The Strategy of LGGI and future directions towards Enterprise Products and Solution

Overview and Update

Geosystems Poland User Group Meeting – June 15, 2007

Dr. Thomas Bayer, Director Sales Europe & CIS

HEXAGON

- when it has to be **right**

Leica Geosystems

Topics

Hexagon Overview

LGGI Overview

LGGI Strategy

Acquisition Progress

Hexagon Overview…..

HEXAGON

- when it has to be right

Leica Geosystems

Facts & Figures

Global technology group with strong market positions

- Hexagon Measurement Technologies
- Hexagon Polymers
- Hexagon Engineering

Headquarters in Stockholm, Sweden

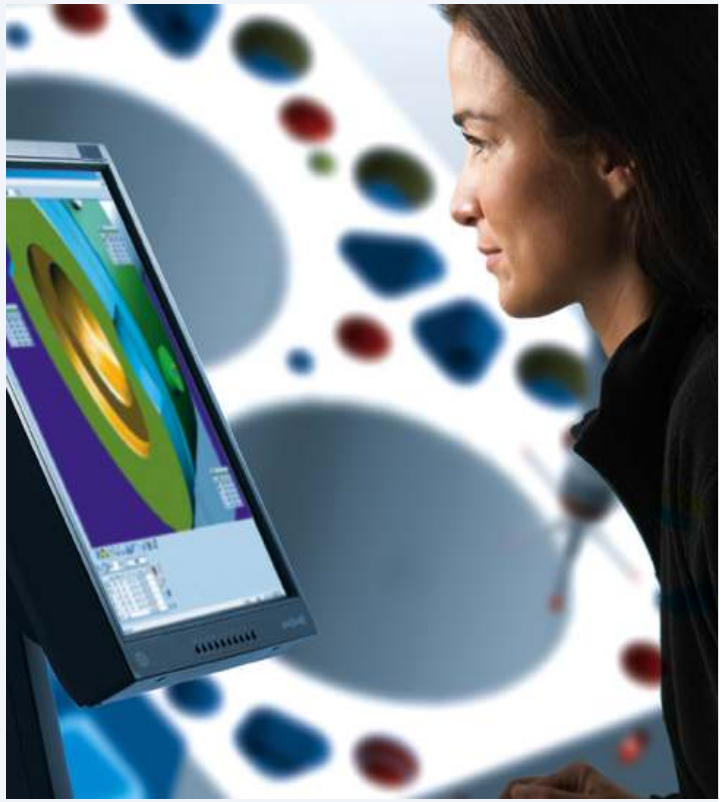
Net sales ~ 13 500 MSEK (~$2 billion)

Sales to > 100 geographical markets

> 8200 employees in 30 countries

Public - 75% Swedish shareholders

Ca. 10% of sales invested in R&D !



Business Targets

Operational

- Being no. 1 or no. 2
- Having the long term cost leadership in the industry
- Being the innovator
- Having the industry's best management
- Speed Management

Financial

- EPS growth of at least 15% P.A.
- Equity ratio between 25 and 35%
- Positive cash flow over a business cycle
- ROCE 15% over the cycle

