Making your production data available for analysis and surveillance

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Experience the commitment®

CGI is a global end-to-end IT and business process services leader

High-end business and IT consulting

72,000 professionals, 85% shareholders *

10,000 clients across the globe

System integration, IT and business process outsourcing

400 offices, 40 countries around the world

Client satisfaction: 9.1/10

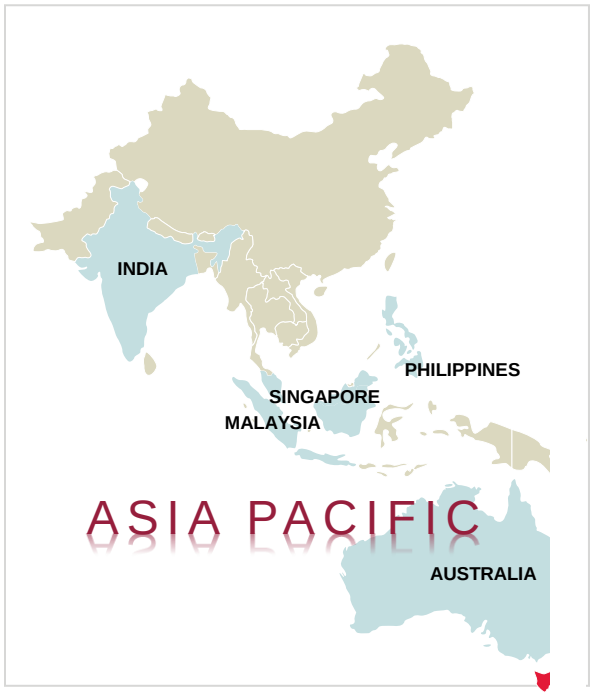
100+ mission-critical IP-based solutions

