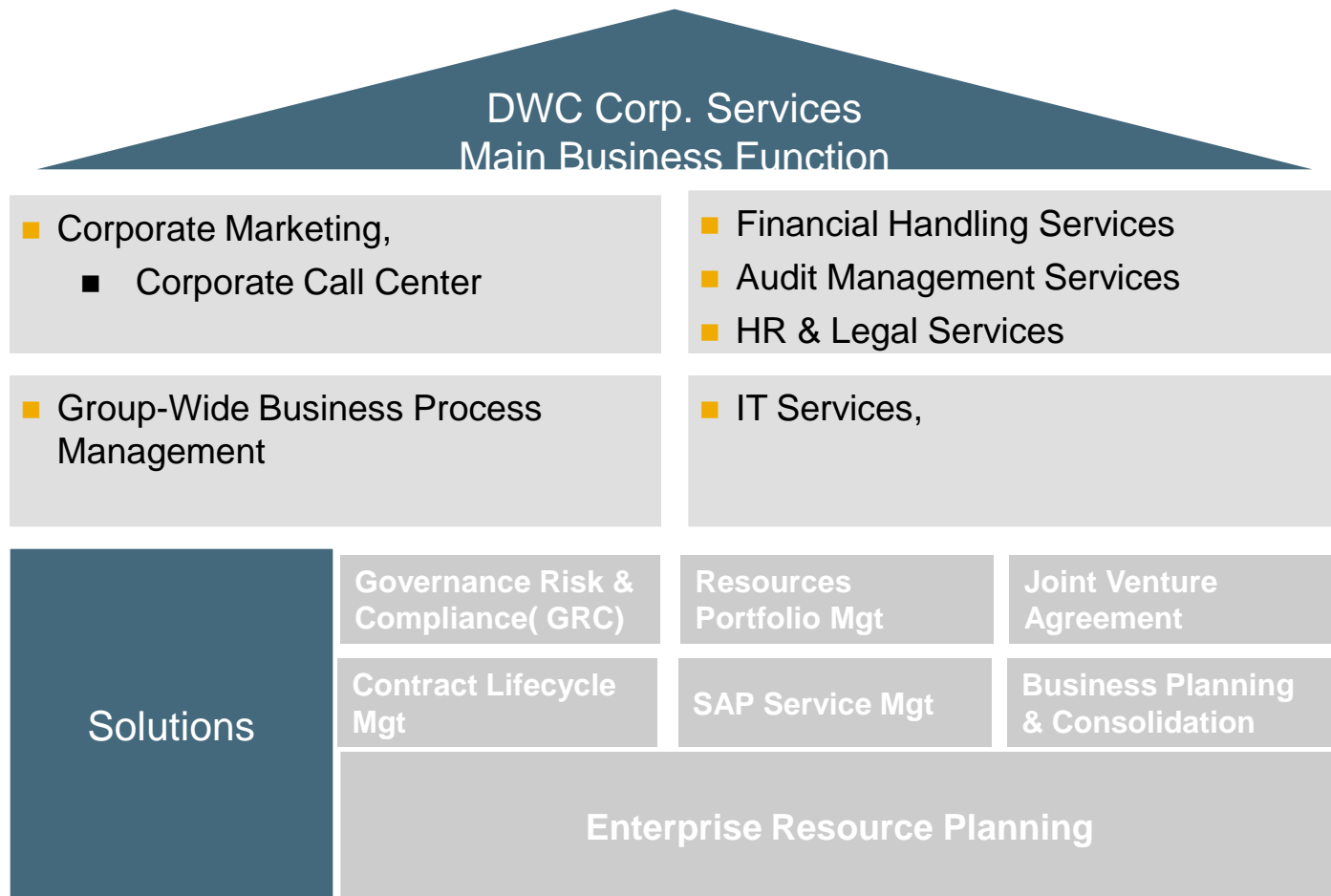
Currently out-of-scope











APPENDIX

DWC_ I-Map

Page 1



		Dubai Logistics City			Free Zone	Dubai Aviation City		
		Abdullah Al Qurashi CEO			FZ Director Khalid Abdulla	Abdullah Al Qurashi CEO		
		25 sqm, 12 m tonnes cargo			Visa, trade licenses, Permits			
Summary of Employees and Turn over:	30 Employee		Main Business is leasing lots	Mixed , client and self build	CRM	5billion AED	MRO 80m USD	
Business Aspects		Tracking Shipments	22 dedicated Cargo terminals	will accommodate more than		MRO Facilities	Facilities, for MRO & Manufacturing Facilities	Heliport Zone
		dedicated inhouse or contract logistics	freezone environment			MRO Customers	Specail Aviation Safety, , Gulf Aerospace MRO, Livewell Aviation Services MRO, Palm Aviation FBO Flight Support	Gulf Aerospace MRO 50m USD
Business Aspects		bonded warehouse	Key diffrentiators are, scale, open and free line with Dubai port			Fixed based operators (FBO)	Provide facility for the Air Show event	Hub for Aircraft, component , parts supply
		DLC office park	Amenities eg. Catering			support services - design consultancy		
Solutions	SRM	WM, ERP	Global trade services (GTS)	Bunded Werahouses		IS RE	IS Education	Hosting MRO Solution

DWC_ I-Map

Page 2



			DWC		% of turnover		
BOBJ	GRC	ERP	DWC Chairman HH Ahmed in Saeed Al Maktoum		Khalifa Al Zeffa DWC Exe Chairman		
Industry Sector							
	DuServe		SAP Relations? % of turnover			DWC Corporate Services	
	Rashad Bin Garaa CEO			RPM	CCO _ Position Open New CFO (TBF)		
	6				Sr Manager Integration Office _ Erhard Buchberger		
	60 Employees will grow to thousands						IT Director Khalid Al Mssri
	Planning and building permits	Will Act like municipality, provides GIS & Permits			commitment and innovation	Central Cooling System for all DWC	HR Direcotr Hassan Hokal
