# Bord Na Móna

# Implementing Shared Services and Business Intelligence at Bord na Mona 2013-2017

*David Fox*
*Former CIO Bord na Móna*
*11th October 2017*

# Who is Bord na Móna? - Statistics

## On an annual basis Bord na Móna:

- Harvests and sells 4 million tonnes of peat;
- Blends, bags and distributes 1.6 million cubic metres of growing media;
- Manufactures and sells 210,000 tonnes of briquettes;
- Generates and sells 800,000 MW hours of electricity;
- Collects, treats and disposes of 625,000 tonnes of waste;
- Imports, blends, bags and sells 220,000 tonnes of coal;
- Purchases and co-fires 180,000 tonnes of biomass.

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# Shared Service Project Objective 2013

- Create an effective Finance operating model to support BNM to achieve strategic objectives by:
  - Standardisation, Simplification & Automation of following processes:
    - Inventory Management
    - Procure to Pay
    - Order to Cash
    - Record to Report
    - Purchasing
    - Reporting
  - Facilitate cost reduction
  - Increase quality of service
  - Improved financial controls and risk avoidance
  - Increased efficiency of Finance operations
  - Migrating to Oracle Standardisation

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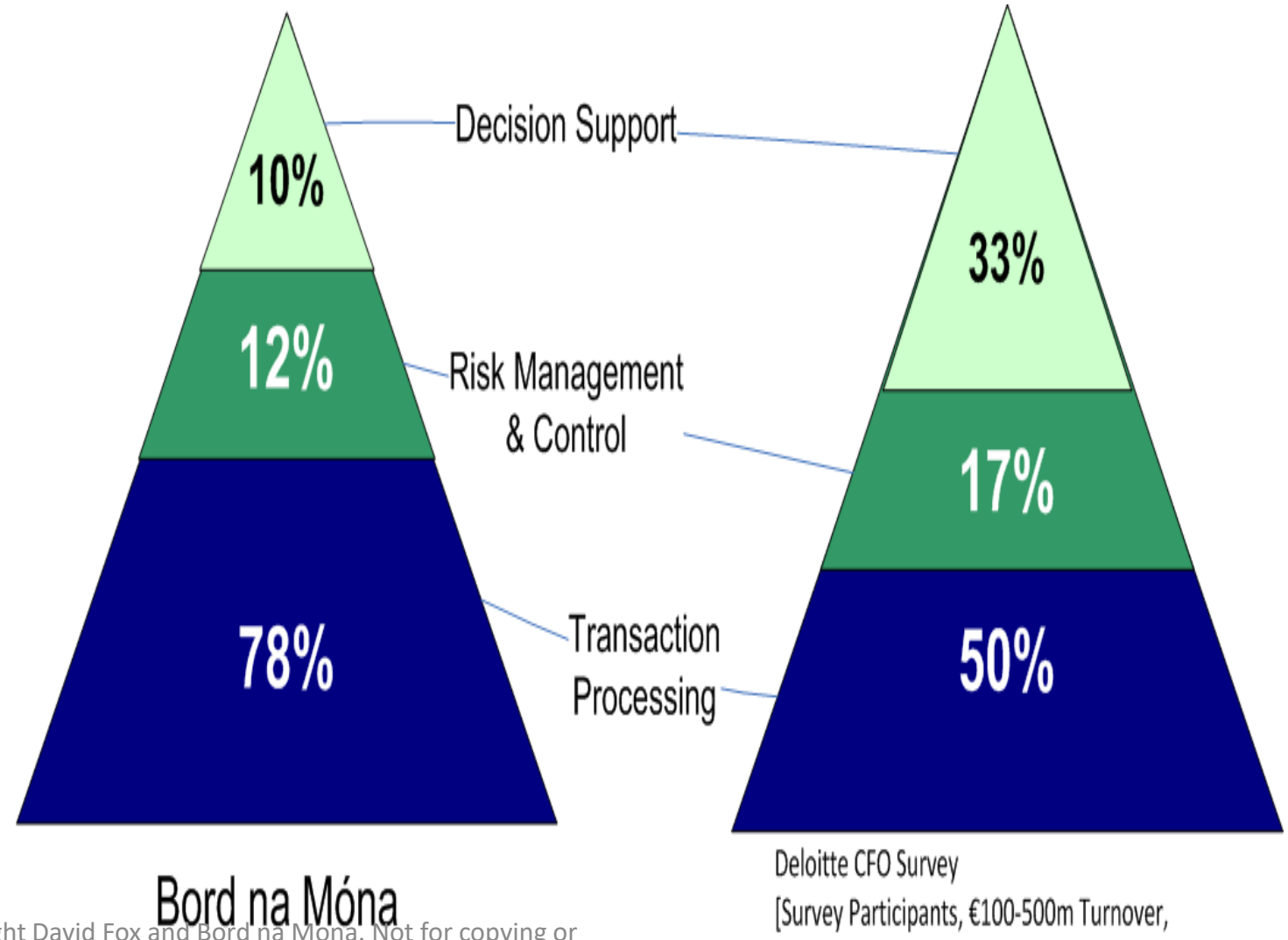
# Shared Service Project Objective 2013

## Achieved via 3 key streams:

1. **Organisation Change** – new Shared Service Centre & Finance Business Partner model

2. **Business Process Engineering** – standardised, simplified processes & reporting, maximising use of automation

3. **Information Technology** – Implement Oracle R12 EBS solution & BI tools

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# Finance Shared Services – Business Case Benefits

## Increased Efficiency

- Optimised processes
- Economies of scale
- Greater span of control
- Leverage IT investment
- Standardisation
- Process re-engineering
- Integrated procurement
- Acquisition synergies

## Increased Effectiveness

- Enhanced Customer Service from:
  - Front office mind set
  - Service level agreements & service costing
- Make the most from specialist skills
- Management more free to focus on business issues
- Improved decision support
- Easier to do data warehousing
- Improved control environment

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# FSS Functional Scope

## Local

**Procure to Pay**
- Submission (& approval) of Expenses
- Receive and Scan Mail (where received locally)
- Initiate Purchase Requisition
- Local Purchasing (P-Cards)
- Goods Receipting

**Order to Cash**
- Order Management (Point of Sales 'POS')
- Billing (including POS)
- Credit Management\ Cash Collection (POS)
- Accounts Receivable (POS)

**Record to Report**
- Request Chart of Accounts Changes
- Review Journal Entries
- Non-recurring/manual accruals
- Non rules based bad debt provisions, etc.
- Costing \ Project Accounting
- Budgeting, Forecasting (incl. cash flow and FX forecasting) & Business Planning
- Inventory (excl. sub-ledger recon. to GL)
- Review and analysis of Management Accounts
- Liaison with Business Unit Management