$10.4B annualized revenue

World's 5th largest independent IT and BPS firm

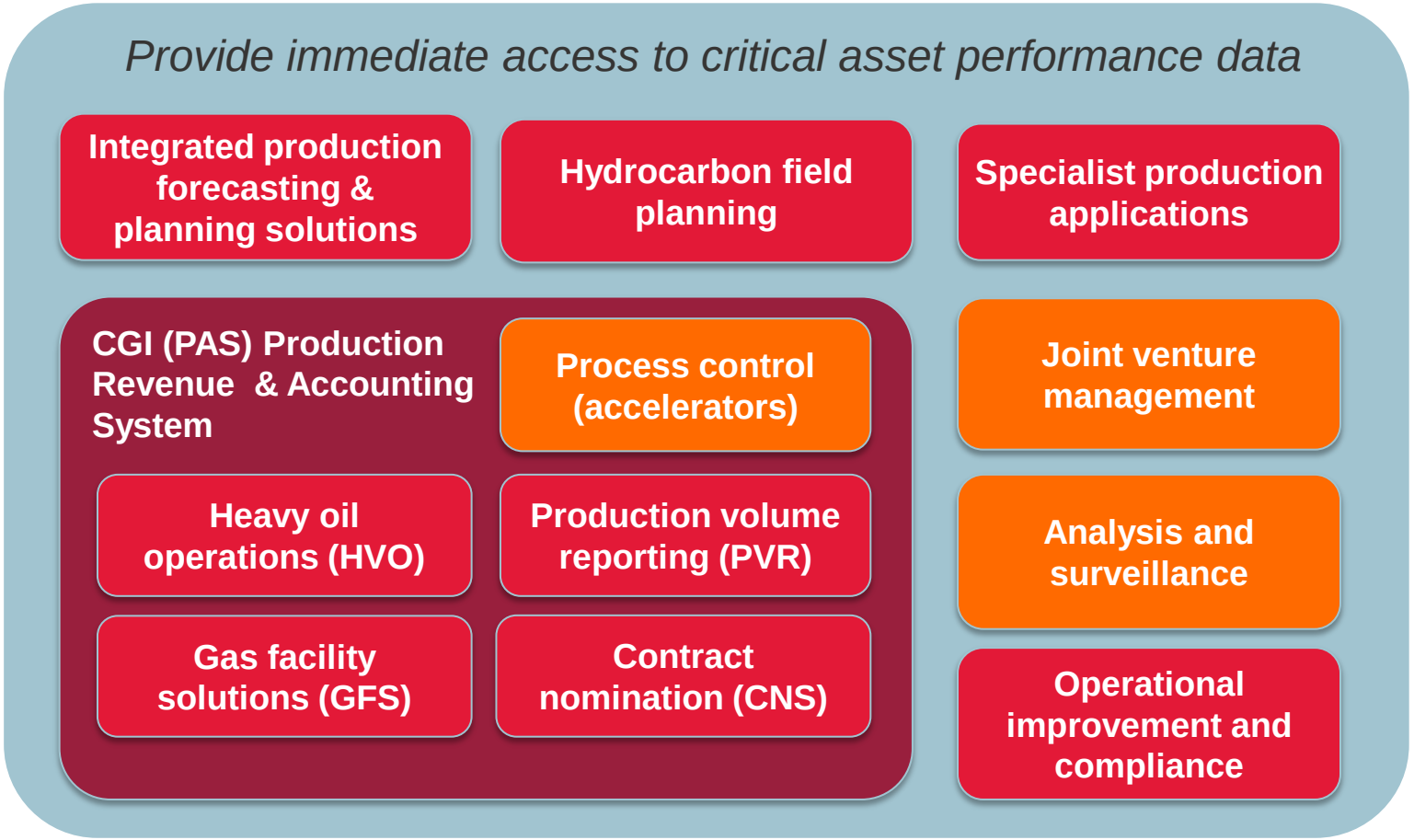
* Before Logica

A strong local presence around the world



With over 650 oil and gas clients worldwide.

Information Management for Production



Is your data available in a single searchable format? Can you use data to analyse production? Do you understand all of the associated outcomes, behaviours and commitments?

Making production data available for analysis and surveillance is an industry challenge..

The internet, network and communication solutions available today have revolutionised data availability:

- Huge volumes of data gathered from multiple distributed data sources,
- real-time data, near real-time data and static data are all required for different purposes
- Data is not all held in the same format (paper, microfiche, electronic), system, network, organisation or geography,
- New data types and formats are appearing all the time,
- It continues to be unclear which of these formats are or will be the most valuable to our industry over time,
- Information requirements continue to evolve as new patterns emerge that need to be addressed

Fundamentally Oil & Gas companies need to derive value from information to make Better, Faster and Smarter business decisions

Some CGI innovations…

1. Joint Venture Management: operators need to equip multiple functions and individual roles with production information and each of these requires different information sets derived from multiple data sources, ***it is an industry initiative***,
2. Field Data Management: manual spread-sheets or home-grown databases no longer fit the bill. Now ***field data capture and*** production volume reporting solutions are expected to access production data through the use of a data extraction layer eliminating direct calls to the back-end database, ***accelerating steam insight***
3. ***Refining data for analysis and surveillance***: CGI's Insight concept takes information from different sources - both structured and unstructured data, handles external available data sets, extracts information from real time systems, thus enabling the correlation of patterns in data.

1. “An Industry Initiative”

- A non profit administrative arrangement organised as a membership association constituted Nov. 2007 (legal entity)
- «Owned» by 38 operating companies represented on NCS, most of them global E&P players.
- Main objective is to deliver IT solutions for supporting common processes in JV management and Operator / Authorities communication / reporting.
- Approx. 80 companies use the services delivered by EPIM.
- EPIM currently have 7 common services included in its portfolio, with new services being added continuously
- EPIM is a good sample of an efficient approach towards managing common processes / solutions without compromising the competitive environment between the JV members