Restriction

- Net Debt / EBITDA < 3.5

Group Management

Ola Rollén
CEO and President
President of Hexagon
Measurement Technologies

Hans Carlsson
President of
Hexagon Engineering

Håkan Halén
Chief Financial Officer

Lars Olofsson
President of
Hexagon Polymers

Gert Viebke
Vice President of Strategy

Hexagon Measurement Technologies

Market Size: 60,000 MSEK

Hexagon Share: 15%

= 69% of Total Revenue

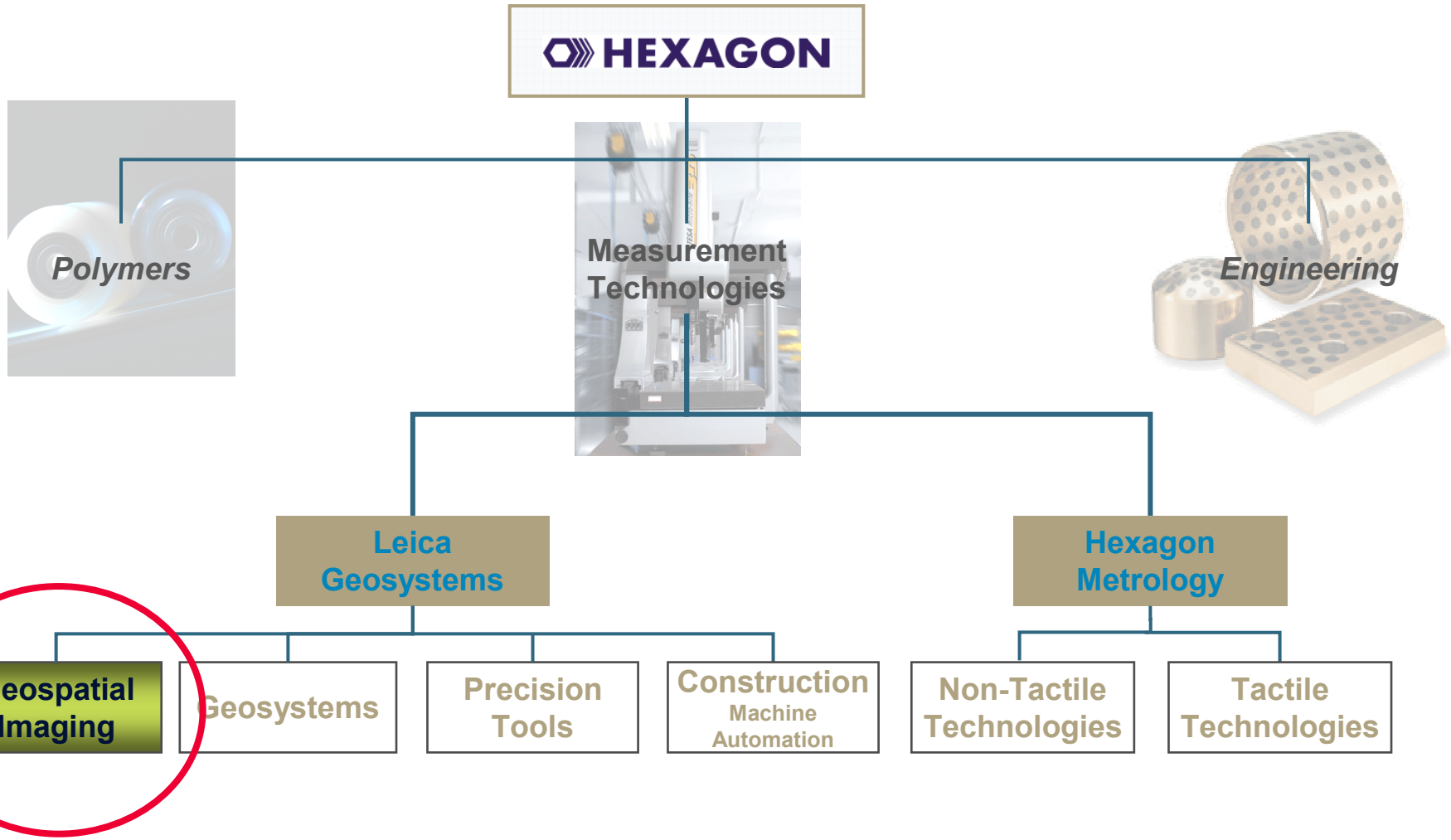
HEXAGON

- when it has to be right

Leica Geosystems

Measurement Technologies – Macro

Hexagon Group Structure



LGGI Overview…..

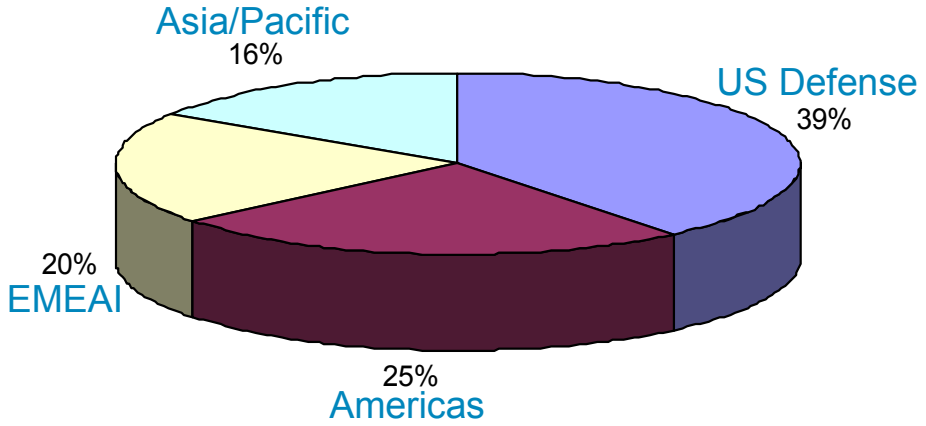
Leica Geosystems Geospatial Imaging

Headquarters in Atlanta, Georgia USA – ~ 210 employees

Annual Revenue – ~ $50M

We Develop, Sell and Support software for Geospatial Imaging Information through direct sales and partners