	facility management	Hazardous Waste	Treatment Facility		Integrity	customer service	Proc Direcotr Yousef Ziadon
	Infrastructure	Cleaning & Security					Legal Direcotr Dean Stelfox
	Highways and public transport	Operate Public Transport System					
	Airport systems	Lights, Navigational Aids, Fuel Sys, Baggages Management Sys, Security, FIDS	aviation fuel supply systems				
	utilities						
	IS Utilities	EAM integrate with GIS	IS TMS		ReFX + FM	RPM	SSC
	Fuel Mgmt (ERP)	IS A&D (AirPort Sys)			ERP	CRM	

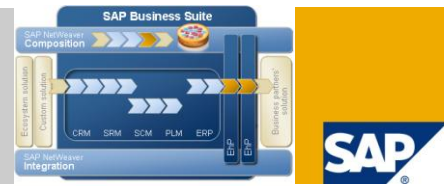
DWC_ I-Map

Page 3



DWC									
						Industry Sector			
	DWC Real Estate					DWC Global Techn			
	Khalid Bin Khatib CEO					Mohammed Asker CEO			
	Residential City	Commercaill Village	Stalf Village	Gulf City		Smartvworld, JV entity with DU & Itisalat for operating and providing the Telecom Services			IT Service Provider TBD
	250 K People & 20 K People	On Hold							
	800 hectars	Selling Lots 15-20% AND leasing the rst	Open Spaces, Resturents, Community	5 Golf Cources,		Intelligent Trasport System GIS	24/7 Online Access, Smart Maps, E-Libraries e-learning	Tele Working, Shopping, Paying Bills	e-homes, e-buildings
	Expected Sales 6 B AED	25 Hotels, Deluxe & 3-5 Stars		Eco Friendly Villas, Town Houses, Apartments		Broadband Services, Voice, Video, Image, Text & Data			
	Hotels, Hospitals, Schools, Shopping Malls	Elegant Houses & Luxury Villas				E-Infrastructure	E-City	E-Business	E-Resident
	Construction is not managed by DWC, Dubai Airport Engineering	Started Construction, 4 phases, 1 &2 SOLD OUT (KEPT	Master Plan been developed by Aeroport Paris capacity	The RE Business funds building the airport which is					
	Retial IS	Hotels							
	IS Media	Health Care	IS Banking						