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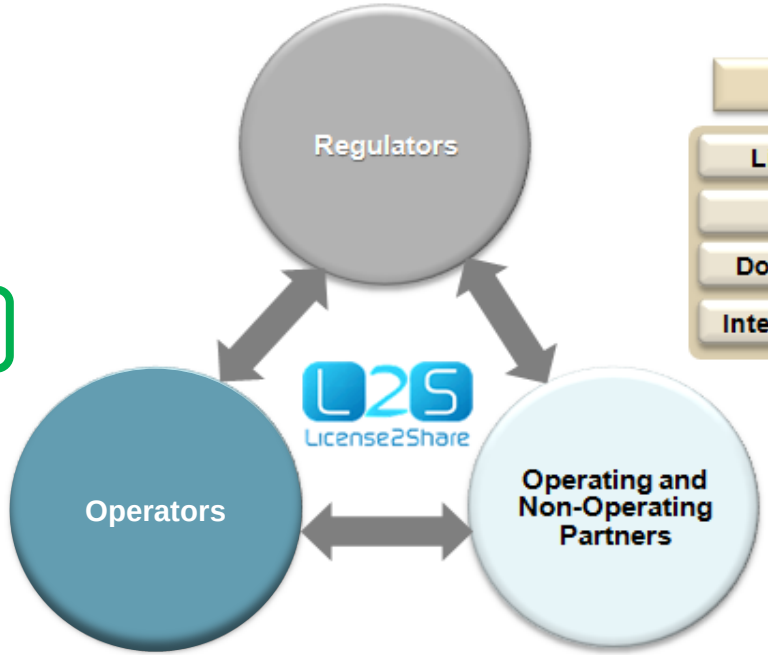
Delivering what is important to operators

Any type of information can be shared between two or more parties

- Contract data
- Production data
- Drilling data
- Incident data
- HSE data
- Other relevant governance data to manage compliance processes

JV participants decide level and types of information to be shared



Functionalities

- License Management
- Data Management
- Document Management
- Integrated Calendar/Email

- L2S features "Instant-On" availability and functionality
  - Ready to go from the moment JV is formed throughout asset lifecycle
  - Allows rapid farm-in and farm-out of partners
- Extensible platform
  - Configurable to your requirements and adaptable to changing needs
- L2S not limited to offshore or JVs
  - Onshore Shale Gas and Tight Oil as well as LNG are excellent candidates
  - Individual companies can also use it within their own ecosystems

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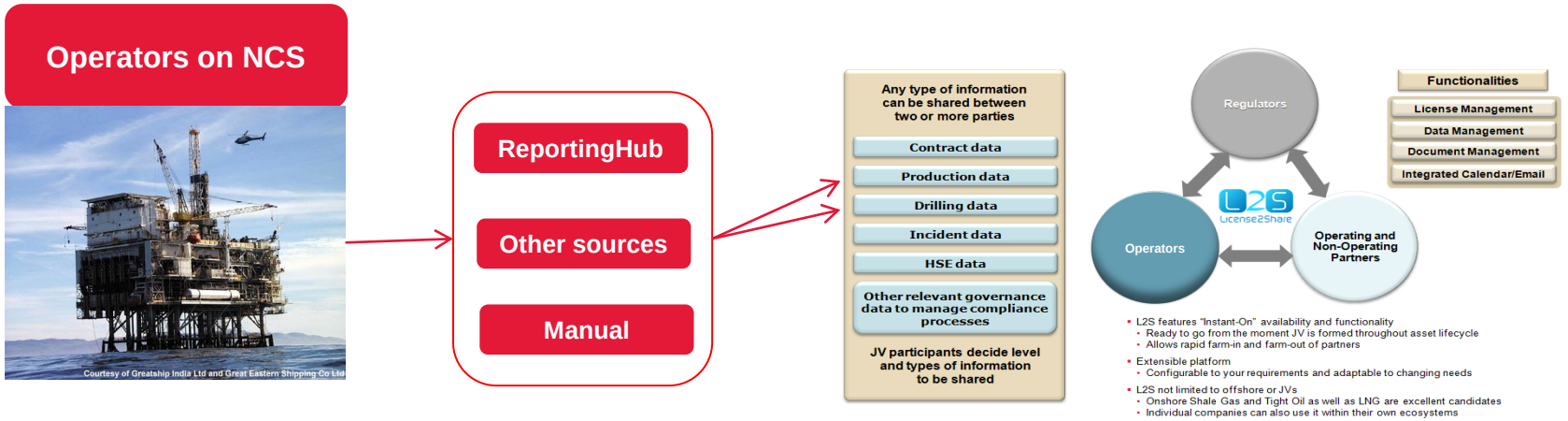
Production Data in License2Share