## *SHARED PROCESSES*

**Procure to Pay**
- Resolve Supplier Queries

**Order to Cash**
- Customer Set Up & Maintenance
- Resolve Customer Queries
- Sales Order Admin (EDI, POS, Manual)
- Cash Collection (excl. POS)

**Record to Report**
- Budget preparation & processing
- Fixed Assets (revaluation & closing projects)
- Treasury (Group)

## Finance Shared Services

**Procure to Pay**
- Processing & Audit of Expenses
- Receive and Scan Mail (where received in FSS)
- Supplier Master Data Management
- Centralised Purchasing
- Process AP Invoices (Including EDI)

**Order to Cash**
- AR Invoicing & Credit Management (excl. POS)
- Cash Receipts & Applications
- AR Collections
- Manage AR Period Close

**Record to Report**
- Manage AR Master Data & Open/Close Periods
- Create Standard Journal Entries
- Rules Based Provisions etc., & Sub Ledger Recs
- Fixed Assets (excl. Revals & Closing Projects)
- Bank and Petty Cash Recs
- Perform Allocations
- Inventory Accounting*
- Intercompany
- Perform Close & Consolidation
- Preparation of Management Accounts
- Tax Compliance
- Financial Reporting
- Audit & Compliance

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# FSS Organisational Scope

- In 2013 there were 28 active legal entities in BNM. Of these 23 were in scope for FSS including international operations.
- FSS is viewed as an enabler for these and other acquisition and merger initiatives.

- **Group**
  - Bord Na Móna Plc
  - Bord Na Móna Property Ltd
  - Bord Na Móna Treasury
- **Anua**
  - Bord Na Móna Environmental Ltd
  - Bord Na Móna USA Inc.*
  - Bord Na Móna Environment Products US Inc.*
  - Bord Na Móna Environment UK Ltd*
- **Feedstock**
  - Bord Na Móna Allen Peat Ltd
  - Bord Na Móna Energy Ltd
- **Retail**
  - Bord Na Móna Fuels Ltd
  - Bord Na Móna UK Ltd*
  - BNM Fuels Ltd
  - Bord Na Móna Horticulture Ltd
- **Resource Recovery**
  - Bord Na Móna Resource Recovery
  - Advanced Environmental Solutions (Ireland) Ltd
- **Powergen**
  - Edenderry Power Ltd
  - Edenderry Operations Ltd
  - Bord Na Móna Windfarm One Ltd
  - Renewable Energy Ireland Limited (JV)
  - Cushaling Power Ltd
  - Oweninny Power Ltd (JV)
  - Bruckana Wind Farm Ltd and Supply Company Ltd
  - Mount Lucas Wind Farm Ltd and Supply Company Ltd
- **Companies Not in Scope**
  - Derryarkin Sand & Gravel
  - Bord Na Móna ESOP Trustee Ltd
  - Bord Na Móna Trustee Co. Ltd
  - Suttons Oil
  - Suttons Oil Ltd
  - All non-trading or legal entities that are in liquidation

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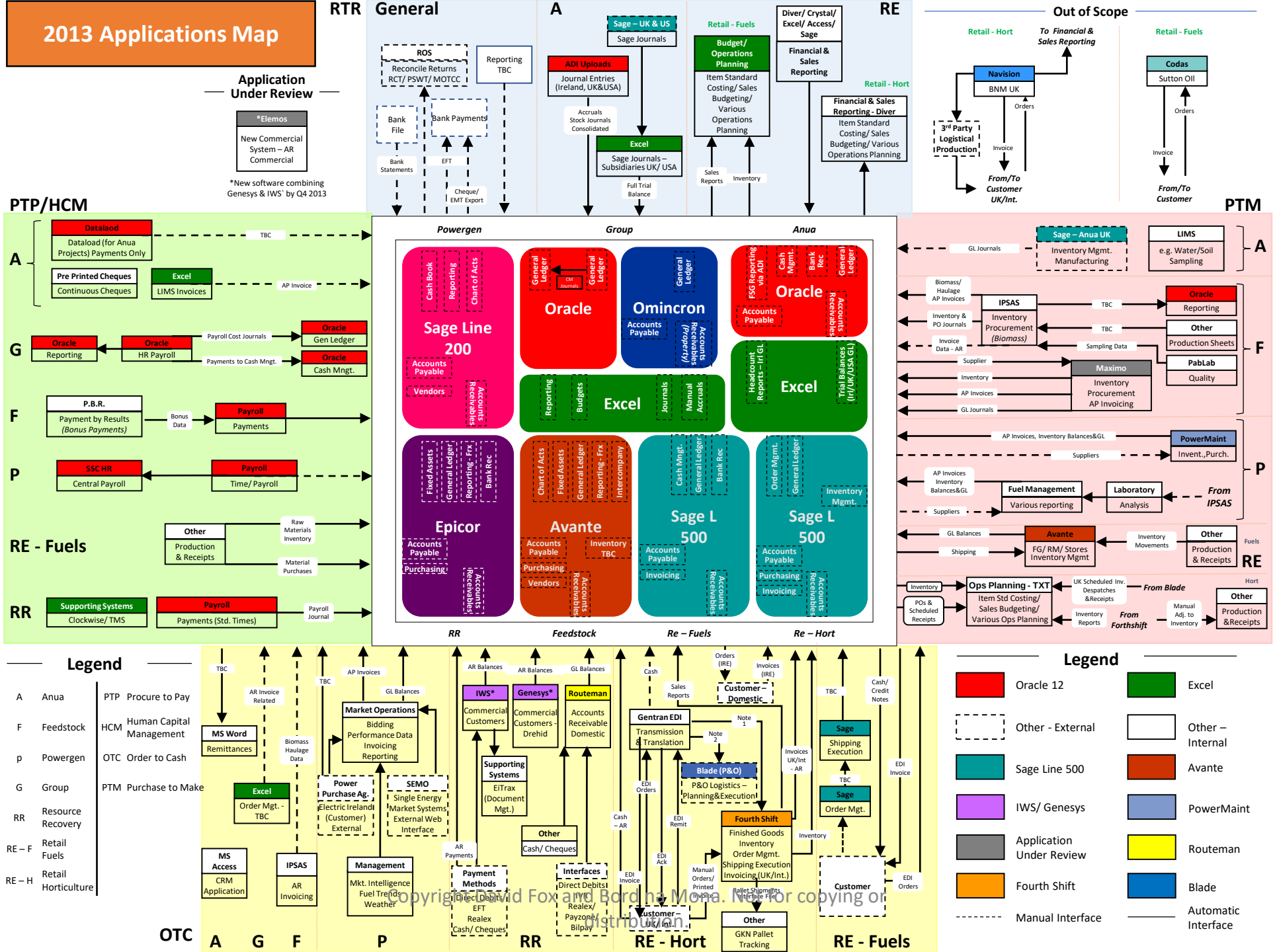
# 2013 Applications Map