>40,000 licenses worldwide



capture reference measure analyze present
POWERING GEOSPATIAL IMAGING™

HEXAGON

- when it has to be right

Leica Geosystems

Employee Base

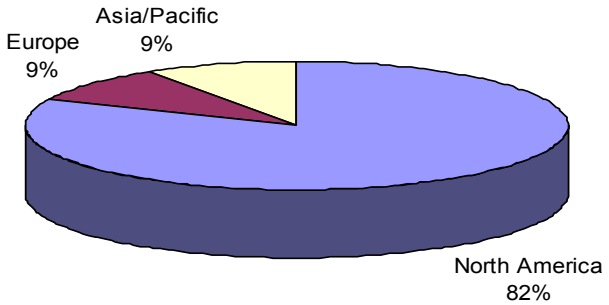
Sales, Support & Marketing ~ 100

Product Management ~ 10

Development ~ 80

Finance & Operations ~ 15

Administrative ~ 5



Employee Locations

HEXAGON

- when it has to be right

Leica Geosystems

LGGI Management Team

CTO
B Skelton

CEO
R Morris

CSO
M Tremp

Sales & Mktg
R McKay

Ent Solutions
G Perkins

Prod Mgmt
R Morris

Prod Dev
B Chaplin

Fin & Ops
A Gutman

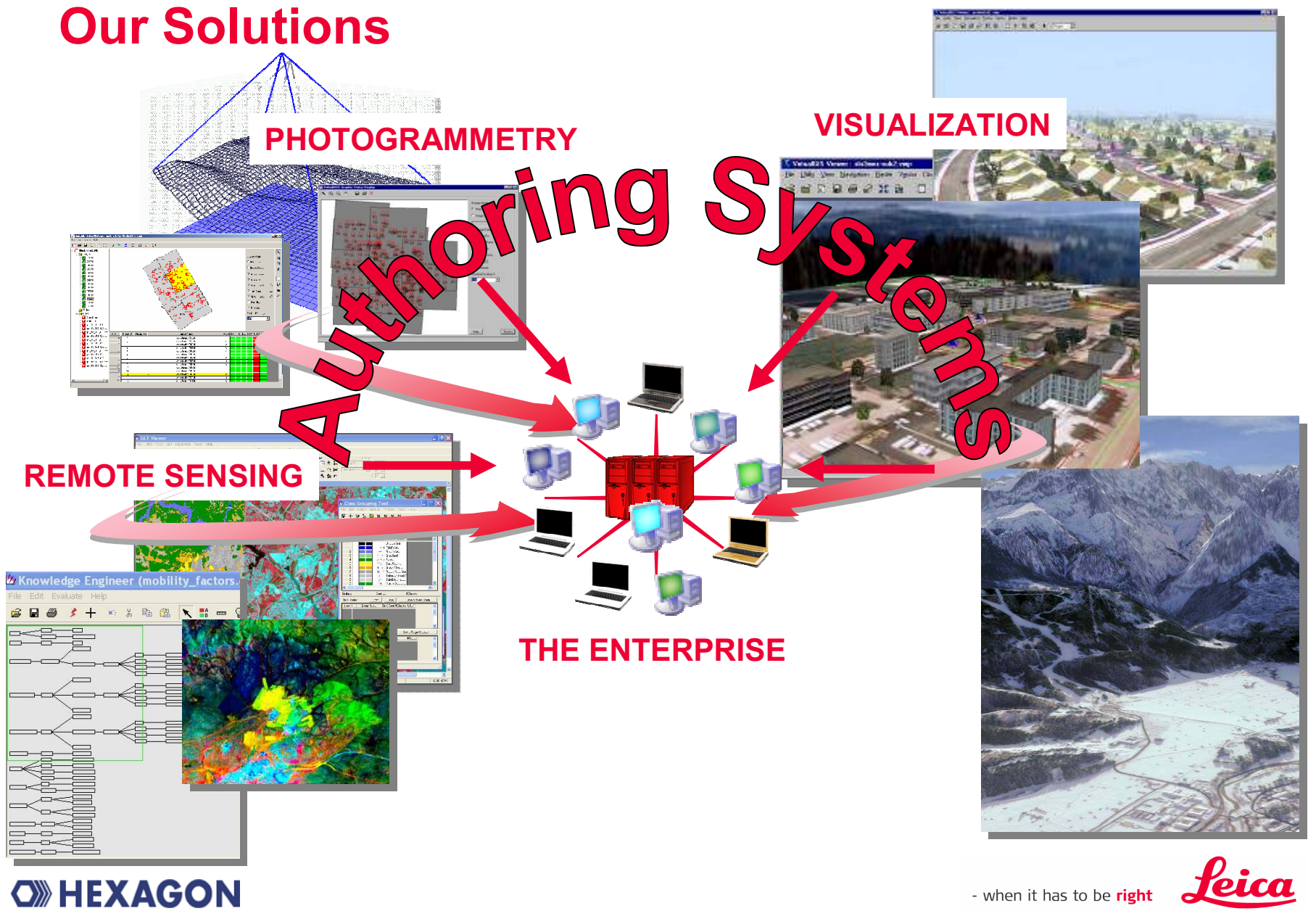
HR
S McGrath

HEXAGON

- when it has to be right

Leica Geosystems

Our Solutions



HEXAGON

- when it has to be **right**

Leica Geosystems

LGGI Strategy Review…..

HEXAGON

- when it has to be **right**

Leica Geosystems

Enterprise – Industry Direction

Shift from desktop to the geo-web (web services)

Increasing use of Open Source (PostGIS, UMN Map Server, uDig)

OGC & ISO Geospatial Standards for interoperability

IT centralization of software hosting, data management, spatial processing and delivery of content

Low cost & publicly available data

Platforms being built on Service Oriented Architecture (SOA)

Spatially Enabled Databases (Oracle, Microsoft, IBM)

Increasing presence of online geospatial portals (Google, Microsoft, GlobeXplorer)

LINUX

Security and Authentication Systems

What Will the Enterprise Platform Do?

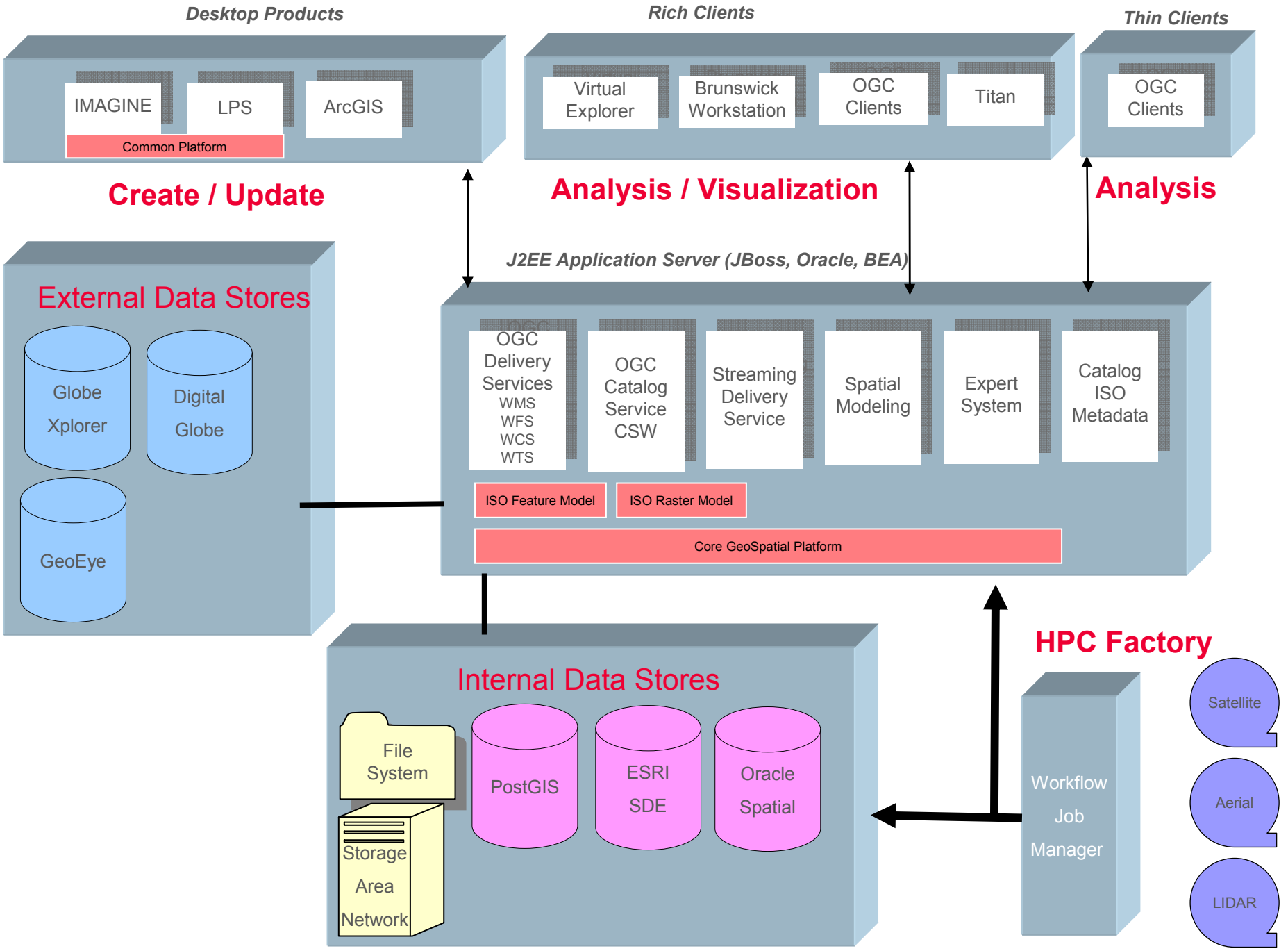
The Enterprise Platform will be the system that….

