Intelligent Marketing
- Spatial Behavioral Analysis

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People matter, results count.

Introductions

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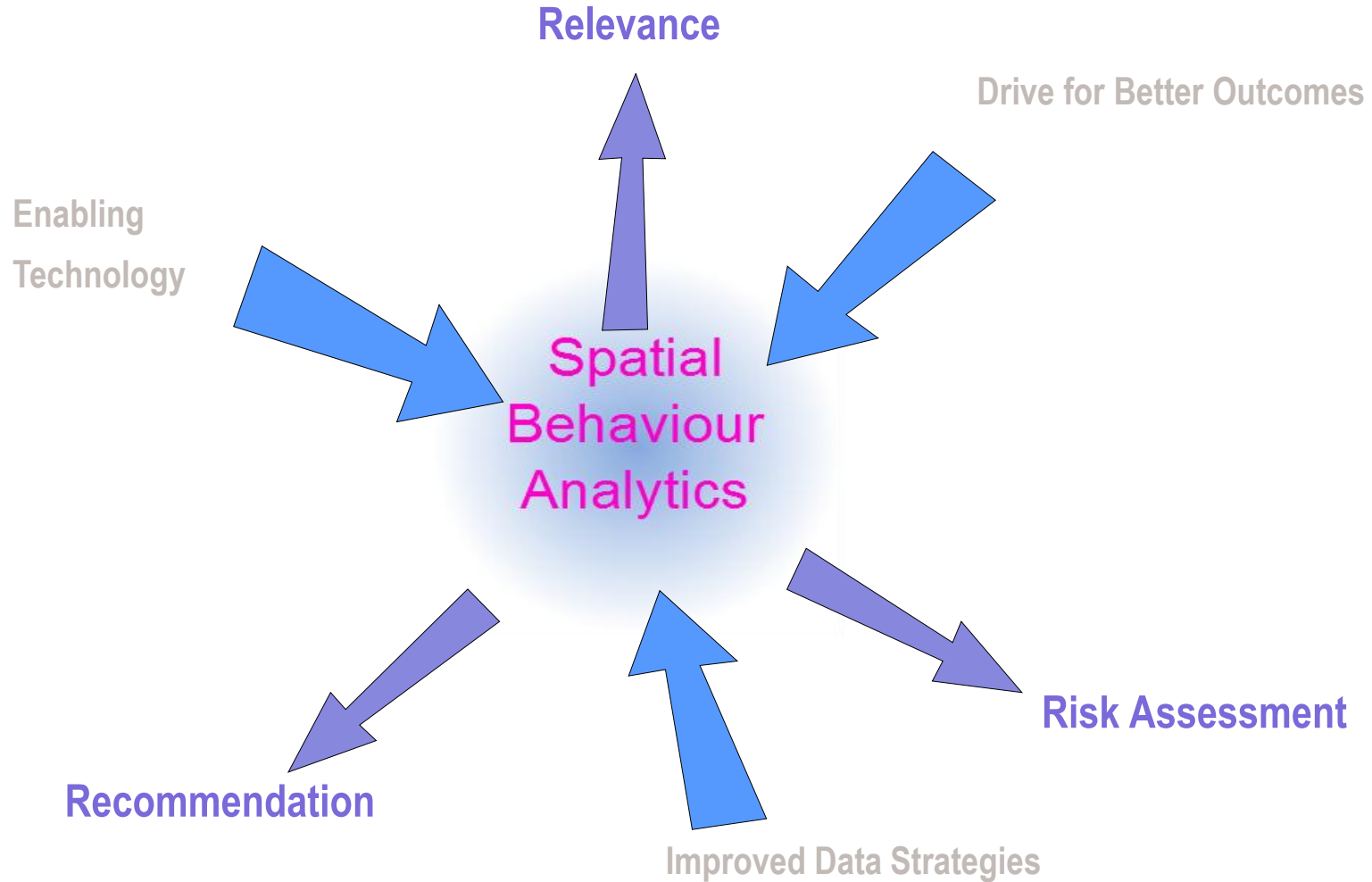andrew.j.morgan@capgemini.com