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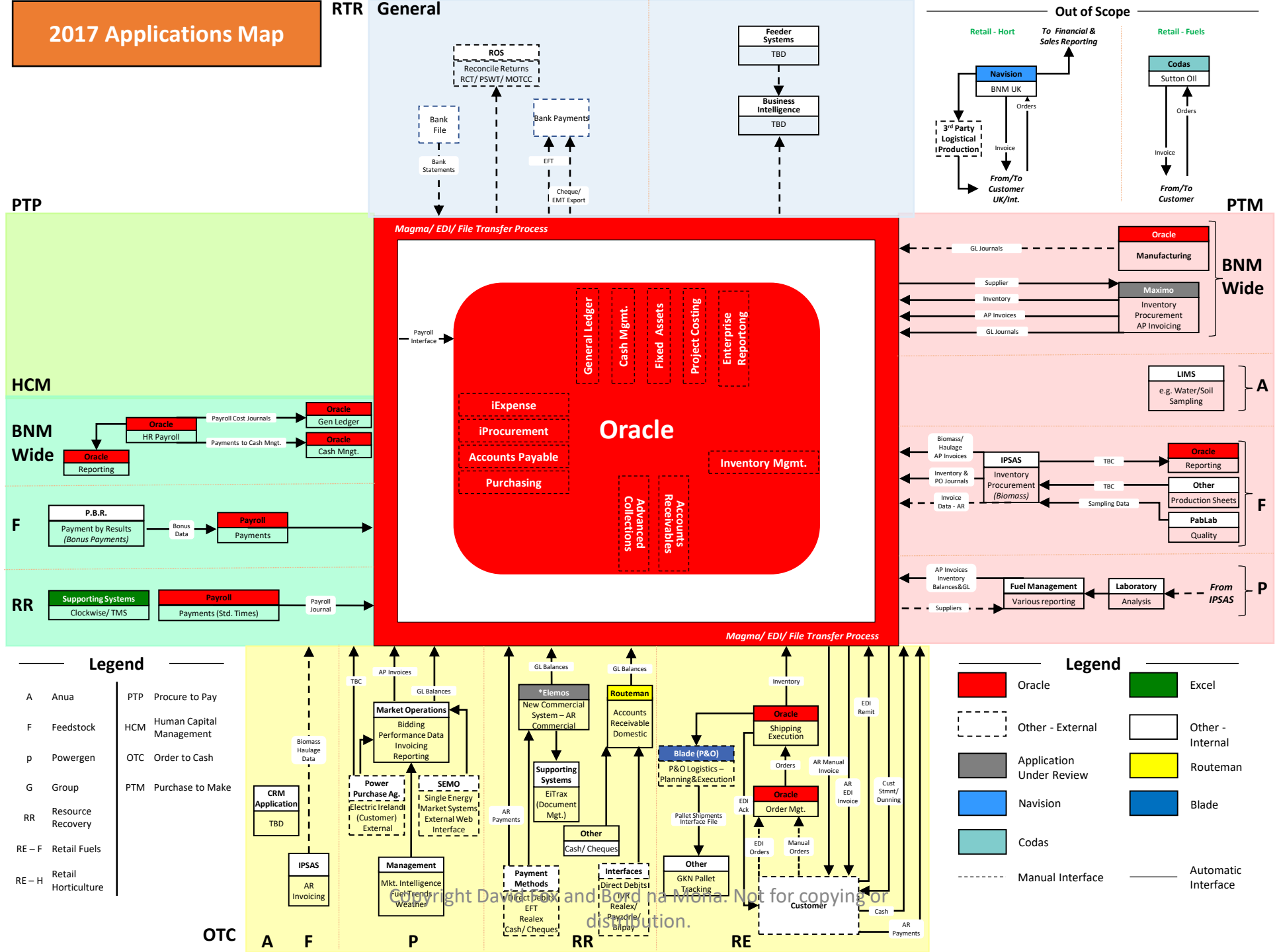
# 2017 Applications Map