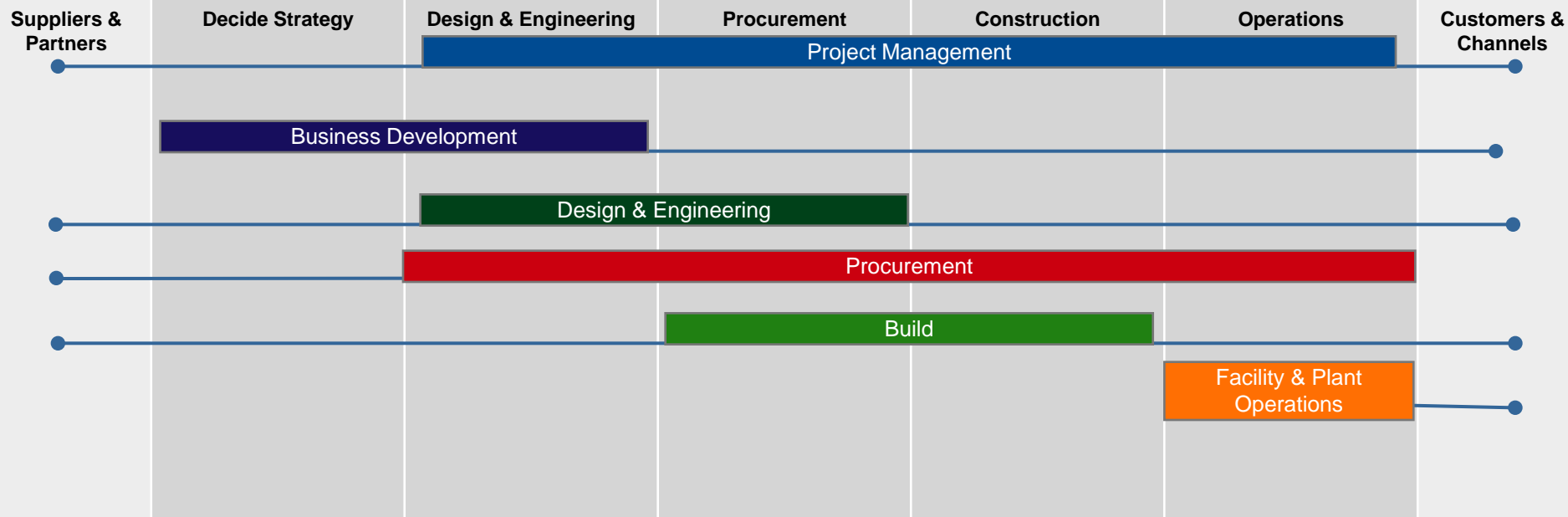
Specific Industry Best Practices for 26 Verticals



Industry Trends & Cross-Industry Best Practices

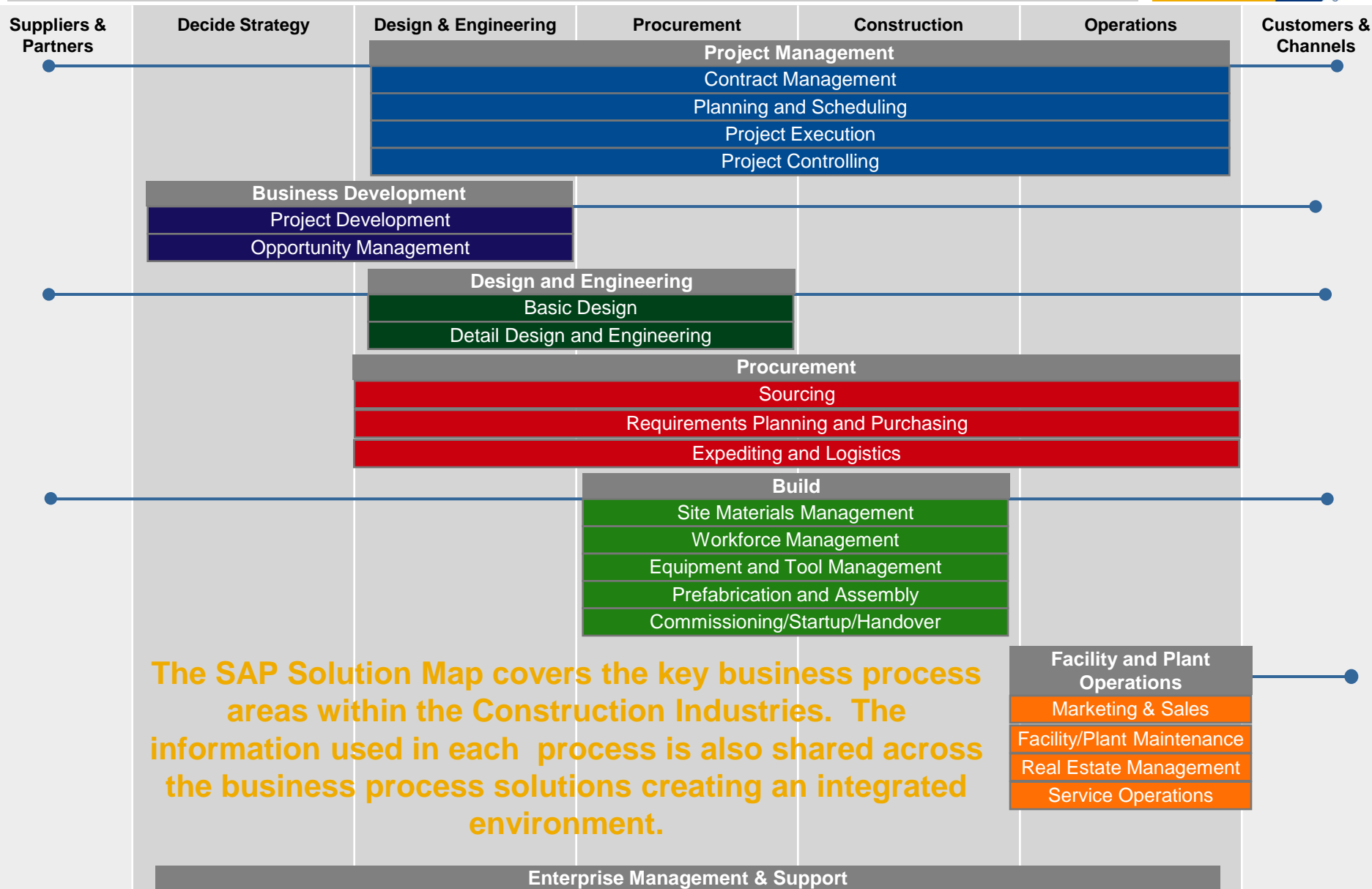
Manufacturing		Services	Financial & Public Services
Aerospace & Defense	Industrial Machinery & Components	Media	Banking
Automotive	Life Sciences	Professional Services	Insurance
Chemicals	Mill Products	Telecommunications	Healthcare
Consumer Products	Mining	Travel & Logistics Services	Higher Education & Research
Engineering, Construction & Oper.	Oil & Gas	Retail	Public Sector
High Tech		Utilities	Defense & Security
		Wholesale Distribution	