Content

- Daily Production Reports
- Daily Drilling Reports
- Monthly Production Reports

Advantages

- Archived during live cycle of Joint Venture (> 10 years), findability
- Secured reporting area for partners and authorities, audit trail
- Supports M&A, Divestments : DataRoom
- Manages governance around production reporting

Examples other Content

- Project Information
- Drawings
- HSE
- Financials
- Contracting

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2. Field data capture

EFFICIENCTLY COLLECT, COMPILE, REPORT AND STORE FIELD DATA

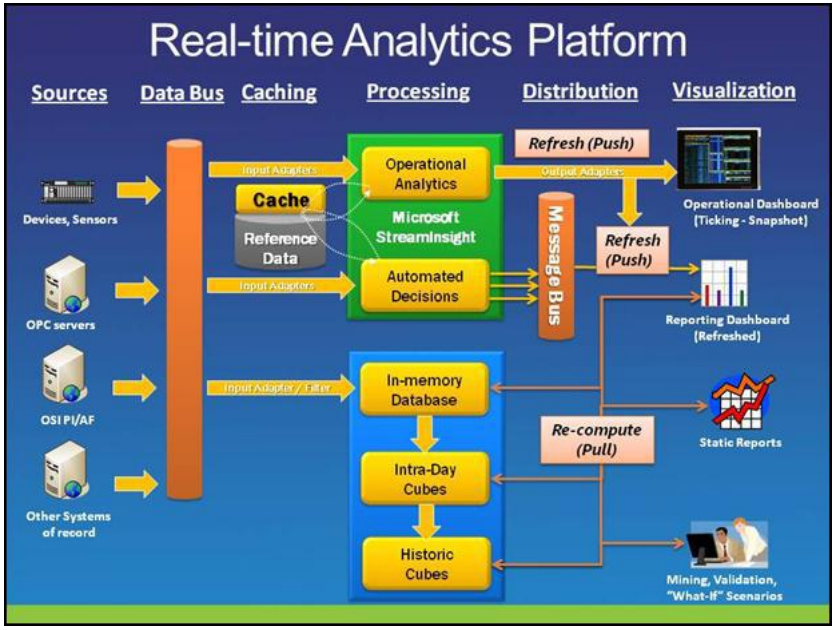
- Both ***field operators and office personnel need their own data sets*** in intuitive, comprehensive, easy-to-access and easy-to-use tools and processes.
- We recognise that it's about ***improving data transparency, data integration and data quality*** across the entire value chain for production. This means gathering data from many hundreds of wells, subsequent calculations and understanding the data
- Do you ***understand what your are measuring*** and why?

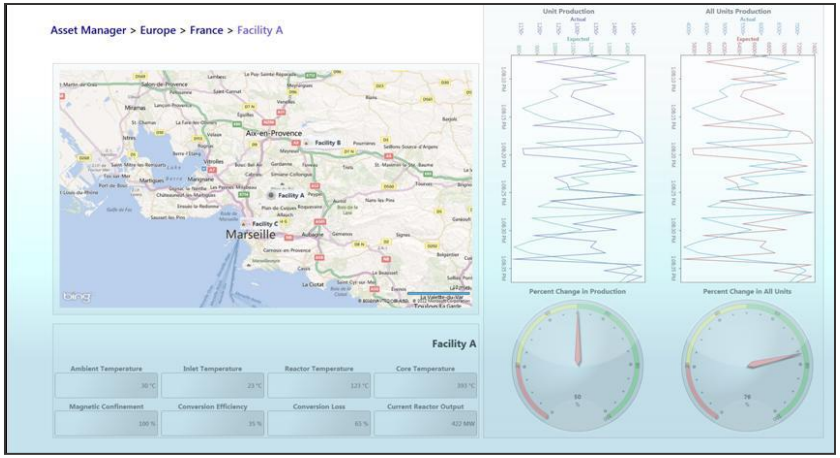
A strong alliance and eco-system:

CGI Accelerators

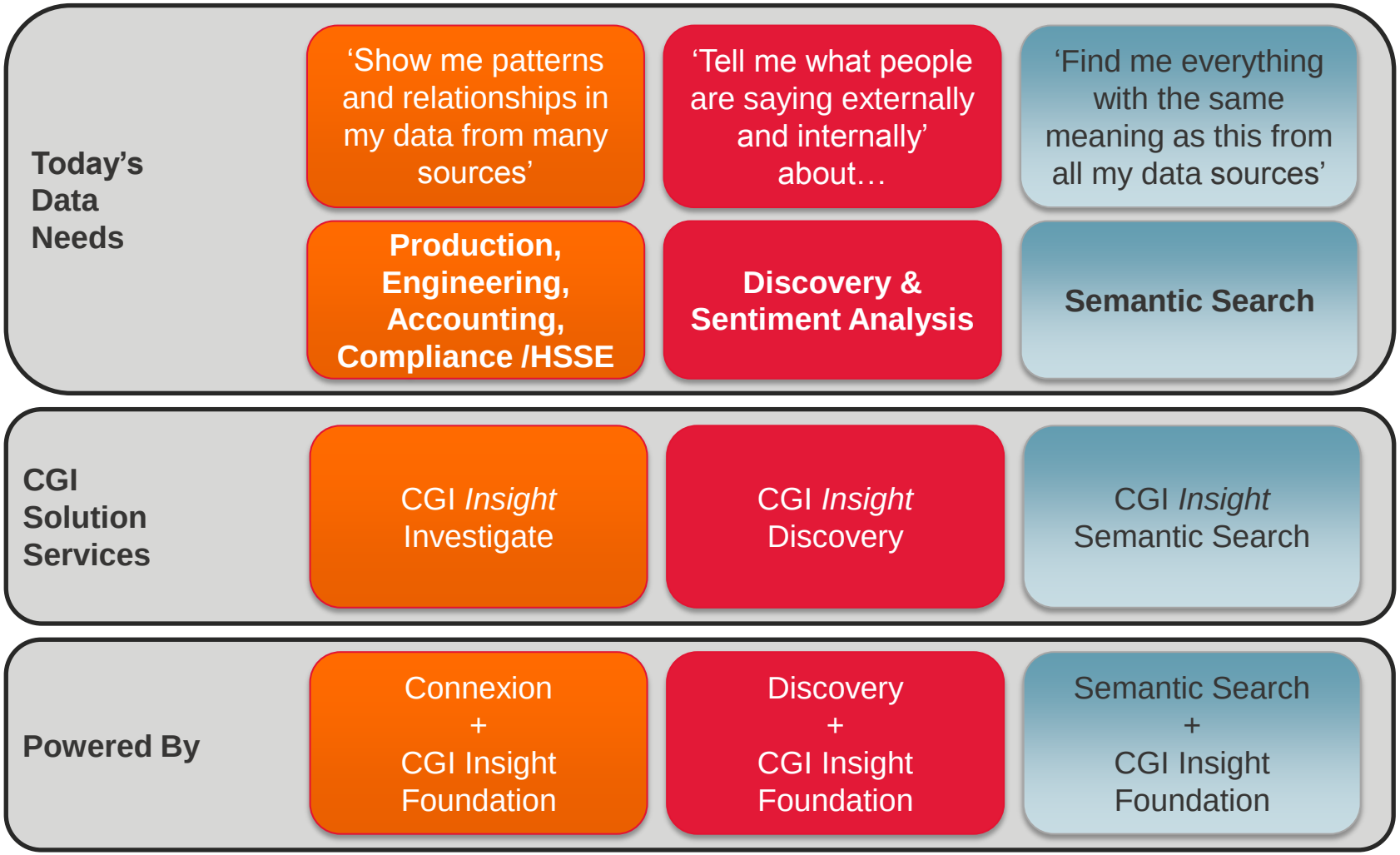
Monitoring software for manufacturing processes in the Process Control Domain:

- CGI designed ACCELERATORS that enhance MICRSOFT STREAMINSIGHT and help operators realise the benefits of Real-Time Business Intelligence (RTBI).
- It is an application framework with its own set of adapters and event driven architecture enabling highly efficient management regardless of data source, relationship or destination.
- Small yet powerful footprint allows placement in field as well as central locations





3. Refining data for analysis and surveillance



A suite of solutions for today's data challenges

What is CGI Insight Foundation?

"A flexible, extensible system for the aggregation of disparate data sources, into a singular searchable or discoverable format.

Data Harvesting

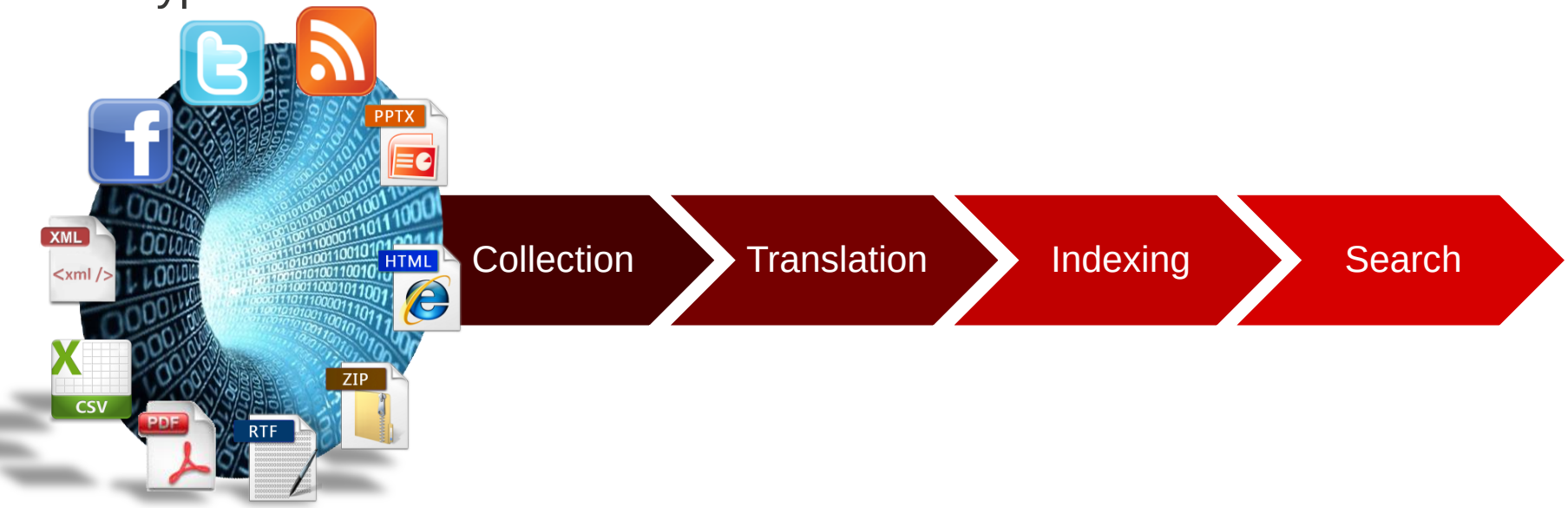
- Comprising a powerful and flexible toolset
- Scalable and customizable

A tool for dealing with large, complex data

- Acquiring **massively different** raw data sets
- Normalising data **without loss of accuracy or detail**
- Fast, efficient & fielded **searching**
- **Retains detail even if original is subsequently deleted**
- **Low impact data spidering –** addressing 'Denial Of Service issues