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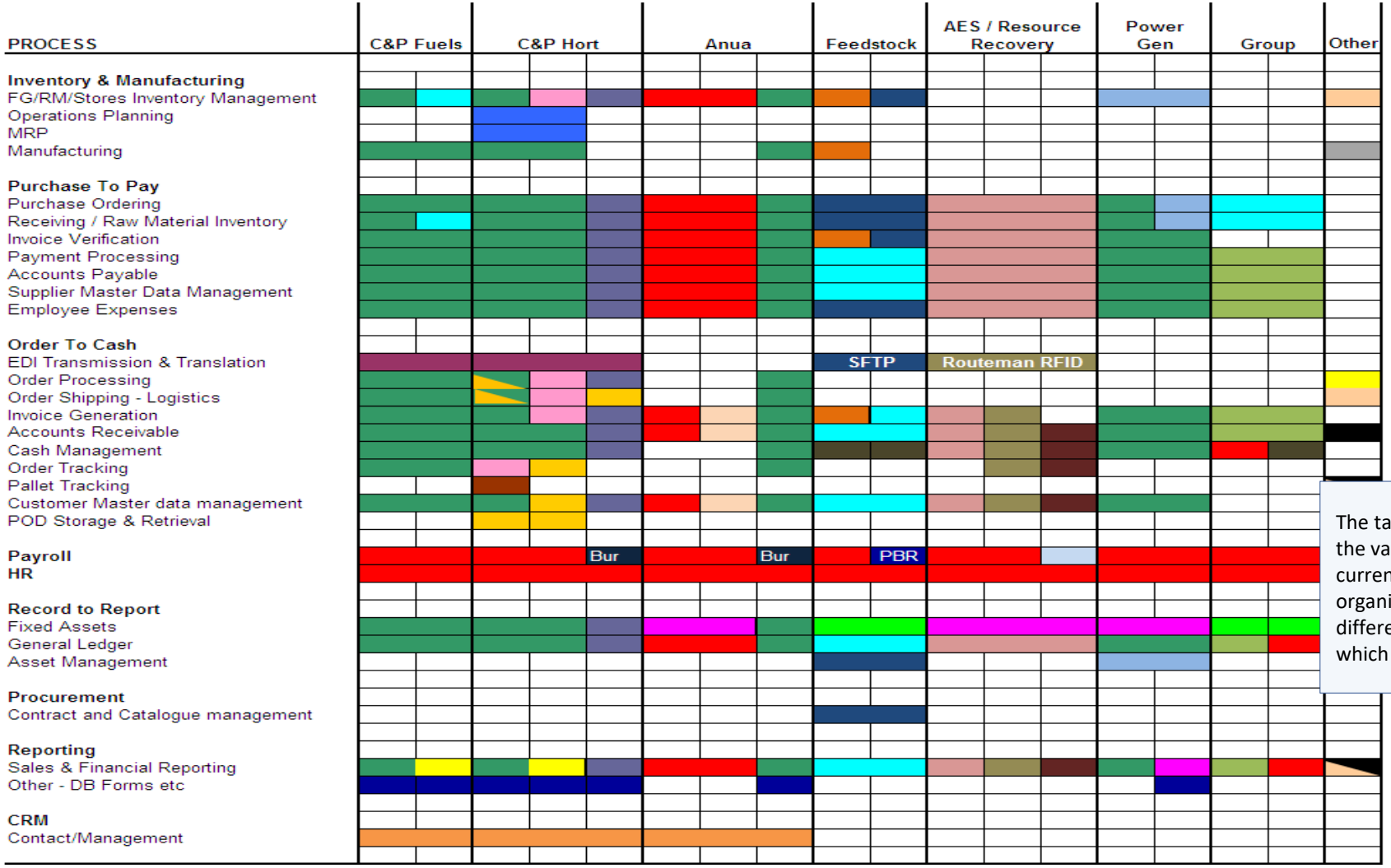
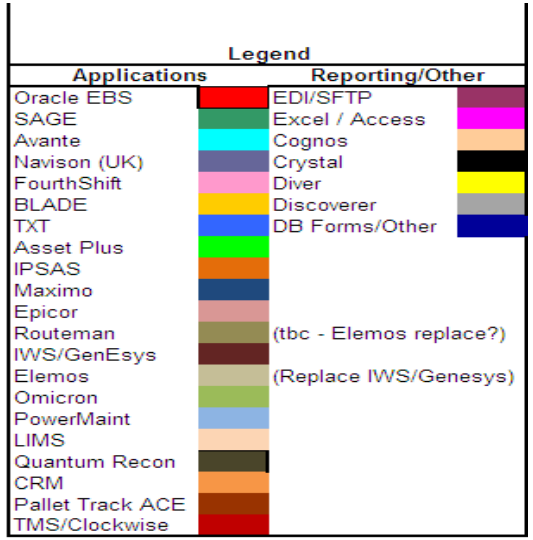
# Applications Footprint 2013




The table to the left depicts the various IT applications currently in use across the organisation, outlining the different business units in which they are used.

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# Applications Footprint May 2017

| PROCESS | Fuels | Horticulture | (UK) | (WM) | Biomass | Feedstock | AES / Resource Recovery | Power Gen | Group | Other |
|---|---|---|---|---|---|---|---|---|---|---|
| **Inventory & Manufacturing** | | | | | | | | | | |
| FG/RM/Stores Inventory Management | O | O | NAVIS | SAGE | O | MAX | | PowerM | | OBIEE/BI |
| Operations Planning | | TXT | | | | | | | | |
| MRP | | TXT | | | | | | | | |
| Manufacturing | O | O | NAVIS | | IPSAS | IPSAS | | | | DISC |
| **Purchase To Pay** | | | | | | | | | | |
| Purchase Ordering | O | O | NAVIS | SAGE | O | O | O | O | O | OBIEE/BI |
| Receiving / Raw Material Inventory | O | O | NAVIS | SAGE | O | O | O | O | O | OBIEE/BI |
| Invoice Verification | O | O | NAVIS | SAGE | O | O | O | O | O | OBIEE/BI |
| Payment Processing | O | O | NAVIS | SAGE | O | O | O | O | O | OBIEE/BI |
| Accounts Payable | O | O | NAVIS | SAGE | O | O | O | O | O | OBIEE/BI |
| Supplier Master Data Management | O | O | NAVIS | SAGE | | O | O | O | O | OBIEE/BI |
| Employee Expenses | O | O | NAVIS | SAGE | | O | O | O | O | OBIEE/BI |
| **Order To Cash** | | | | | | | | | | |
| EDI Transmission & Translation | O/Gentran | O/Gentran | | EDI | | MAX | O/Gentran | | | |
| Order Processing | O | O | NAVIS | SAGE | O | | | | | |
| Order Shipping - Logistics | O | O | O | WEB | O | | | | | |
| Invoice Generation | O | O | NAVIS | SAGE | O | O | O ELEM ROUTE | O | O LIMS | OBIEE/BI |
| Accounts Receivable | O | O | NAVIS | SAGE | O | O | O ROUTE | O | O LIMS | OBIEE/BI |
| Cash Management | O | O | NAVIS | SAGE | O | O | O ROUTE | O | O | OBIEE/BI |
| Order Tracking | O | O | O | WEB | | | | | | |
| Pallet Tracking | | PALLET | | | | | | | | |
| Customer Master data management | O | O | O | | O | O | O ELEM ROUTE | O | | OBIEE/BI |
| POD Storage & Retrieval | | O | | | | | | | | |
| **Payroll** | O | O | Bur | SAGE | O | O | O TMS | O | O TMS | OBIEE/BI |
| **HR** | O | O | | | O | O | O | O | O | OBIEE/BI |
| **Record to Report** | | | | | | | | | | |
| Fixed Assets | O | O | O | SAGE | O | O | O | O | O | OBIEE/BI |
| General Ledger | O | O | O | SAGE | O | O | O | O | O | OBIEE/BI |
| Asset Management | | | | | | MAX | Asset Minder | PowerM | | |
| Operational Reports | | | | | | | | Automsoft | | |
| **Procurement** | | | | | | | | | | |
| Contract and Catalogue management | O | O | | SAGE | O | O | O | O | O | OBIEE/BI |
| **Reporting** | | | | | | | | | | |
| Sales & Financial Reporting | O | O | NAVIS | SAGE | O | O | O ELEM | O | O | OBIEE |
| Other - DB Forms etc | O | O | | SAGE | | | | | | |
| **CRM** | | | | | | | | | | |
| Contact/Management | | | | | | | | | | |