Capgemini UK plc

Agenda

- The 3 R's – Reading, wRiting & aRithmetic
- Behaviors In Places
- Relevance: Place As Campaign
- Recommendations: Habits as heat maps
- Risk: Risk exposure as route history
- The Big Idea: Spatial Behaviour
- Spatial Behavioral Analytics – as a Service
- The Platform
- Discovering Insights, Delivering Outcomes
- Capgemini – Business Information Management
- Intelligent Marketing

We are gathered here together ...
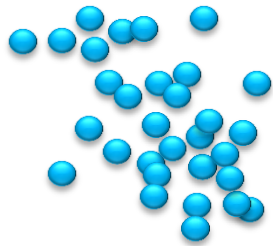
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The 3 Rs – Reading, wRiting & aRithmetic

Relevance

Drive for Better Outcomes

Enabling

Technology

Spatial
Behaviour
Analytics

Risk Assessment

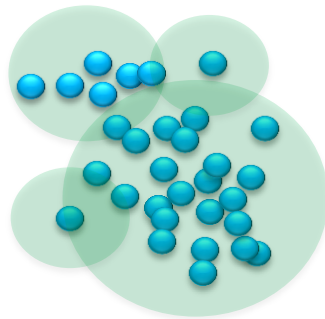Recommendation

Improved Data Strategies

Behaviours in Places

Where you interact and transact isn't random, it's the result of choices in places.

clustered by common behaviours

common behaviours in places

Place and behaviour are linked.

What brought these two people together?

Smoking Area? Watching a busker? Ice Cream?

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National Theatre

Spatial Behaviour – Common Behaviours in Places

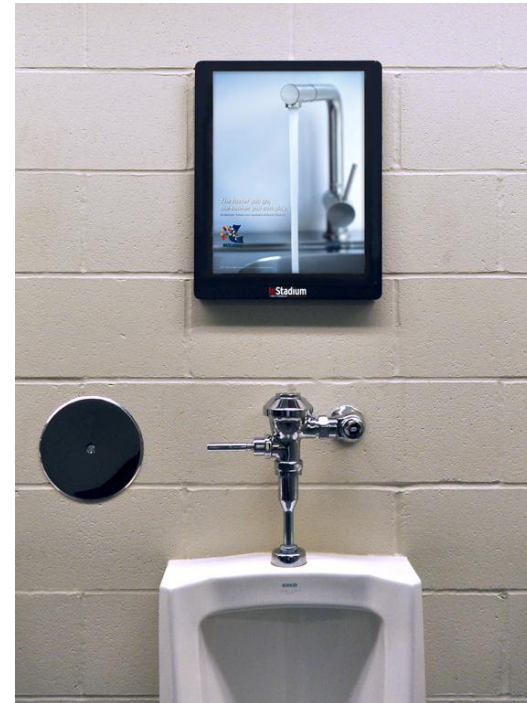# Relevance: Place as Campaign

Place-as-campaign

More relevant marketing campaigns can be defined at Places.

As customers are identified in a place, we make them a targeted offer.

These ideas aren't new, above the line marketing has always been focussed on advertising media placement.

"Place Specific" Campaigns

It's not new to target campaigns on specific places

Relevance: Place as Campaign

Place-as-campaign

More relevant marketing campaigns can be defined at Places.

Tailoring Offers to people in places, allows us to focus on experience, and improve relevance.

For example, as you enter into the "campaign boundary" your inclusion in the campaign is Activated, and an offer, an alert, or a notification is sent.