- Feeds an organization with fresh content from a variety of sensors
- Analyzes spatial and non-spatial content within the organization to make decisions
- Visualizes the organization in order to create visual information products
- Shares the enterprise with internal and external customers

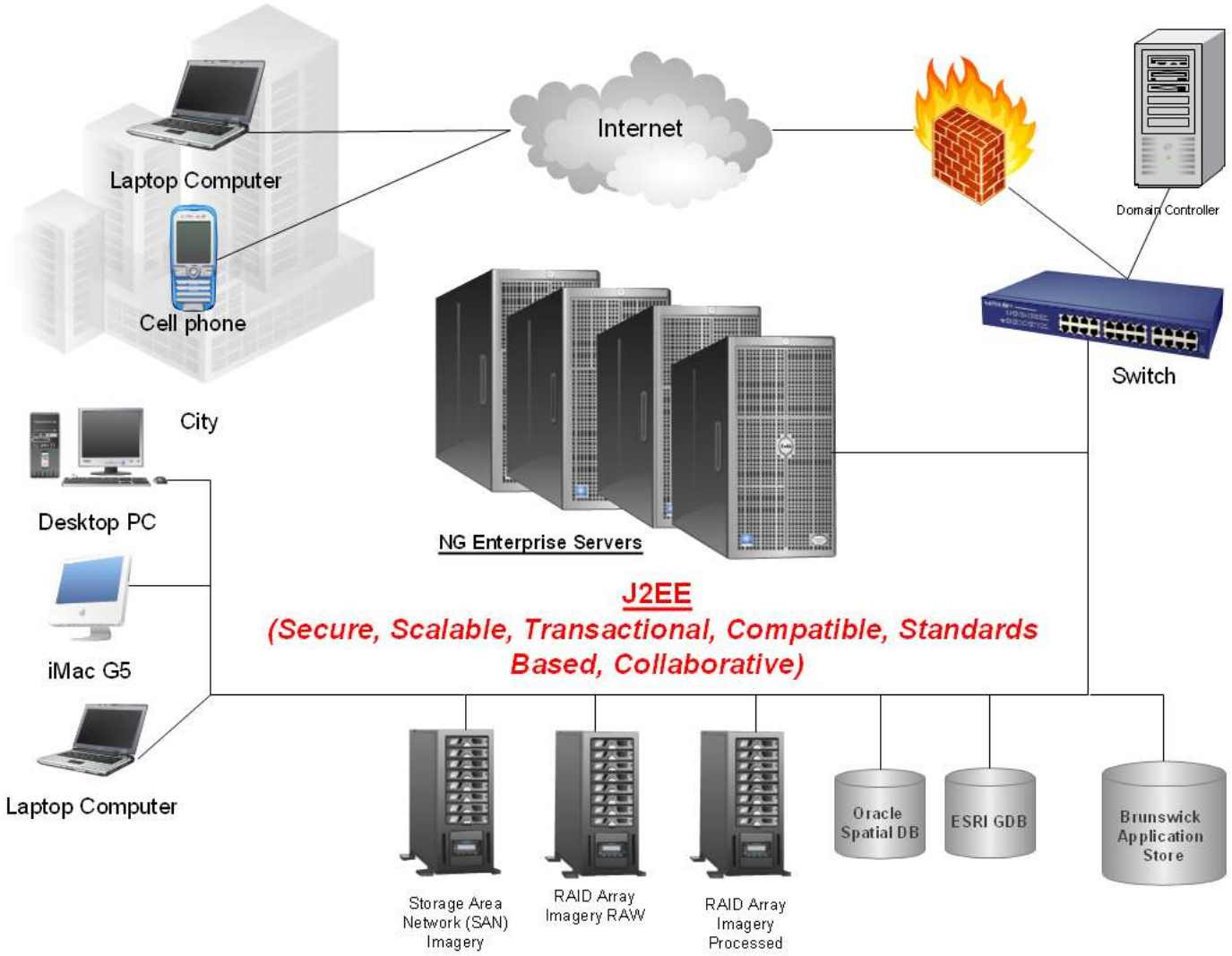
The Enterprise Architecture

A scalable, portable enterprise architecture on which to build future enterprise products.

- Enterprise – It must be able to be easily integrated into the business processes of a large organization. This mean the software must be vary layered in its construction and separate the data model from its persistence. It must also allow be based already well established standards (J2EE, .NET, OGC, etc). Frameworks such as J2EE provide enterprise and Web integration.
- Scalable – The architecture must allow for its components to run on handheld machines as well as massively parallel GRID computing systems.
- Portable – It must not make a presumption about a particular platform. Linux is strong in the server market and is gaining in the desktop.
- Easy to develop – It must be built with tools that are easy to use that promote robust software construction.