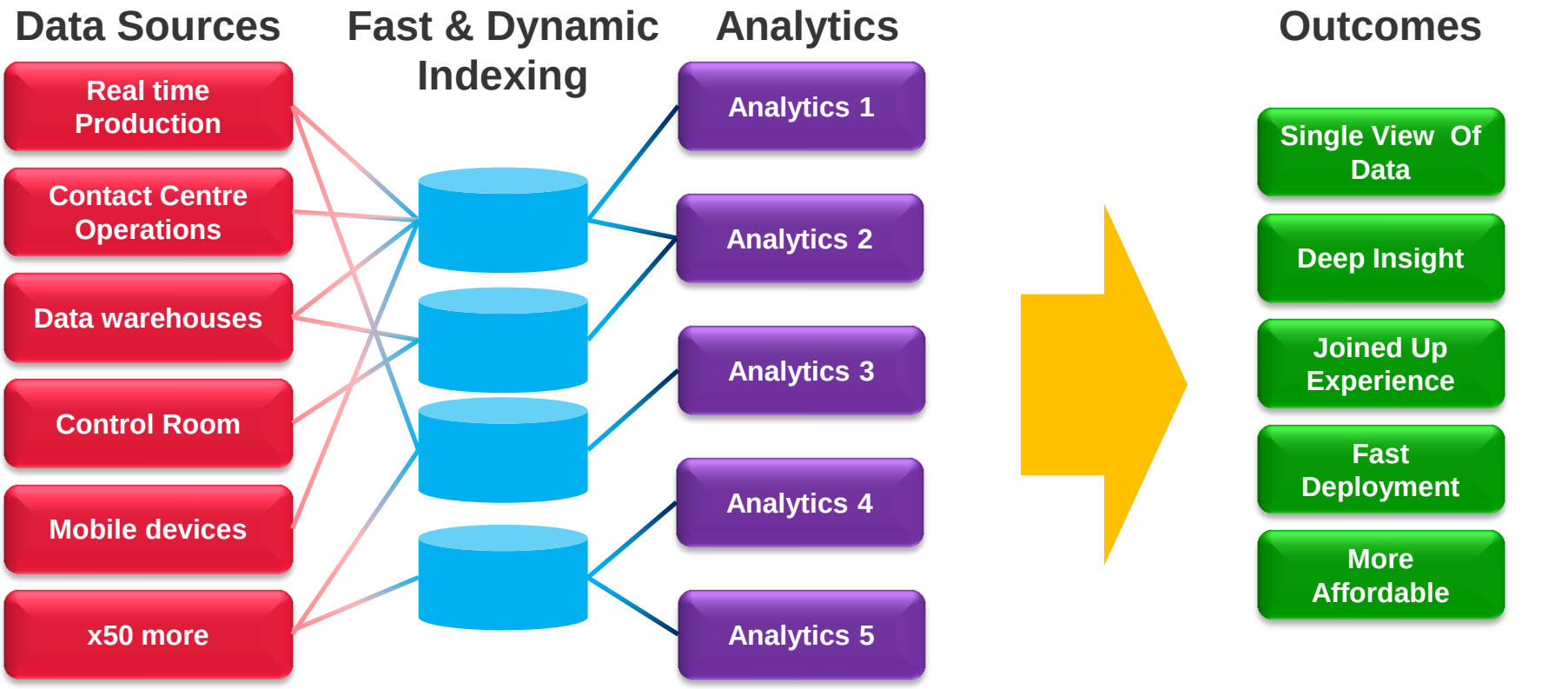
CGI Insight Foundation Overview

- **Insight's** collectors are directed at data sources, passing captured data to a series of **translators** for the processing of specific data types



- Translators create **indexable** data items that retain **key information** within the data, respective to data type
- Output is in a **single searchable or discoverable format**