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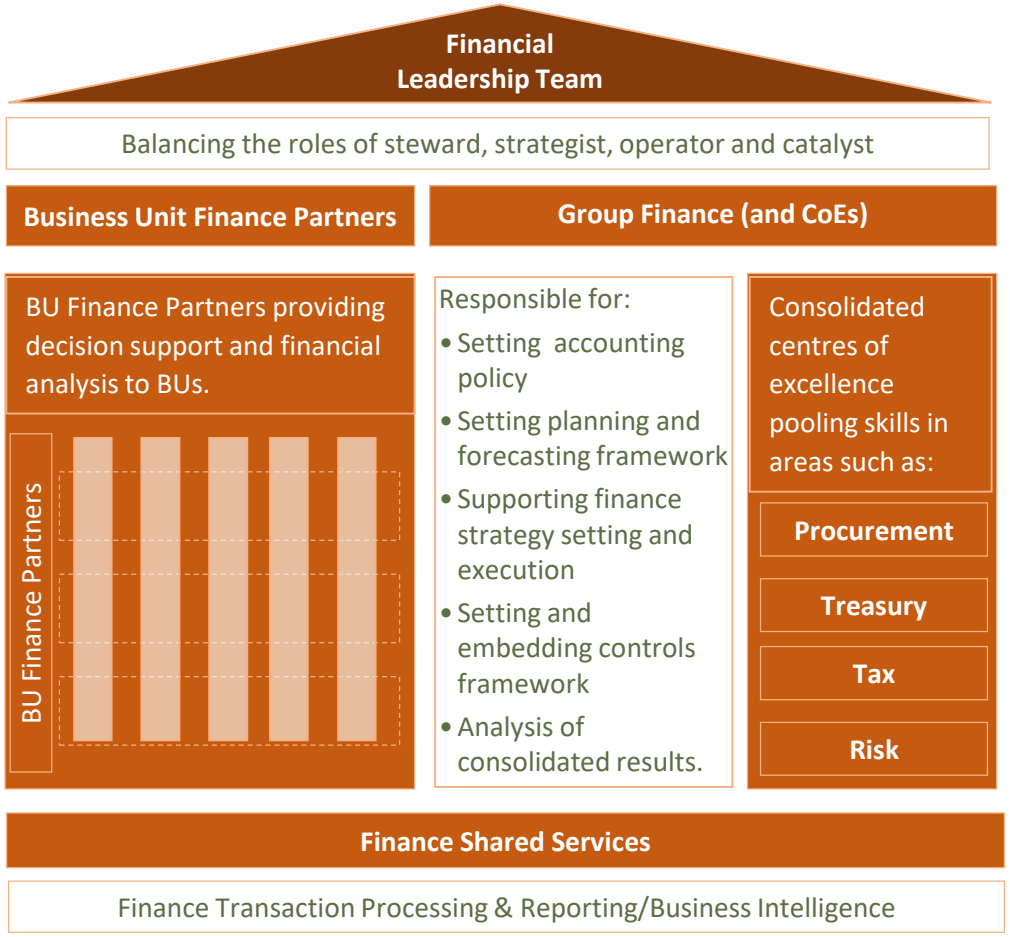
# Future Finance Operating Model




## Finance Model

- Focus on developing Finance function with functional expertise
- Positions Finance at the heart of business with flexibility to meet evolving needs
- Business Partners valued as trusted advisors to the business for their knowledge and ability to provided targeted analysis
- Specialist technical teams recognised for their deep skills
- Transaction Processing providing efficient processes standardised with strong controls

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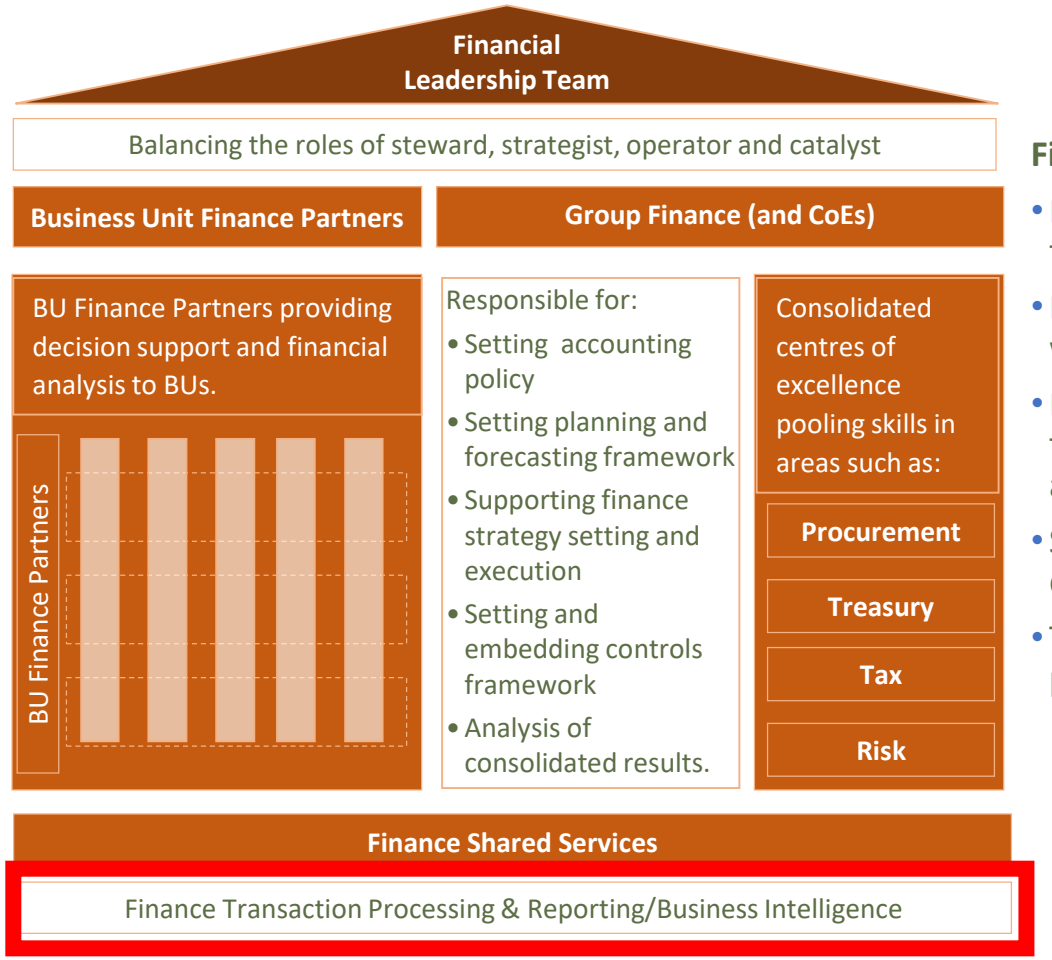
# Future Finance Operating Model

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# Application/ Design Principles