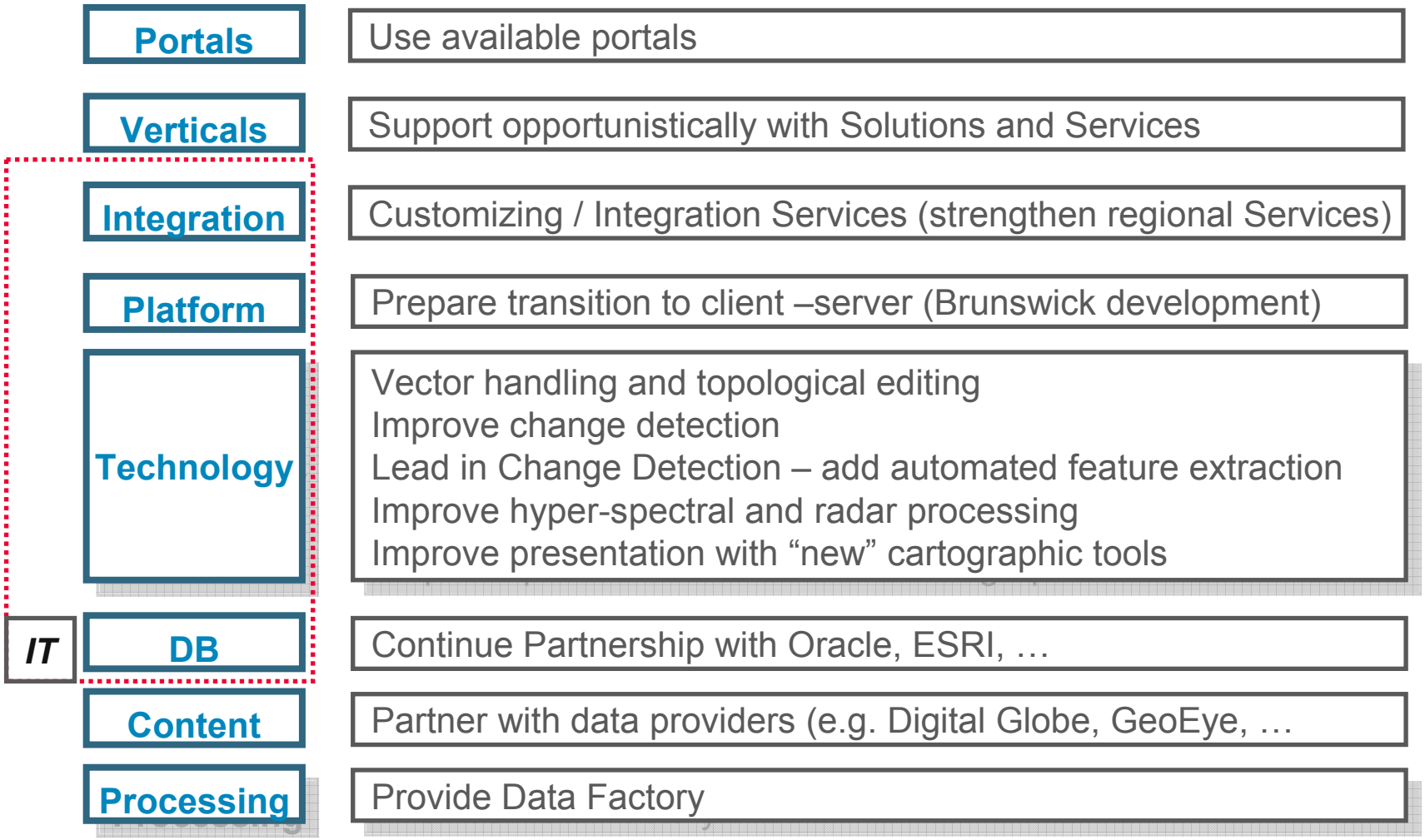

Desktop Products
Rich Clients
Thin Clients
IMAGINE
LPS
ArcGIS
Common Platform
Virtual Explorer
Brunswick Workstation
OGC Clients
Titan
OGC Clients
Create / Update
Analysis / Visualization
Analysis
J2EE Application Server (JBoss, Oracle, BEA)
External Data Stores
Globe Xplorer
Digital Globe
GeoEye
OGC Delivery Services
WMS
WFS
WCS
WTS
OGC Catalog Service CSW
Streaming Delivery Service
Spatial Modeling
Expert System
Catalog ISO Metadata
ISO Feature Model
ISO Raster Model
Core GeoSpatial Platform
HPC Factory
Internal Data Stores
File System
Storage Area Network
PostGIS
ESRI SDE
Oracle Spatial
Workflow Job Manager
Satellite
Aerial
LIDAR

Scaling from Handhelds to Servers



Growth strategy

Identifying acquisition / partnering targets



Acquisition progress…

HEXAGON

- when it has to be **right**

Leica Geosystems

- Completed acquisition April 1, 2007
- Announced publicly on May 7, 2007

Strategic rationale for acquisition

- **Adds Vector editing and topology handling to LGGI's Enterprise System**
- **Provides Platform (ADE) to build spatial applications for users who are using Oracle Spatial**
- **Access to new customer base, mostly in US federal, state and utility**
- **Adds to LGGI**
  - Specific Oracle Spatial and DB expertise
  - J2EE expertise
  - "Service" and implementation experience for enterprise systems

Anticipated synergies

- **Technology**
  - Vector handling and topological editing are key components to a fully deployed Enterprise solution set
  - Java/J2EE expertise
  - Database and data management expertise
  - Mobile client deployment
- **Enterprise Implementation**
  - Seeds our IT solution implementation ability (a skill set we are currently limited in)
  - Certified Oracle Spatial training and support
- **Market Access**
  - Opens access to Oracle install base with geospatial requirements
  - Opens non-traditional markets in business intelligence and mobile data mgmt

Leica ADE Architecture why Oracle

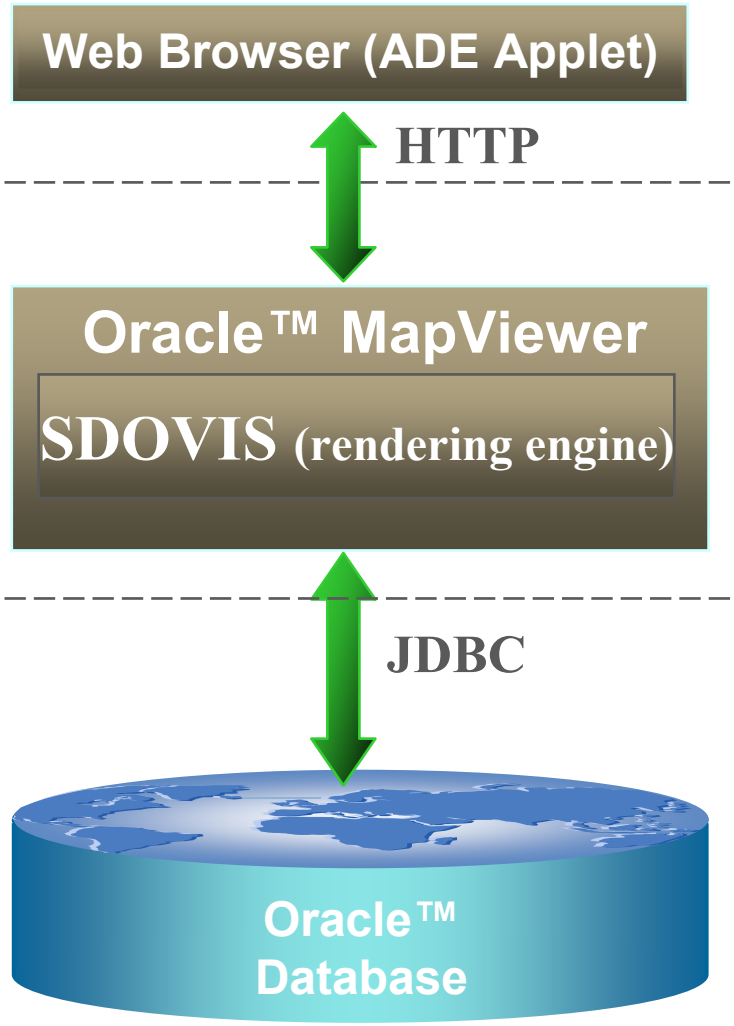
Oracle add spatial capabilities to the database