"Place Specific" Campaigns

Southbank Pedestrian Campaign Area
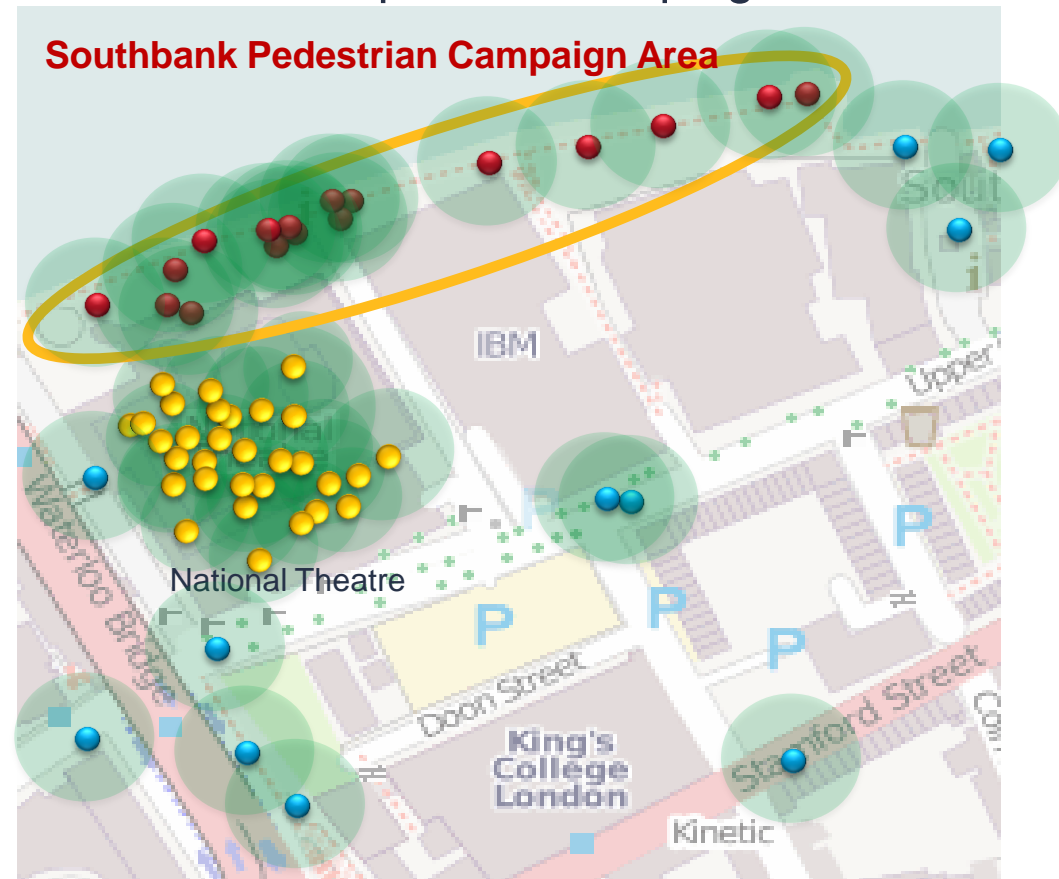
National Theatre – "Southbank Pedestrian Offer"

Recommendation: Habits as Heat-maps

Habits-as-Heat-maps

Recommendations
can be tailored to a customer's
habits, revealed by the heat-maps
of their locations over time: Their
"Visited Place Profiles"

Here, an IBM employee, Dale
Lane, used Google latitude to
publish online his own personal
travel heat map.

How might we tailor/ improve
recommendations we make?

Iceland - 0   Tesco - 1

Risk: Routes through Risk

As people move through heat-maps of "risk" we can tally up their exposure to tailor policies to them.

If motorways had a different car accident risk profile than other roads, how does this map record their exposure to risk, and how the policy might be priced?

We can also specify policy boundaries and alert them as they move "out of coverage" and offer to "top them up"

Routes as movement through risk heat maps

The Big Idea: Spatial Behaviour

We think knowing
where customers interact &
transact can improve:

- Relevance
- Recommendation
- Risk Assessment

Place and behaviour are linked.

What brought these two people together?
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Spatial Behaviour – Behaviours in Places
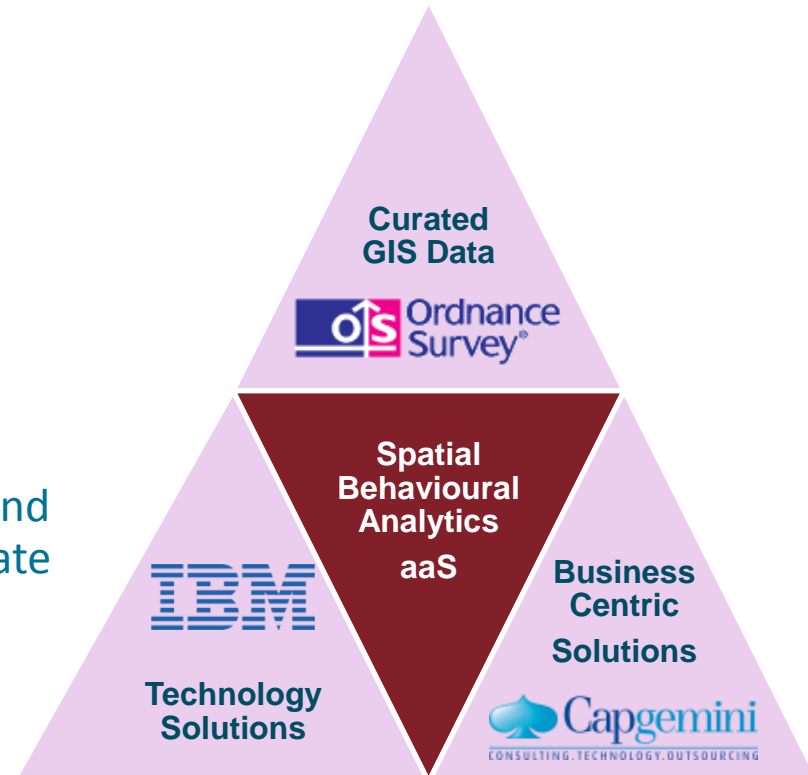
Spatial Behavioral Analytics – as a Service