## Generic – All Process Areas

- Oracle 'Out of the Box' is the basis for Process Design
- Oracle eBS is primary system for **all** Finance related Process areas and will integrate with a small number of operational support systems in downstream BUs
- Designed Processes and Policies to be Standardised, Simplified and Automated across BnM
- Controls and Security to be built within Process and System Design
- Duplication of Finance Activity within/ across Process and Business Units to be eliminated with data entry occurring only once
- Single Chart of Accounts
- Workflow Approval/ Resolution Process maximised
- Maximise use of electronic communication methods
- Standard reporting for all process areas

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# Application/ Design Principles

## Record to Report

- Single Chart of Accounts aligned with Reporting requirements
- Integrated Single Month End Timetable across the business
- Day 5 Month End Close, including Consolidation & Reporting
- Standard Management Report Pack
- Automated sub ledger, Bank & GL reconciliations
- Maximise system automated journal entries (auto reversing, recurring)
- Automate management allocations
- Automate intercompany end to end processes
- One integrated Fixed Asset process across the company

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# Application/ Design Principles

## Reporting

- One Business Intelligence (BI) tool  to be used – enables consistent performance measurement and metrics usage across the Group
- Common Data Architecture  & Governance within/ across systems to facilitate reporting accuracy
- Right information, at right level of detail, at right time
- KPI's, Dashboards & Reports to be clean and simple to ensure underlying message conveyed
- Dynamic reporting to meet end use analytical needs
- Eliminate reliance on Excel for critical reports

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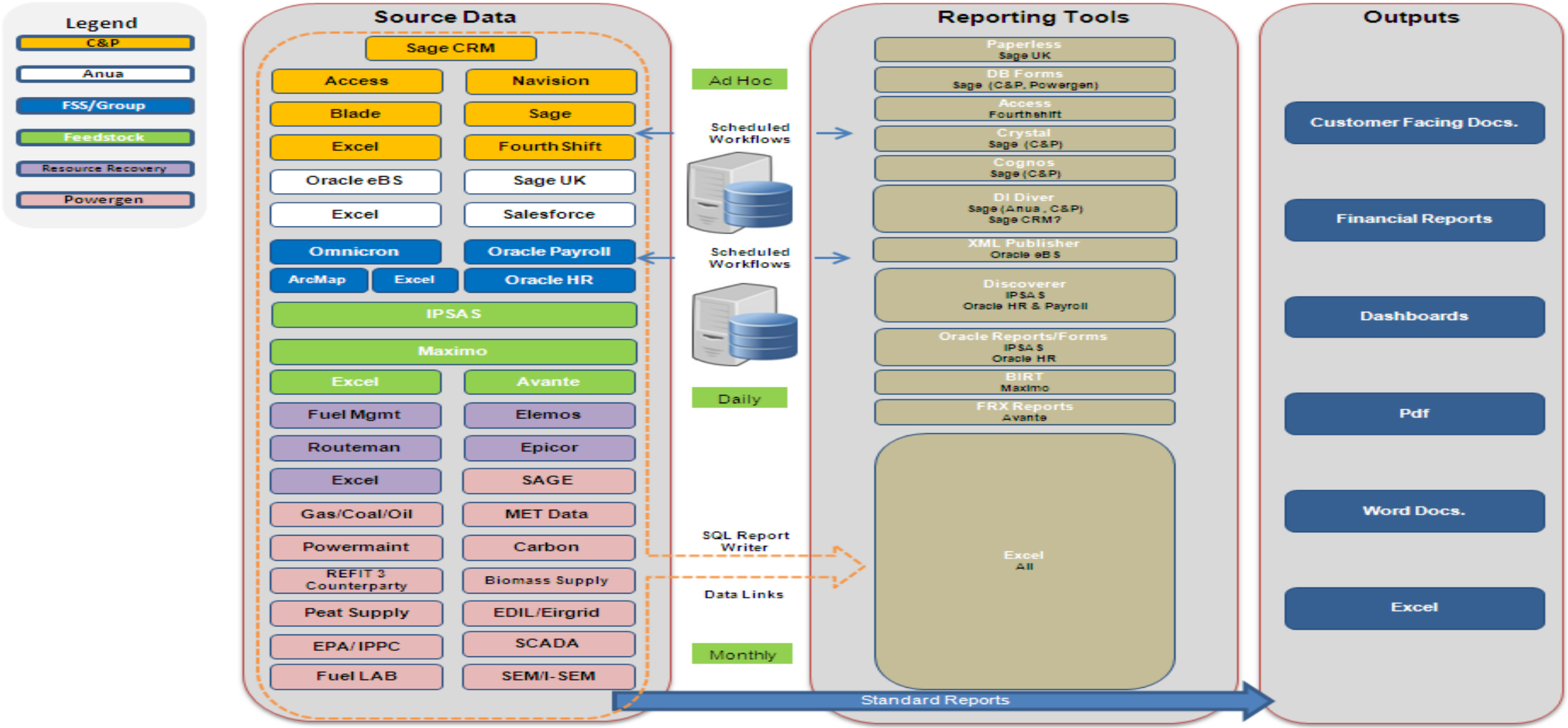
# Reporting ‘Architecture’ 2013