ADE add real-time data editing, scaled in a web environment

Data is updated at the source

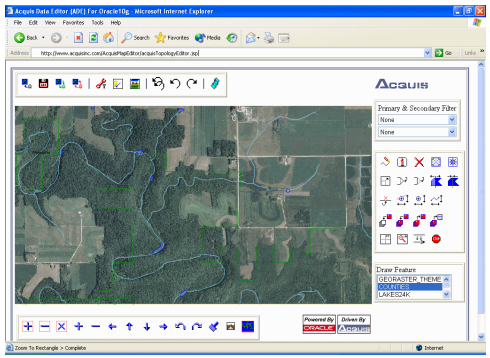
Transaction management is database driven

Analysis functions can encompass Spatial and business data



Leica ADE Enterprise suite

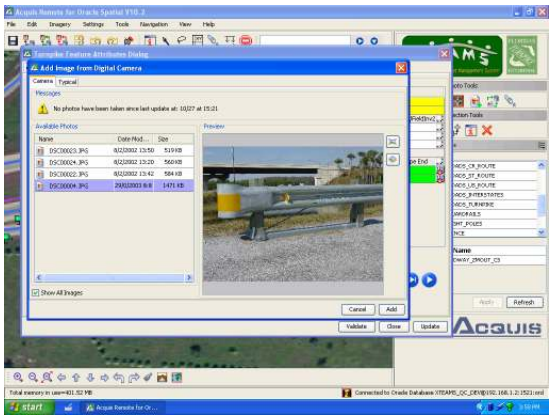
Leica ADE Enterprise



Interactive web-applications

enables real time data editing of spatial and non spatial data in a thin client.

Leica ADE Remote



Field force enabled interactive data editor

enables connected, disconnected or occasionally disconnected editing

Leica ADE Mobile

Real time interactive mobile applications

enables connected, disconnected or occasionally disconnected editing

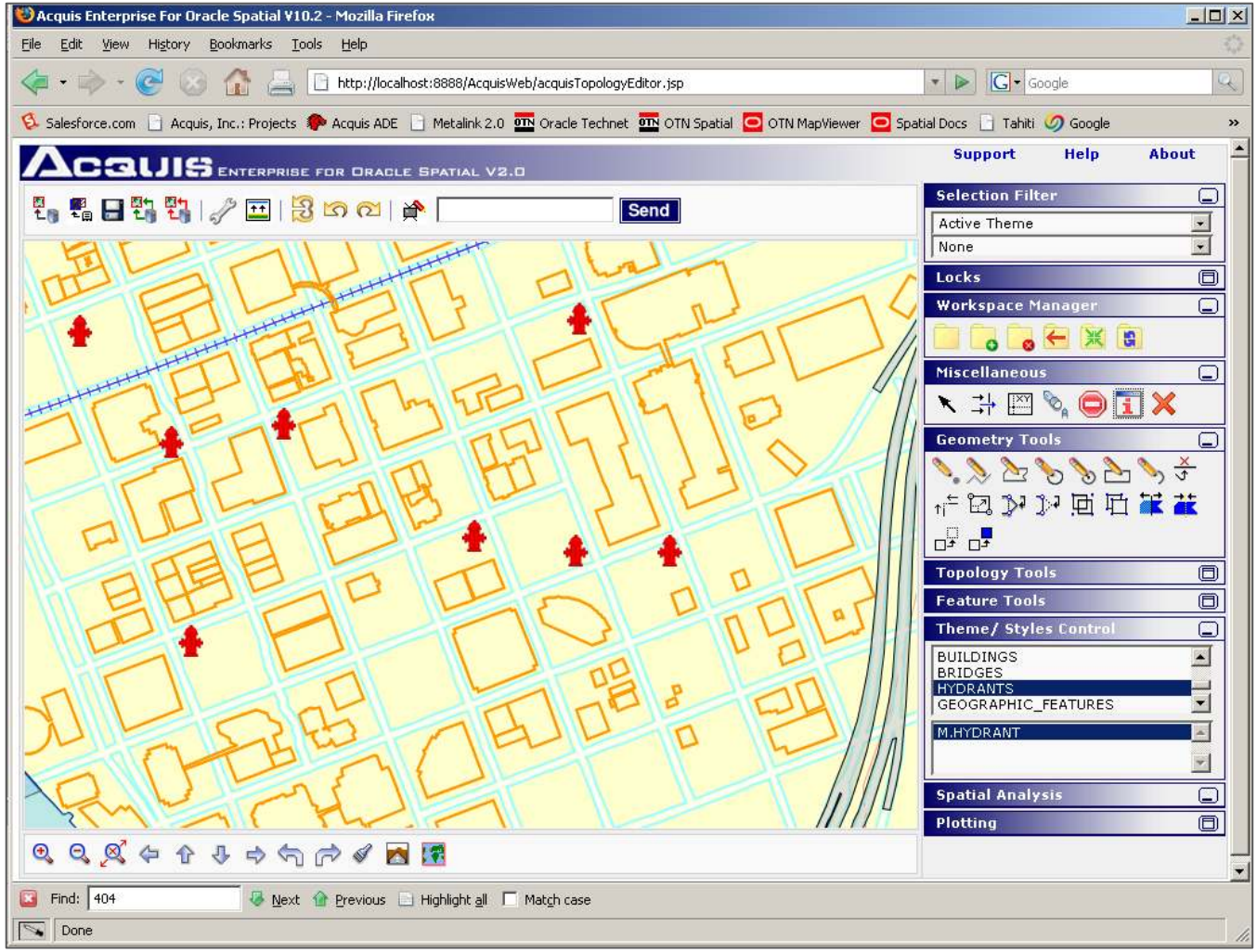
Oracle Spatial Expertise & Solutions Development Services