CGI Insight allows dynamic data aggregation



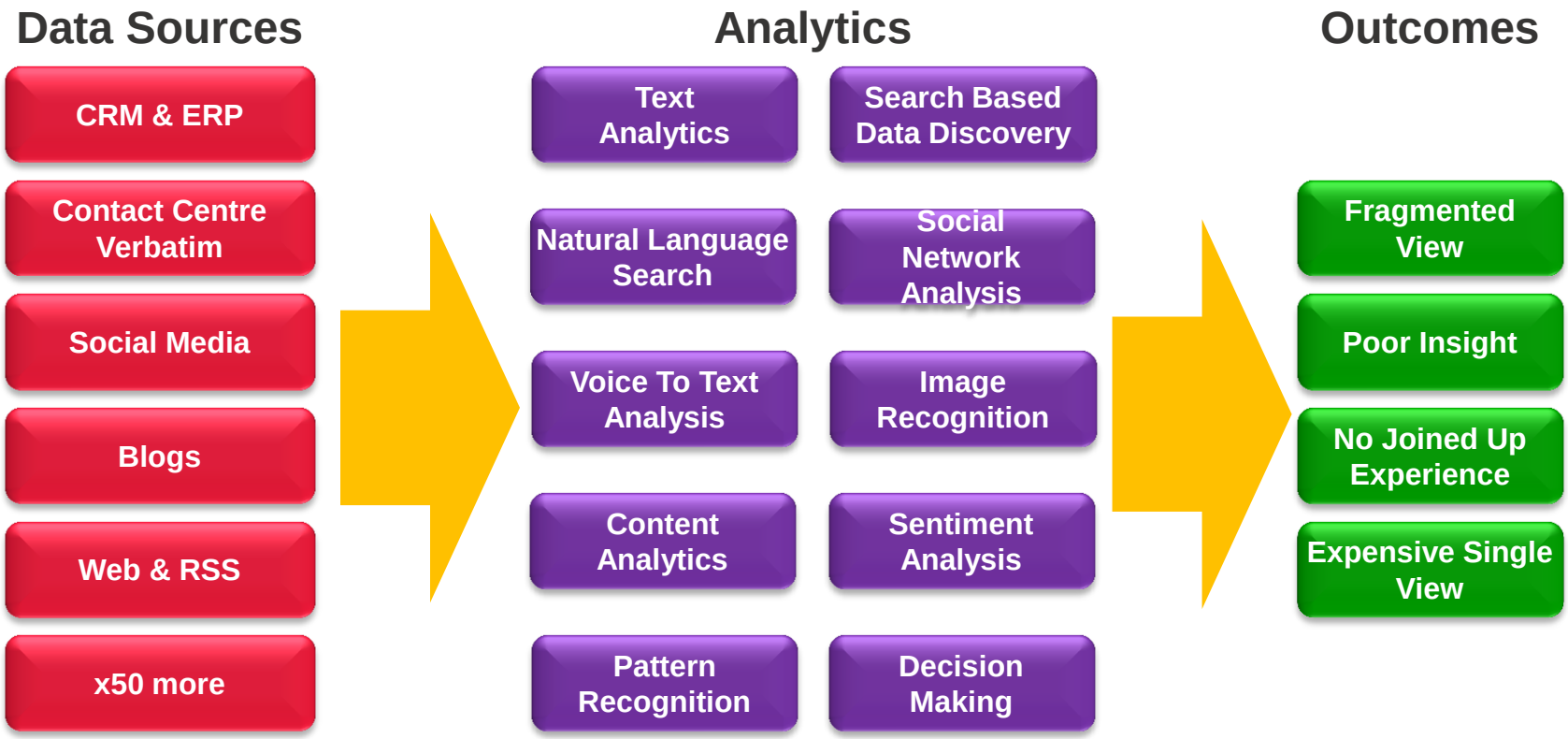
Leave Data In Its Original Location

Dynamically Index Data

Connect Multiple Tools To Same Index

Faster & more Affordable Than Data Warehousing

Why ‘Warehouse’ When Data Is Dynamic



Data Sources & Formats Are Constantly Changing

Analytics Tools Are Constantly Evolving & Everyone Wants Their Favourite

Difficult To Keep Pace With Business Needs

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Fundamentally Oil & Gas companies need to derive value from information to make Better, Faster and Smarter business decisions

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Thank you

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