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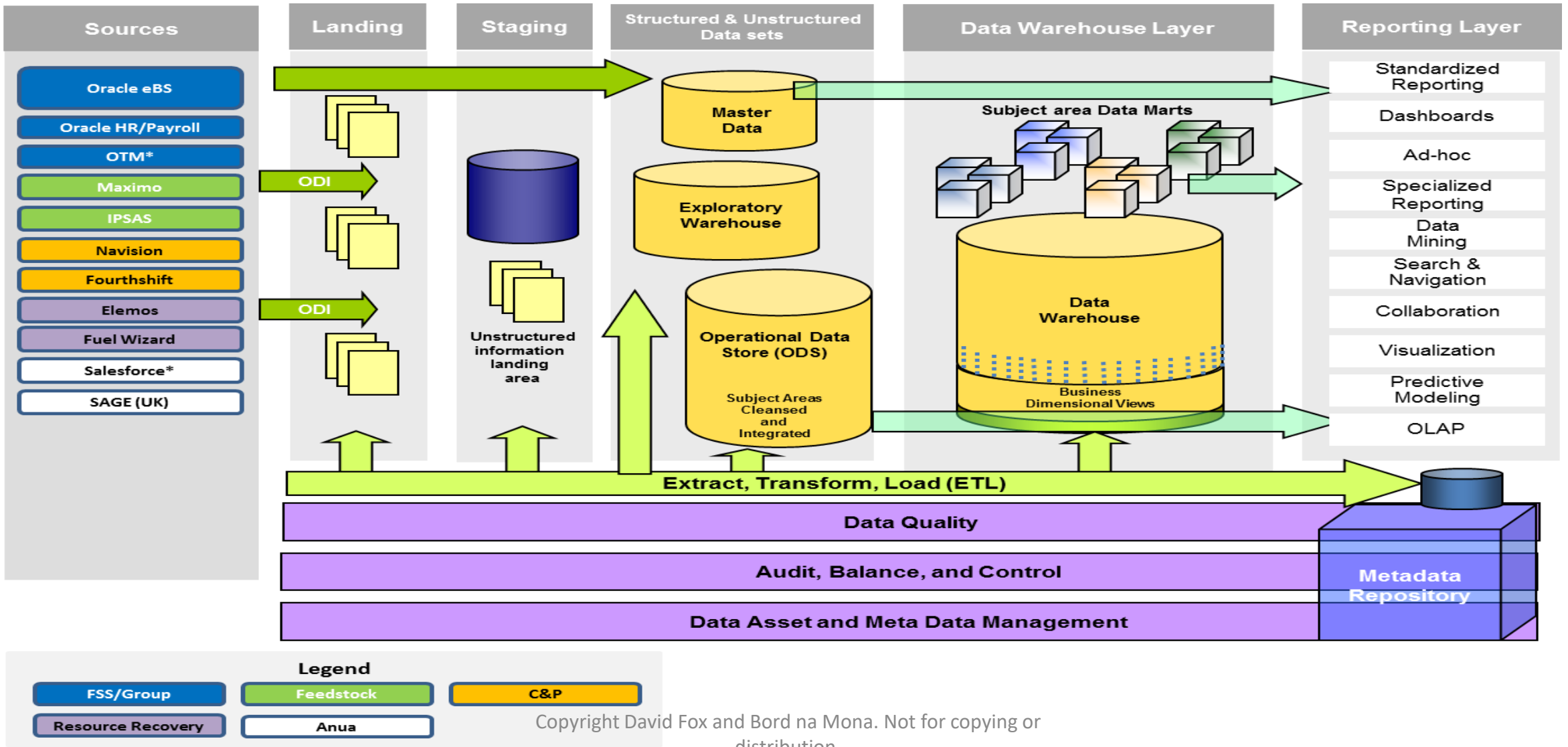
# Conceptual Target Reporting Architecture

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# Business Intelligence Competency Centre

- To avoid duplication of effort and to reinforce the concept of ‘one version of the truth’ a centralised BICC was established.
- This was also necessary as (it was realised that) ongoing deep understanding of the data and data structures and the BI tools would be required
- Key Activities:
  - Develop and maintain BnM reports catalogue available to all BUs
  - Support Finance Business Partners in developing adhoc reports
  - Support BUs to achieve self service reporting
  - Develop BI system, reporting dashboards and align with BnM strategy
  - Support BUs with annual and 5 year plans

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# Shared Service Lessons Learned

| Title | Lesson Learned | Associated Actions on the FSS project |
|---|---|---|
| **Stakeholder Engagement** | Proactive engagement between the FSS and the shared service customers is required at all employee levels throughout the project lifecycle. Don't let this be something that is "done to you." Working with the change management function is key to this. | • Communications Approach and Plan - provide key details on how we will engage with the business units throughout the project.<br>• Business Coordinators - Business Coordinators identified to liaise with the Change Manager/ Deployment Lead to exchange key information relating to the project. |
| **Change Impact Assessment** | Important that a formal change impact assessment is carried out so that all levels of the business can understand and plan for<br>(a) input required during project design and testing<br>(b) the immediate impact of the shared service go-live on business operations and<br>(c) the impact of the bedding in period that will be required before being able to revert to "business as usual" | • High level change impact assessments completed<br>• Detailed impact assessments carried out to enable a change action plan to be developed |
| **Feedback Loop to Project** | Need to ensure that the business are providing feedback to the project on their readiness for go-live as well as risks / issues from their perspective. There also needs to be a reporting loop during the stabilisation phase. | • Business Readiness plan and approach developed<br>• Deployment Lead role established for each BUto enable feedback to be collated and actioned by the project team |
| **Standardised Processes** | Willingness to move to standardised processes is key to long term success for both business user and the shared service. Short-term pain here is worth the effort. | • Standardised process design was a fundamental feature of the process design work and also in the functional designs<br>• The end user training plan is designed to ensure these standardised processes are embedded and communicated to the BU's |
| **Data Quality** | Business users have responsibility for the quality of the data that is migrated from the old systems to the new consolidated system. Important that this is understood and that necessary actions are taken to test and cleanse the data. | • The role of the Data Migration lead was key working with the business units as a key liaison, ensuring all data to be transitioned is of the required quality.<br>• Major issues emerged in the quality of supplier data and a detailed plan to remedy this was executed |

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# Shared Service Lessons Learned

| Title | Lesson Learned | Associated Actions on the FSS project |
|---|---|---|
| **Co-location:** | Within Bord na Móna the business and the project team were initially not co-located. Therefore all of the above items require more conscious effort and formalised documentation. Otherwise there is the ever-present risk that one side “loses sight” of the other. | This risk is mitigated through the delivery of:<br>• Communication plan and Deployment Lead role activities will ensure increased visibility of project in each BU<br>• Knowledge Transfer - Knowledge transfer will ensure that no “Tacit” knowledge is lost from the transition of finance activities to the FSS. |
| **Leadership** | Business unit sponsors needed to be seen as promoting and championing the initiative and highlighting the benefits it will bring to their unit. | Engaging leadership is an important feature in the Communications Approach and Plan outlined. Ask back to the business was :-<br>• Take a proactive approach in communicating with their teams<br>• Promoting the FSS as frequently as possible<br>• Encouraging teams to engage with the project<br>• Feedback to project team on issues raised/ ways to improve interactions between the teams<br>• Reinforce standardisation and benefits constantly |
| **Common Expectations** | Important that both the shared service and the business units have a common understanding of what will be operationally delivered by the shared service and, in turn, what the shared service requires of the business units. | Service Partnership Agreements(SPA) played a critical role, highlighting the requirements both the FSS and the business units have on each other. |

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# The Good News

- Apart from a three-month slippage of one phase, the overall programme was delivered on time and on budget
- Design principles were largely delivered
- After initial push-back, resistance proved futile and BU management and staff rowed in behind the programme
- Business case benefits slow to be realised but are happening with a significant time lag
- Better transparency of operations and financial performance had informed many tactical and strategic business decisions, especially in 2017.
- Business and IT teams have time to breathe after a hectic 3.5 years !