Engineering, Construction & Operations

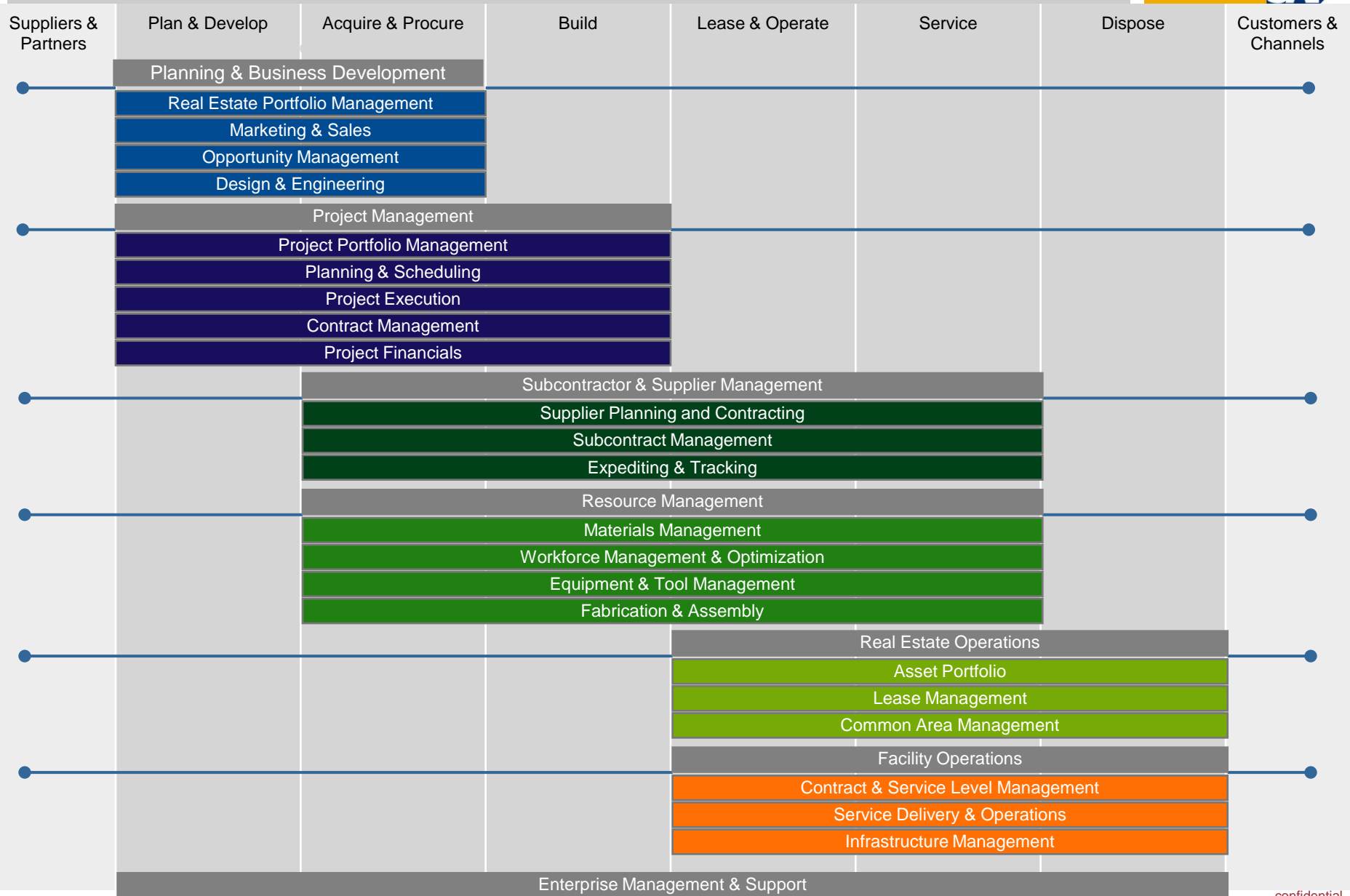


Enterprise Management & Support						
Analytics						
Strategic Enterprise Management		Financial Analytics		Operations Analytics		Workforce Analytics
Financials						
Financial Accounting		Management Accounting		Financial Supply Chain Management		Corporate Governance
Human Capital Management						
Talent Management		Workforce Process Management		HCM Service Delivery		Workforce Deployment
Corporate Services						
Travel Management		Environment, Health & Safety		Incentive & Commission Management		Real Estate Management
Operations Support						
Data Management	Program & Project Management	Quality Management	Enterprise Asset Management	Indirect Procurement	Global Trade Services	Global Trade Management

Engineering, Construction & Operations



SAP for Engineering, Construction & Operations



SAP Real Estate



Enterprise Management	Strategic Enterprise Management	Business Analytics	Business Intelligence & Decision Support		Accounting	Employee Relationship Management & Workforce Analytics	
Real Estate Business Analytics	Valuation Methods	Scoring Model	Benchmarking & Reporting		Planning & Simulation		Data Exchange Facilities
Customer Lifecycle Management	Customer Engagement		Customer Service			Buy & Sell	
Project Management	Approximate Financial Planning & Time Scale		Bid Invitation, Award, Invoicing			Ready for Use	
Commercial Management	Contract Management	Rental Accounting	Rent Adjustment & Sales-Based Rents	Service Charge Settlement	Third Party Management	Land Use Management	
Technical & Infrastructure Management	Space Management	Planned Maintenance	Repairs & Modernization		Procurement of External Services		Building Control Systems
Real Estate Controlling	Object Controlling		Responsibility Accounting with Profit Centers		Overhead Cost Controlling		Activity-Based Costing
System & Real Estate Infrastructure	Organization Structure	Master Data Objects	Partner & Address Management	Correspondence & Optical Archive	Graphical Interface		Reporting

SAP ERP: Solution Map



End-User Service Delivery							
Analytics	Strategic Enterprise Management		Financial Analytics		Operations Analytics		Workforce Analytics
Financials	Financial Supply Chain Management		Financial Accounting		Management Accounting		Corporate Governance
Human Capital Management	Talent Management		Workforce Process Management		Workforce Deployment		
Procurement and Logistics Execution	Procurement	Supplier Collaboration		Inventory and Warehouse Management	Inbound and Outbound Logistics		Transportation Management
Product Development and Manufacturing	Production Planning		Manufacturing Execution		Product Development		Life-Cycle Data Management
Sales and Service	Sales Order Management		Aftermarket Sales and Service		Professional-Service Delivery		Incentive and Commission Management
Corporate Services	Real Estate Management	Enterprise Asset Management	Project and Portfolio Management	Travel Management	Environment, Health and Safety	Quality Management	Global Trade Services

SAP NetWeaver

Thank you!