HEXAGON

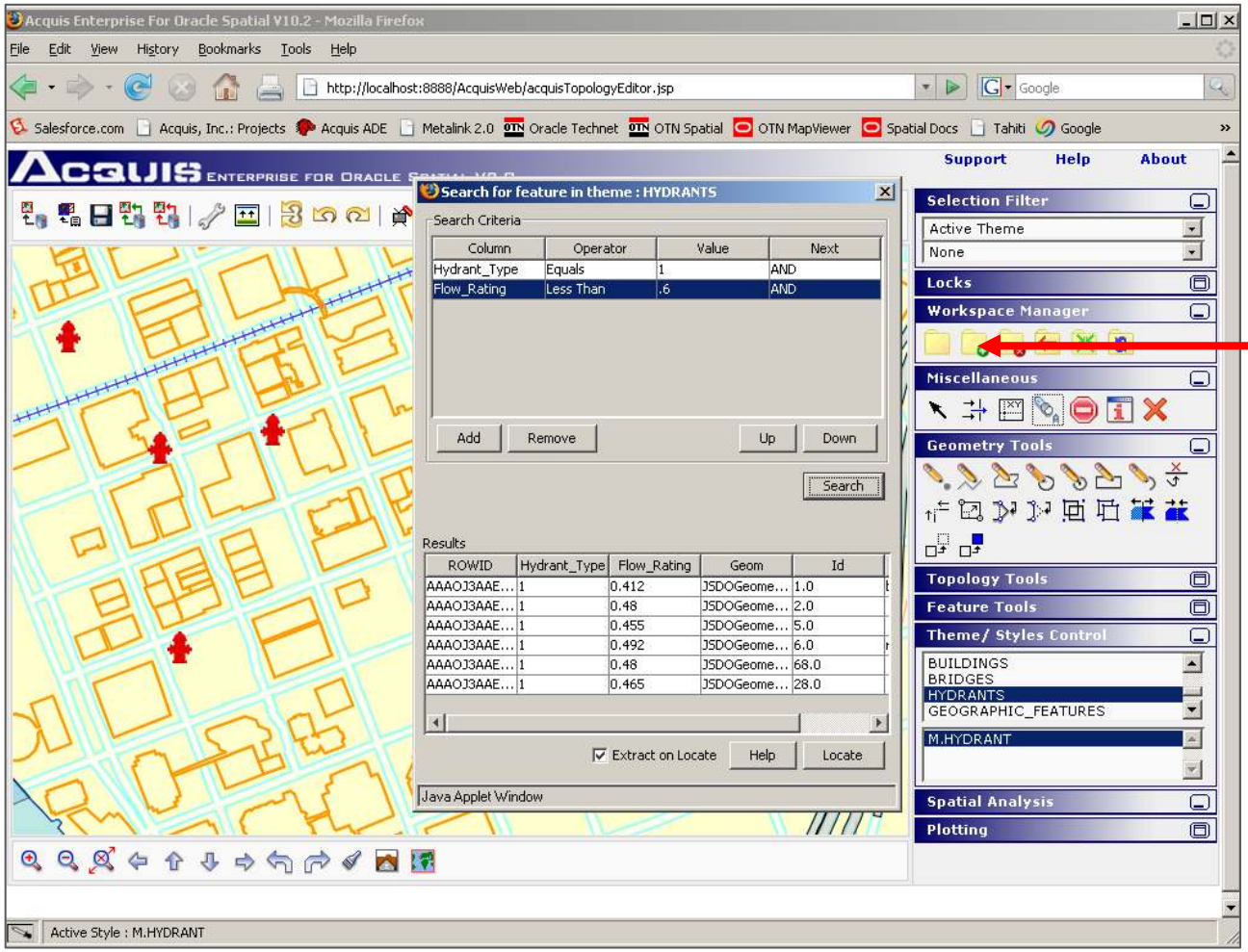
- when it has to be **right**

Leica Geosystems

Manage ALL Data Using:
Web, Online or Offline Interfaces

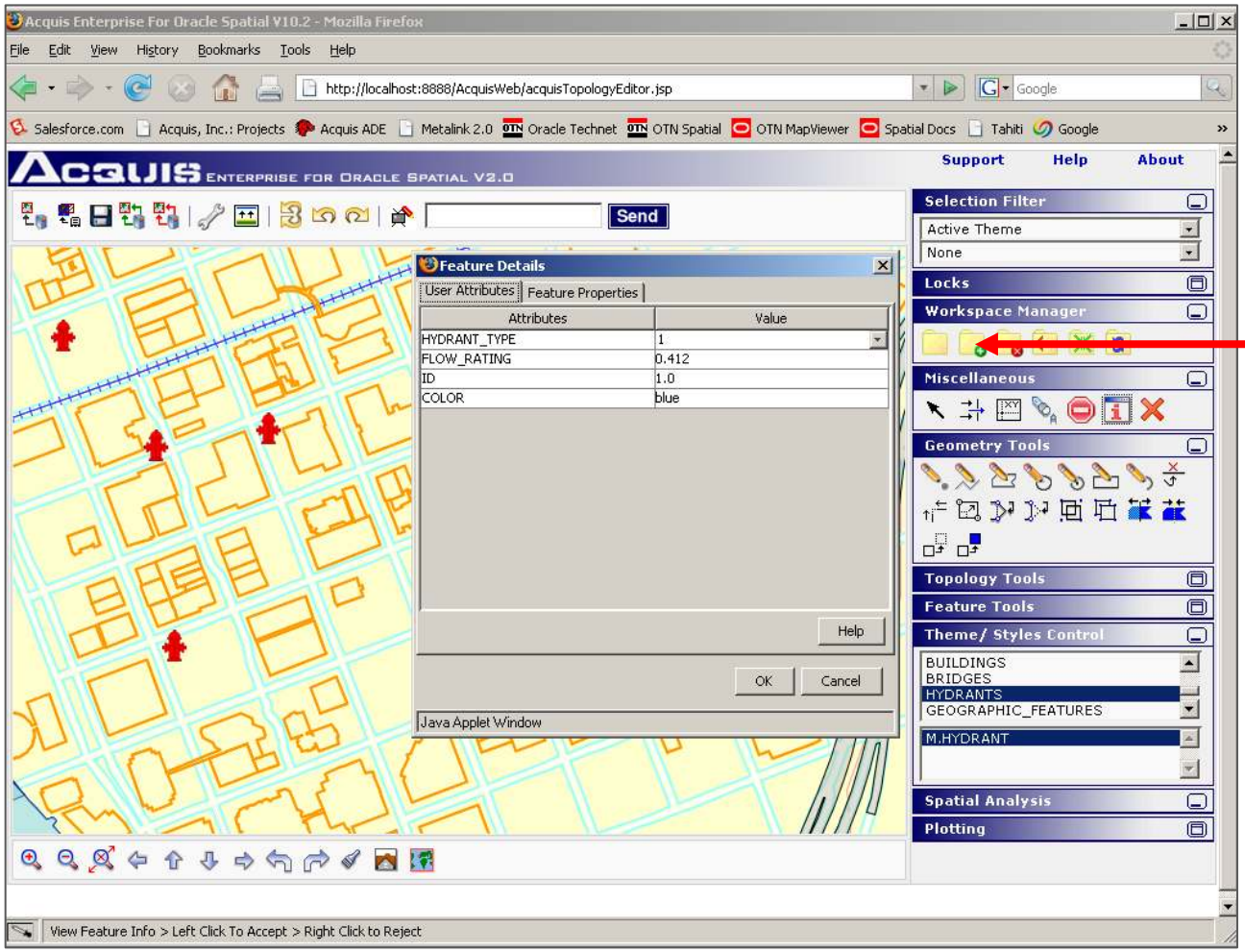


Enterprise Attribute Data is COMPLETELY Integrated with Location Data



Search for location based on attribute data…out-of-the-box!

Enterprise Attribute Data is COMPLETELY Integrated with Location Data



Add, delete or modify attribute and/or location data…out-of-the-box!

LGGI and ER Mapper

building a powerhouse together

HEXAGON

- when it has to be right

Leica Geosystems

What ER Mapper brings to LGGI
powering geospatial imaging

- World-class, high performance image serving solutions
- Leading edge image compression technology
- Exceptional people and knowledge
- Strength in the mining and extractive markets
- Strong foothold and performance in Southeast Asia
- 50 employees worldwide

ER Mapper
Geospatial Imagery Solutions