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# The not-so-good news

- Business Unit support was taken for granted.
- Ongoing support costs, especially manpower, was significantly underestimated. The Cost of Ownership was, and is likely to remain, much higher than anticipated
- Very difficult to recruit/retain key technical staff on public sector salaries
- Not enough effort went into communications. You cannot over-communicate a programme of this scale.
- Negligible support from product vendor
- In general quality of data was worse, in some cases a lot worse, than expected
  - There were significant inconsistencies in data held in different systems
  - Gaps in data had habitually been compensated by local knowledge and/or spreadsheet workarounds created to compensate
- Some out-of-the-box processes of the ERP solution complex and cumbersome
- BI proved to be very unforgiving of data quality gaps

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# Concluding Remarks

- Put major effort into upfront planning. Leave nothing to chance or open to interpretation. Fail to plan, plan to fail applies.
  - *Design principles, programme governance, roles and responsibilities defined at the outset and stick to them.*
  - *Governance at all levels is painful and essential. Committed programme sponsor, professional programme management, programme deliverables built in to management objectives*
  - *Huge effort into RACI and RICEFW definitions upfront and built into contracts. This was a living, breathing essential support to the programme team because …….*
    - *The Systems Integrator is not your friend ☺*
- 'Out of the Box' was the key mantra espoused by all from CEO down
- One set of target processes for all BUs. No special cases.
  - Any deviations from this had to be approved by Steering and alterations funded outside the project budget → only a handful became necessary surprisingly !
- Communicate, communicate , communicate !!!
- Data can kill you
- BI is the killer app in ERP.

➢ It can be done. It's not easy. It's complex and painful.

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# Questions

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# Appendix

# Bord na Mona
# Central Support Service
# Phase 1

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# Central Support Service

- **I need help**

  - *Can't log into Oracle*
  - *Light bulb is not working*
  - *I didn't get my expense*

- **I need to Know**

  - *How Do I*
  - *Am I entitled to*
  - *What's the procedure for*

## Schedule a task – Review

*Daily, Weekly, Monthly*

*Daily checks*

*Schedule Maintenance*

## Co-ordinate & link multiple activities

*IT Support*

*HR*

*FSS*

*Facilities*

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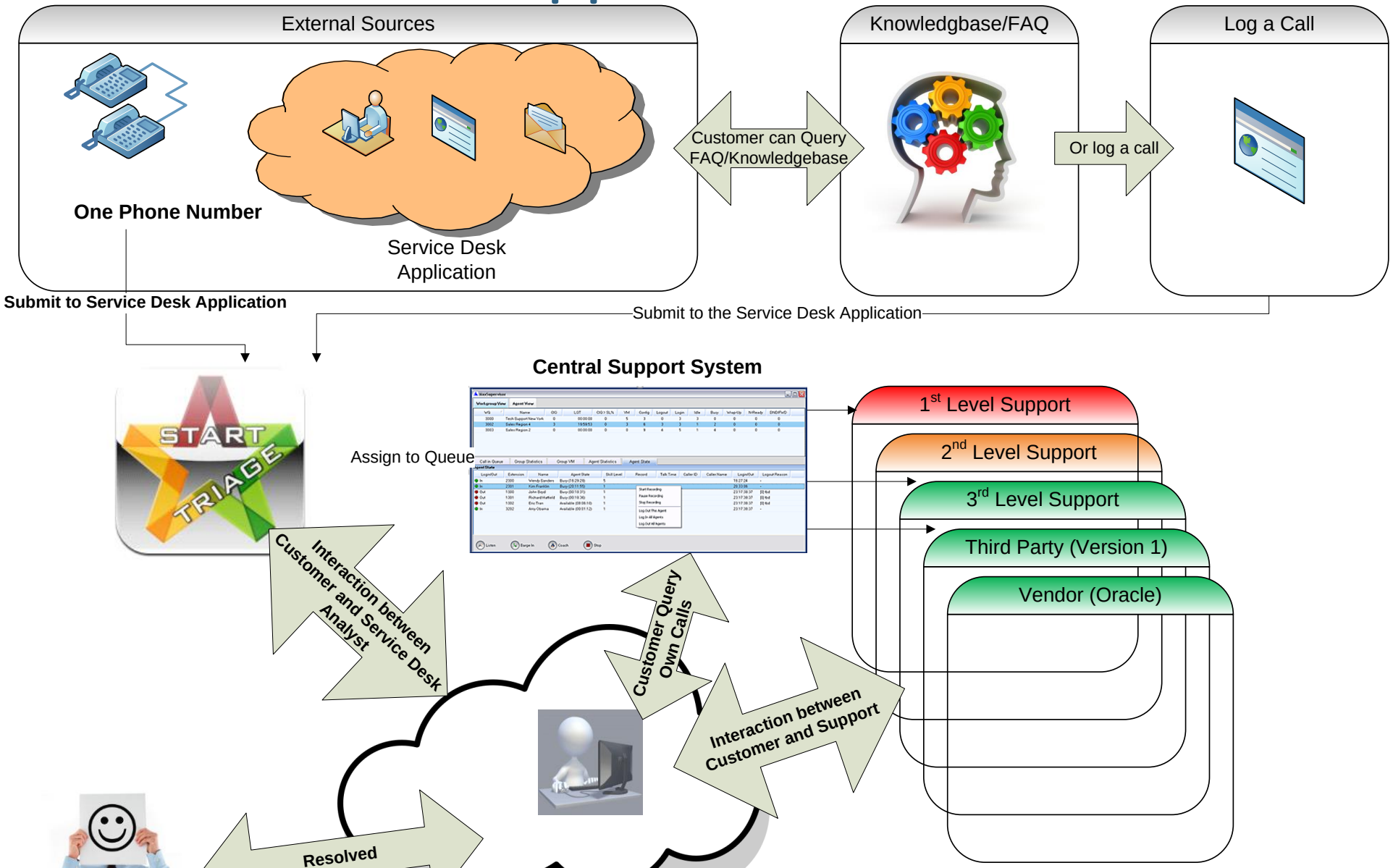
# Central Support Service Model

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# FSS Business Case Benefits

## Operational

- Focus on Core Business – Business unit management freed up to focus on market and customer activities
- Scalability – Organic growth and acquisitions or disinvestments will be more easily incorporated
- Greater leverage of finance resources
- Flexibility/quickness to respond to market changes
- Improvement in levels of investment in working capital
- Ease of implementing new systems and processes
- Ability to make 'value add' IT investments
- Basis for on-going process optimisation and further evolution of the operating model

## Service Quality

- Improved data quality, transparency and speed of dissemination of information
- Standardised finance processes & systems
- Improved control environment & embedded controls in Oracle leading to a systematic approach to internal controls
- Enhanced reputation with suppliers /customers

## People

- Better working environment for staff
- Up-skilling and development of employees
- Ease of succession planning and increased opportunities within finance organisation
- Improved communications, teamwork and strengthens cross-functional co-operation

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