➤ **"Spatial Data Science" on a "living atlas"**

We believe that **"where customers transact/interact"** *affects our clients ability to improve their:*

- ✓ *Relevance*
- ✓ *Recommendations*
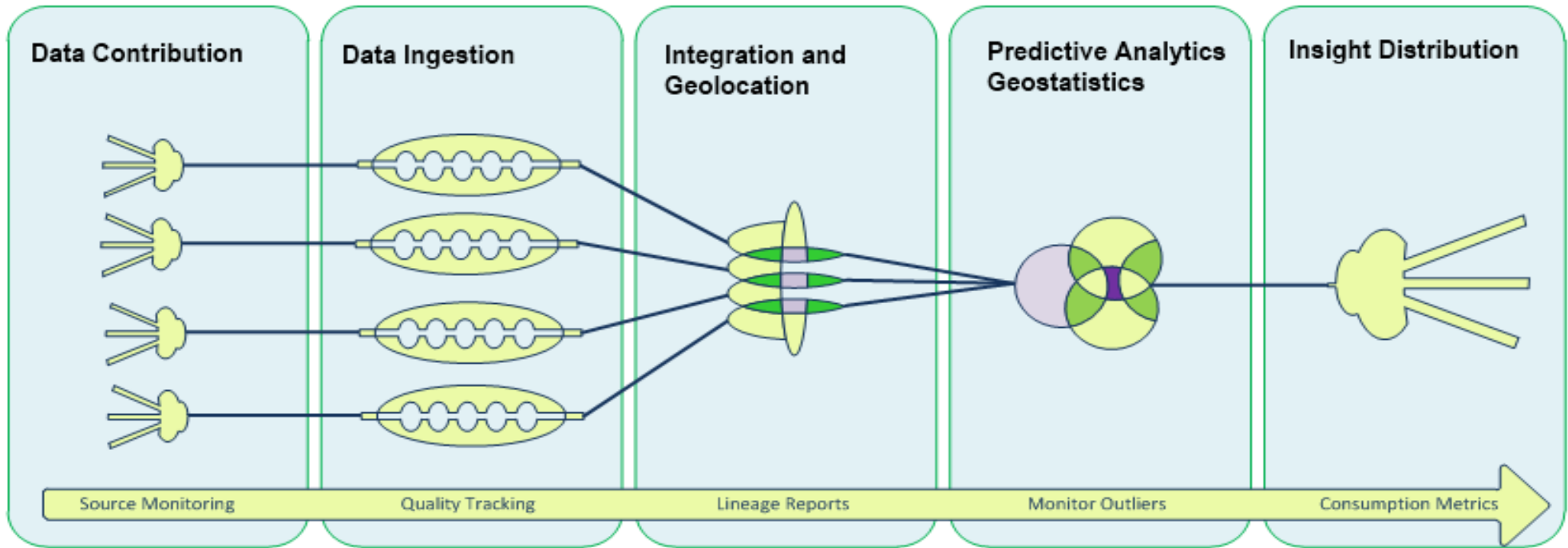- ✓ *Risk Assessments*

➤ The intersection of technology, spatial data competency, and experience in business centric solutions, enables us to create a platform to delivery

"Spatial Behavioural Analytics aaS"

