Maximizing the Business Impact of Discovered Knowledge

Hints and tips for those looking to cross the chasm between analysis and action
A focus on Business Impact takes us beyond the Science of KDD
We must also master the art of applying and managing knowledge

- Do the Right 'It'
- Drive Intelligent Action
- Become a Learning Organisation
Sky's IDS team are a world class decision support organisation
Business Partner Teams underpinned by Centres of Excellence

<table>
<thead>
<tr>
<th>Trading</th>
<th>Product</th>
<th>Content</th>
<th>Service</th>
<th>NowTV</th>
<th>Advertising</th>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get, Keep &amp; Grow Customers</td>
<td>Strategy Design &amp; Performance</td>
<td>Acquisition Commissioning &amp; Performance</td>
<td>Operations &amp; Service Performance</td>
<td>Insight to support e2e OTT business</td>
<td>Linear &amp; Targeted Placement &amp; Performance</td>
<td>Strategic Regulatory Investors</td>
</tr>
</tbody>
</table>

**ANALYTICS**
Decision Science Hub including predictive analytics, data science and econometrics

**OPERATIONS & DEVELOPMENT**
Reporting development integrated with other exploitation development activities

**PRIMARY RESEARCH**
Improved research capability offering opportunities for lower cost in-housing

**TECHNOLOGY DATA SERVICES**
Dedicated data management provided by Sky Technology
Sky's IDS team are a world class decision support organisation

Operational Demand and Output Volumes Summary

## Reporting Production

<table>
<thead>
<tr>
<th>Business Area</th>
<th>Reports Per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMG - BB &amp; Talk</td>
<td>424</td>
</tr>
<tr>
<td>SMGTV, Content &amp; Internet Products</td>
<td>411</td>
</tr>
<tr>
<td>Customer Operations - Sales</td>
<td>1227</td>
</tr>
<tr>
<td>Customer Operations - Service</td>
<td>1027</td>
</tr>
<tr>
<td>Customer Operations - Service Quality and Billing</td>
<td>217</td>
</tr>
<tr>
<td>Customer Service Change Projects</td>
<td>211</td>
</tr>
<tr>
<td>Customer Service Group - Strategic Initiatives</td>
<td>113</td>
</tr>
<tr>
<td>eExperience</td>
<td>5</td>
</tr>
<tr>
<td>Finance &amp; Executive Group</td>
<td>732</td>
</tr>
<tr>
<td>Home Service and Supply</td>
<td>387</td>
</tr>
<tr>
<td>Sky Business</td>
<td>173</td>
</tr>
<tr>
<td>Trading - Customer Management</td>
<td>883</td>
</tr>
<tr>
<td>Trading - Existing Sales</td>
<td>28</td>
</tr>
<tr>
<td>Trading - New Sales</td>
<td>740</td>
</tr>
<tr>
<td>Trading - Republic of Ireland</td>
<td>686</td>
</tr>
<tr>
<td>Misc</td>
<td>245</td>
</tr>
<tr>
<td>Now TV Subs</td>
<td>71</td>
</tr>
<tr>
<td>Content Performance</td>
<td>130</td>
</tr>
<tr>
<td>Media Performance inc AdSmart</td>
<td>847</td>
</tr>
<tr>
<td>Dashboards - Retention, Digital, Bespoke</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>8587</td>
</tr>
</tbody>
</table>

## Commissioned Outputs

<table>
<thead>
<tr>
<th>Activity</th>
<th>Outputs Per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Reporting developments (pipeline = 400)</td>
<td>70</td>
</tr>
<tr>
<td>Market Research projects</td>
<td>45-50</td>
</tr>
<tr>
<td>Ad Hoc Media research projects</td>
<td>5-10</td>
</tr>
<tr>
<td>Content Research projects</td>
<td>20</td>
</tr>
<tr>
<td>Analytics projects (&gt; 1 day)</td>
<td>40-60</td>
</tr>
<tr>
<td>Modelling projects</td>
<td>5-10</td>
</tr>
<tr>
<td>Econometrics projects</td>
<td>2-3</td>
</tr>
</tbody>
</table>

## Targeted Campaigns & Decisioning Outputs

<table>
<thead>
<tr>
<th>Activity Channels: Email, Dmail, Call Centres, Online, AdSmart</th>
<th>Volumes Per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>New briefs each month from 55 Business teams</td>
<td>300</td>
</tr>
<tr>
<td>Targeted campaigns delivered</td>
<td>650-750</td>
</tr>
<tr>
<td>Targeted customer contacts</td>
<td>170m</td>
</tr>
<tr>
<td>Decisions calculated for targeted customer contacts</td>
<td>5bn</td>
</tr>
</tbody>
</table>
Our current decision execution capability is coordinated and immense. We make >5bn data-based decisions supporting 170m intelligent contacts every month.