HEXAGON

- when it has to be right

Leica Geosystems

Synergies that deliver
powering geospatial imaging

- Stronger global enterprise – Asia Pacific, Americas, Europe, India, Middle East, Africa
- Enhanced products and enterprise services in discovery, cataloging and delivery of geospatial imagery
- Expanded corporate and personal opportunities for growth
- Proven commitment to investing in R&D
- 250+ geospatial information experts in one company
- Management team with broad experience in geospatial information industry

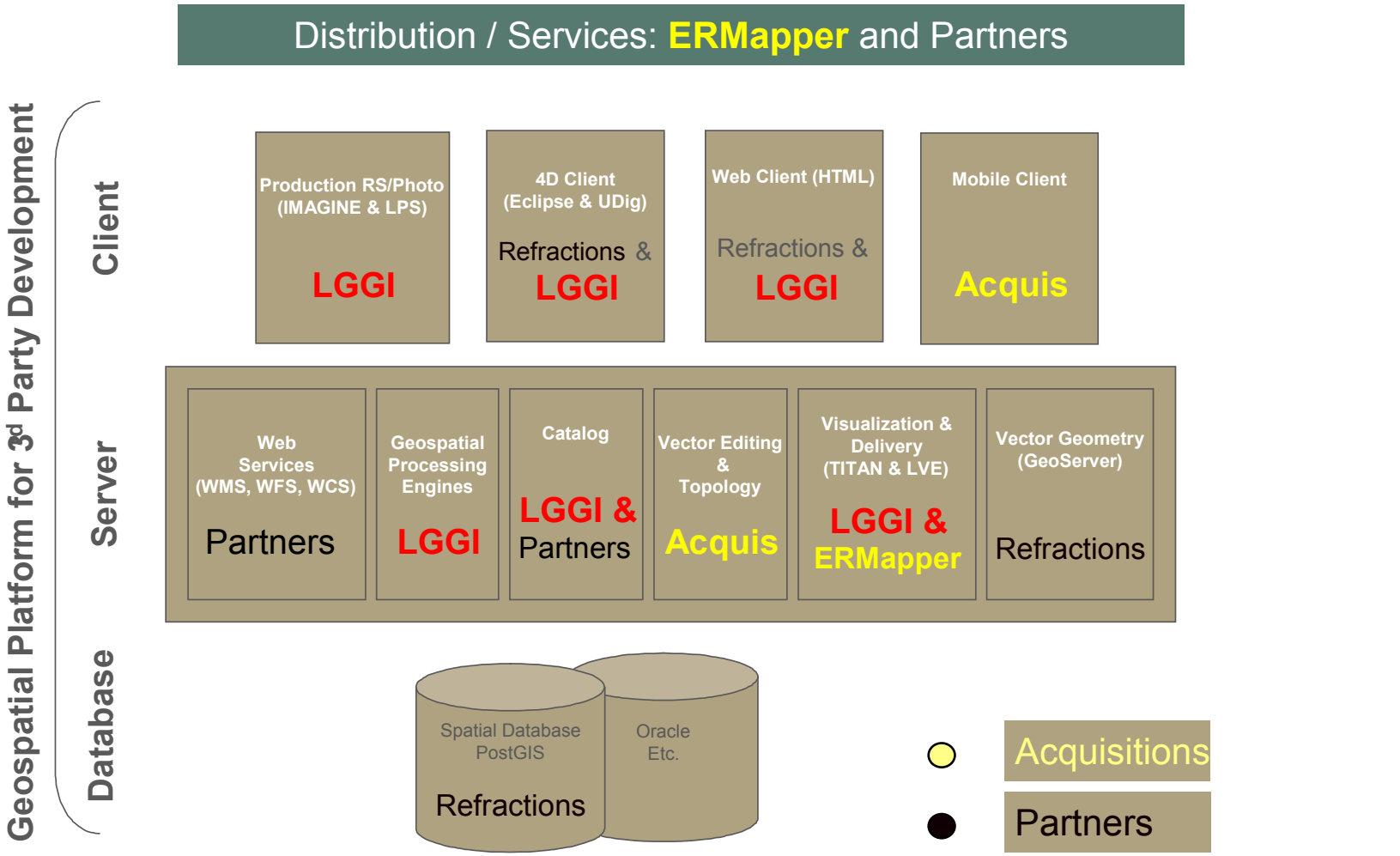
1+1=3

HEXAGON

- when it has to be right

Leica Geosystems

Advancing Enterprise Development



HEXAGON

- when it has to be right

Leica Geosystems

Leica Geosystems

ER

Geospatia

ER Mapper
Geospatial Imagery Solutions

ca

HEXAGON

- when it has to be **right**

Leica Geosystems

Questions?

HEXAGON

- when it has to be **right**

Leica Geosystems