Curated GIS Data
Ordnance Survey®

Spatial Behavioural Analytics aaS

IBM
Technology Solutions

Business Centric Solutions
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The Platform

Data Contribution	Data Ingestion	Integration and Geolocation	Predictive Analytics Geostatistics	Insight Distribution
Source Monitoring	Quality Tracking	Lineage Reports	Monitor Outliers	Consumption Metrics

- Clients on the platform buy analytics results, with/ without mapping context
- Data providers are granular – apps on the IPAD?
- Data Providers are Enterprises – passing along change data capture about Customers
- Reference Data Providers – provide shared information models, and reference sets that give context especially with respect to spatial data.
- The platform has underlying functionality to control it's shared use: Monitoring, Quality, Consumption monitoring, Data Access Controls.

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Discovering Insights, Delivering Outcomes

Value:

✓ Provides analytics about "situated behaviours" within a "living atlas" having dynamic context

✓ Improves generalist AaaS platforms available today because:

✓ Caters to analysis about individuals, and their located and situated behaviours, against a backdrop of accurate curated spatial context.
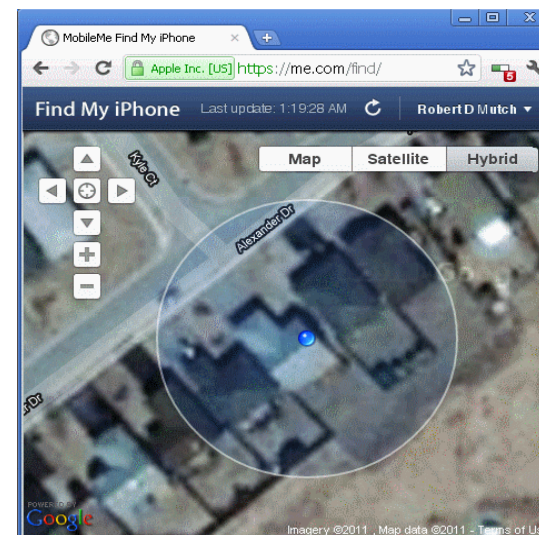
Traditional areas of Geostatistics:

✓ Retail Gravity Models, Transportation Planning Models

✓ Route Planning, Static Insurance Risk Models, Environmental Modelling

New frontiers of Spatial Data Science:
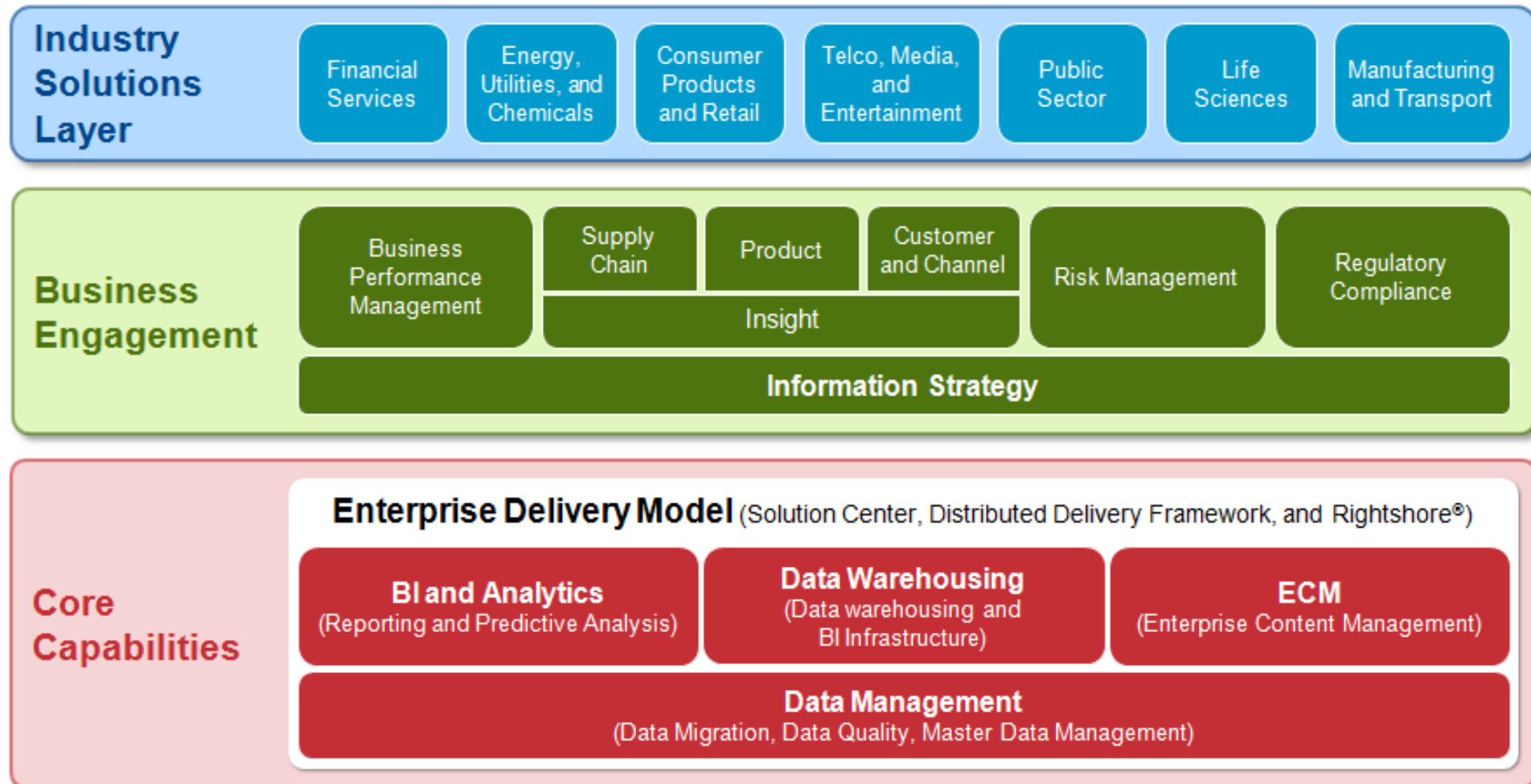
Analytics about individuals within context, location, situation, against dynamic populations