### Decision Complexity

<table>
<thead>
<tr>
<th>Low</th>
<th>Decision Complexity</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outbound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inbound</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Decision Examples

**Mail**
- AdSmart
- Mobile
- Email
- Calls
- Social

**Mailshot files to support offline campaigns**
- Simple Segment IVR files
- ELP segments

**Voice**
- Service: 9.8m decisions supporting 1.2m calls
- Retention: 14m decisions supporting 400k calls
- Sales: 19m decisions supporting 360k calls

**Web**
- Homepage: 31m decisions supporting 15m visits
- Watch: 9.5m decisions supporting 1.6m visits
- Products: 16m decisions supporting 1.8m visits
- Shop: 144m decisions supporting 1.4m visits
- MySky: 34m decisions supporting 5.7m visits
- Help: 121m decisions supporting 4.7m visits

**Model Based or Optimised**
- 3 million contacts
- 1000 decisions per contact

- Product Upsell DM & Email
- Uplift Models in OBTM
- Introduce a Friend

**Targeted by Product/Process**
- 88 million contacts
- 14 decisions per contact

**Event or trigger driven**
- 4.7 million contacts
- 13 decisions per contact

**Targeted by IDS Segment**
- 40 million contacts
- 19 decisions per contact

**Extended Lower Price**
- Simple Segment
- Sky Go Push Notifications
- Champions League

**Decision Examples**

- Reinstate
- Mitigation
- Newsletter
- Service Communications

- Downgrades & Cancellation
- NPS
- Customer Engagement
- Welcome Programmes

- Low
- 5bn decisions driving 136m contacts
- High
- 400m decisions supporting 32m contacts
Do The Right 'It'
In most corporations 'Right' is defined by identifiable and actionable value opportunities

- Anchor the investment of our intellect on business strategy
- Incorporate business understanding into the insight process
- Demonstrate the value of insight in financial terms

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<th>Rights Negotiations</th>
<th>Get, Keep, Grow</th>
<th>Engagement Strategy</th>
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<tr>
<td>Combining business perception of content performance with precise measurement of viewing &amp; approved value metrics</td>
<td>Developing a common framework within which competing customer strategies can be developed, implemented and assessed</td>
<td>Ensuring the 'Best Next Action' is designed and deployed in the context of the broader Customer strategy to drive demonstrable value</td>
</tr>
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</table>
Do The Right 'It'
An example Balanced Scorecard for measuring the value of insight investment

**Strategic**
Delivery to strategic imperatives
- Supports achievement of key Sky strategies
- Delivers insight to strategic thinking
- Qualitatively described

**Financial**
Measurable P&L impacts
- Customer revenue increased
- Customer Service / Marketing costs saved
- Cost avoided

**Capability**
Innovation to deliver competitive advantage
- New tools driving effectiveness of insight
- “Insight Products” with revenue possibilities

**Efficiency**
Efficiency - right thing, right time, right areas
- Cost avoided through increased efficiency e.g. time or headcount savings
- Running day-to-day operations
Drive Intelligent Action
You must consciously manage the gap between knowledge and intelligent action

- Create a culture where insight's raison d'être is to drive decisions
- Focus on an omni-channel intellect to drive customer-centric actions
- Develop actions that are timely & measurable to enable learning

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<th>In-session Decisioning</th>
<th>Content Consumption</th>
<th>Price Elasticity &amp; Churn</th>
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<td>Incorporating offline models into the online experience and factoring in online behaviours into decision making</td>
<td>Driving precision into measurement to enable better diagnostics and inform treatment strategies</td>
<td>Integrating customer-centric intelligence into operational processes to drive pro-active value strategies and minimise wastage</td>
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Drive Intelligent Action
An illustrative decisioning architecture to support deployment of intelligent actions

**Decision Support**
*Decisions for the Business*

- Optimise for business
- Model & Optimise
- Enable Data
- Customer centric view of behaviour to enable Decisioning

**Decision Execution**
*Decisions for the Customer*

- Seamless deployment of decisions
- Manage
- Measure & Evaluate
- Robust processes to measure outcome data

**EQ**
- Present & Fulfil
- Context based conversations in call centres
Become a Learning Organisation
Actions become much more valuable if you are able to learn from them!

- Integrate functions that describe, diagnose, predict and prescribe
- Accept that anything you do is based on what you currently know
- Develop and maintain a publishable library of what you know

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<th>Self-Service Insight</th>
<th>Corporate Memory</th>
<th>Model &amp; Manage Root Cause</th>
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<td>Providing a single version of the truth for key business metrics and ability to perform what-if and Descriptive analysis 'on the fly'</td>
<td>Productise story-telling &amp; create tools that enable the cataloguing and exploration of what is known in order that the business may learn</td>
<td>Design your modelling practice with the explicit intent of changing the drivers of underlying behaviours &amp; influencing future outcomes</td>
</tr>
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Become a Learning Organisation
True learning is based upon knowing what you know and a willingness to adapt.
Mastering the Art of Applying and Managing Knowledge

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- Drive Intelligent Action
- Become a Learning Organisation

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