✓ How/When do we recommend things, as the customer is moving around?

✓ When a customer searches, location affects relevance

✓ A customer's routine journeys, in space, bound the probable risks they are exposed to.

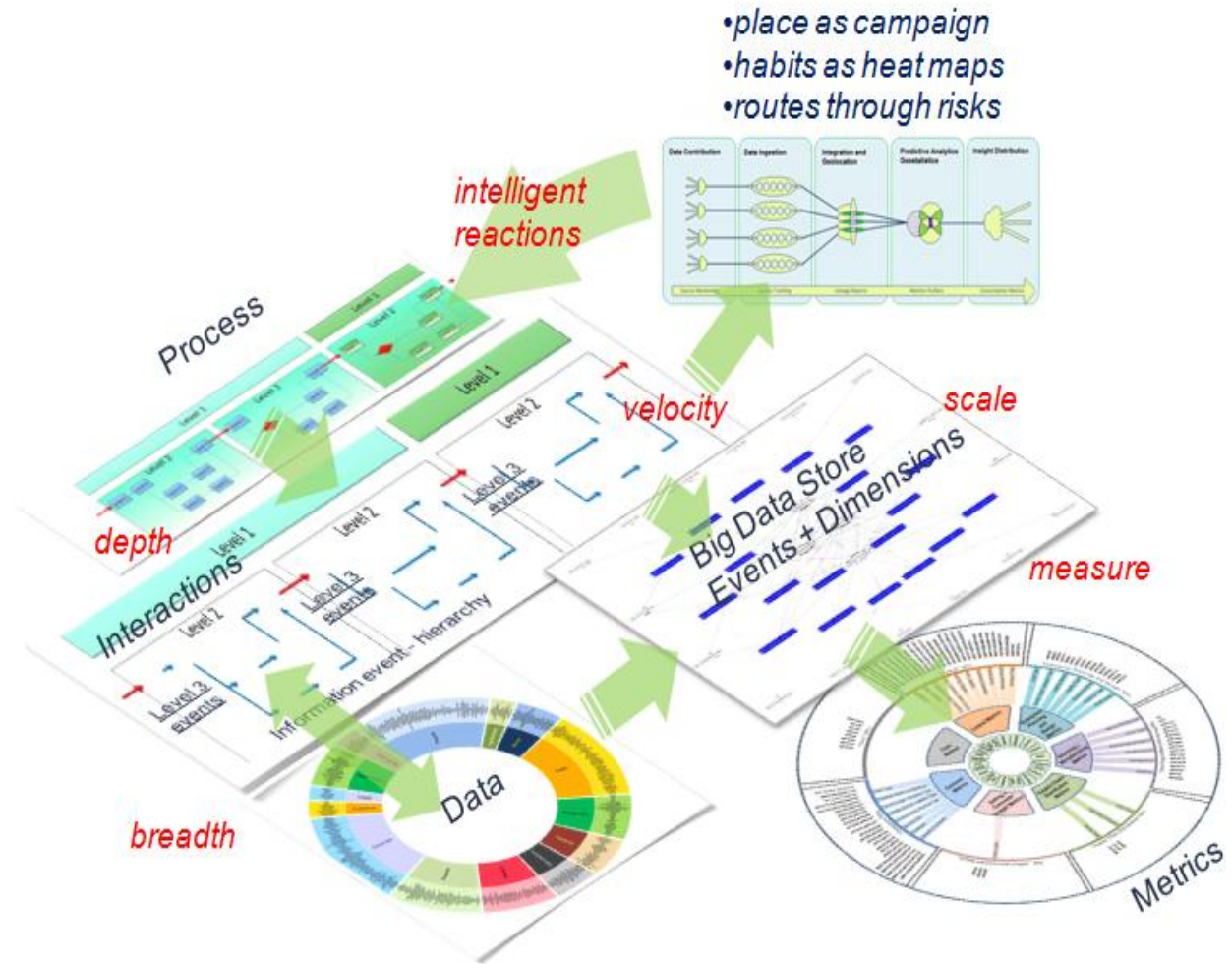**Powerful insights on individuals too, not just clusters**

Capgemini – Business Information Management

Industry Solutions Layer

- Financial Services
- Energy, Utilities, and Chemicals
- Consumer Products and Retail
- Telco, Media, and Entertainment
- Public Sector
- Life Sciences
- Manufacturing and Transport

Business Engagement

- Business Performance Management
- Supply Chain
- Product
- Customer and Channel
- Insight
- Risk Management
- Regulatory Compliance

Information Strategy

Core Capabilities

Enterprise Delivery Model (Solution Center, Distributed Delivery Framework, and Rightshore®)

- **BI and Analytics** (Reporting and Predictive Analysis)
- **Data Warehousing** (Data warehousing and BI Infrastructure)
- **ECM** (Enterprise Content Management)

Data Management (Data Migration, Data Quality, Master Data Management)

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Intelligent Marketing

Marketing Strategies - using the platform with **your big data** *helps you to improve your relevance, recommendations, and risk strategies in real-time.*

- place as campaign
- habits as heat maps
- routes through risks

intelligent reactions

Process

velocity

scale

depth

Big Data Store
Events + Dimensions

measure

Interactions

Information event - hierarchy

Data

Metrics

breadth

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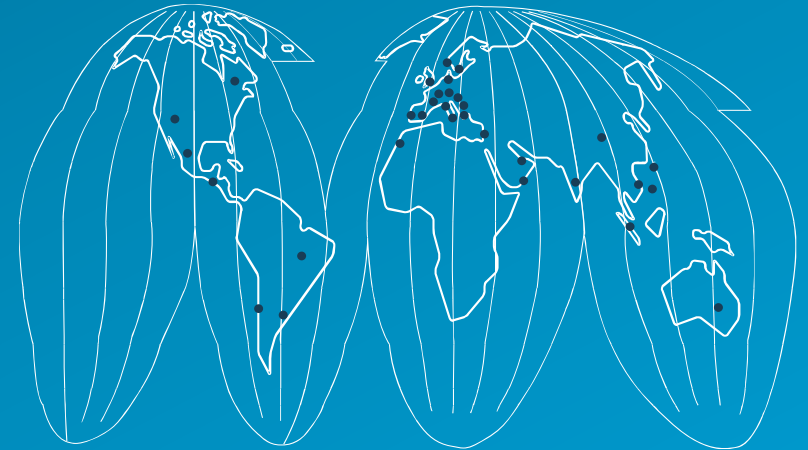
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➢ **Level 1**
- **Level 2**
  - **Level 3**
    - **Level 4**