Introduction

Our clients depend on models to make critical financial and business decisions. Models can provide numerous benefits, including deep insights into data, efficient automation of processes and dynamic analysis of options and opportunities. High quality, robust modelling reduces the potential of misapplying business logic or encountering data errors, and decreases the risk that organisations will make poor decisions.

KPMG Modelling helps our clients utilise information to answer their business questions, by integrating large volumes of data from disparate sources and applying subject matter knowledge and technical expertise to build and review models. We work across all sectors and support the strategic direction of the whole business or parts of a business through a variety of capabilities.

Recognised leader in the provision of modelling services

Highly technical skills coupled with strong commercial acumen

Tried-and-tested approaches underpinning all our capabilities

Agile methods adapted to suit your requirements
Four stages to navigating through COVID-19

All our clients will be in different phases of their journey navigating through COVID-19.

**Reaction**  
Stage 1

**Resilience**  
Stage 2

**Recovery**  
Stage 3

**New Reality**  
Stage 4

Our Modelling & Analytics team can deliver solutions to address client challenges at all stages of the cycle.
How Modelling can help

Our modelling, data analytics and visualisation expertise enable us to quickly deliver robust and agile tactical solutions to support our clients’ decision making throughout the COVID-19 cycle. Our tactical solutions are flexible and customisable, enabling clients to respond rapidly to changing conditions.

Cash Flow Analysis
Cash flow and working capital projections forecast including scenarios.

Contact Centre Resource Forecasting
Identifying resourcing gaps and supporting operational planning.

Customer Vulnerability Analysis
Identifying vulnerabilities and supporting response prioritisation.

Debt Restructuring & Refinancing
Analysis of debt restructuring options and impact on key financial ratios.

Business Plan Modelling
Business repositioning and transformation processes.

Automated Letter Generation
Tactical solutions for operations for generating letters.

Impairment Analysis
Models to support impairment testing and provisioning.

Workforce Analytics
Modelling to support strategic workforce planning and optimisation.

ChatBot
Internal or external communications solution to provide FAQs and triage queries.
Cash Flow Analysis

Detailed forecasting and scenario analysis of cash flows and working capital projections are vital to making informed business decisions.

**Reaction**  
Stage 1

**Client needs**  
Dealing with ongoing uncertainty in the short and medium term

**How modelling can help**  
- Granular forecasting of cash flows on a daily/weekly/monthly basis to enable management to focus on short-term issues and address liquidity concerns for targeted business areas
- Accurate modelling of receivables and payables for different classes of customers and suppliers and the subsequent impact on working capital
- Quick and easy model deployment

**Resilience**  
Stage 2

**Client needs**  
Stress testing of business plans to understand business resilience under different scenarios

**How modelling can help**  
- Detailed scenario modelling of new resilience measures overlaid with sensitivities on key variables
- Analysis of the impact of changes in payment terms, customer and staff numbers, cost structures, supply changes, financing arrangements and macroeconomic variables

**Recovery**  
Stage 3

**Client needs**  
Understanding how the business will return back to more stable cash flows

**How modelling can help**  
- Modelling of time to recovery for different revenue streams
- Modelling implementation of new resilience measures
- Analysis of how government support measures will help and affect business KPIs

**New Reality**  
Stage 4

**Client needs**  
Monitoring performance going forward and adapting to a new world environment

**How modelling can help**  
- Comparison of budget vs. actuals and forecasting future cashflows based on actuals entered to date
- Identifying and adjusting levers as the new reality evolve
- Analysis of the impact on key financials/covenants, KPIs and ability to pay stakeholders
## Contact Centre Resource Forecasting

Demand forecasting model to identify resourcing gaps and underpin operational planning

<table>
<thead>
<tr>
<th>Reaction</th>
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</table>
|          |         | Reacting to large increases in the demand for contact centres whilst capacity is at its lowest | — Analysis of current FTE requirements gap areas  
— Identification of problems areas and highlight the immediate steps to take |

| Resilience | Stage 2 | Planning for high volatility in demand and capacity in the short to medium term | — Develop tactical and strategic models for forecasting call types, call drivers and FTE demand  
— Factor in average call handling times, opening hours reduction, resource shrinkage and attrition |

| Recovery | Stage 3 | Developing dynamic agile responses across multiple centres | — Gain insights from detailed forecasting models to enable better operational planning for COVID-19 disruptions, allowing consistent customer experience |

| New Reality | Stage 4 | Adapting resource forecasting needs to different country responses to disruptions | — Scenario modelling around variable offshore capability and future disruption scenarios  
— Potential to overlay with existing reporting, enabling actuals vs forecast |
# Customer Vulnerability Analysis

Detailed analysis of customer data to identify vulnerabilities and support response prioritisation especially at times of unprecedented uncertainty for everyone.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Client needs</th>
<th>How modelling can help</th>
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<tbody>
<tr>
<td><strong>Reaction</strong></td>
<td>Significant and rapid changes to customer and supplier situations requires in depth assessments of their needs</td>
<td>— Perform data analysis on customers, sales, supply chain and workforce</td>
</tr>
<tr>
<td><strong>Resilience</strong></td>
<td>Regular assessments across the whole business with data often being limited and disparate</td>
<td>— Customer segmentation using our analytics capabilities, handling vast amounts of data and assigning rules as to how that data is used</td>
</tr>
<tr>
<td><strong>Recovery</strong></td>
<td>Performing the required ongoing analyses without a significant drain on staff time</td>
<td>— Dashboard outputs giving management the ability to slice and dice the data in different ways, to provide better insights and help identify problem areas</td>
</tr>
<tr>
<td><strong>New Reality</strong></td>
<td>Prioritising customers according to vulnerability, which presents a new challenge to businesses in terms of data, ethics and staff capacity</td>
<td>— Vulnerability prediction model using client data</td>
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<td>— Scenario modelling which feeds into the analysis, based on how long the disruption might last</td>
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<td>— Support decision making through in-depth understanding of impact on business</td>
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<td>— Ability to update analyses with refreshed data on an ongoing basis</td>
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<td>— Reduced pressure on operational time</td>
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</table>
Debt Restructuring & Refinancing

Analysis of impact of COVID-19 on key financial ratios and potential debt restructuring options

<table>
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<tr>
<th>Stage</th>
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</table>
| Reaction  Stage 1 | Dealing with ongoing uncertainty in the short and medium term | — Overlaying existing financials with potential new debt restructuring and financing options  
— Side by side comparison of the options including time to execute a quick short term response plan |
| Resilience  Stage 2 | Addressing changes in the accessibility and cost of financing available | — Scenario modelling to see how clients take on the new forms of finance available to them  
— Understanding the impact of rising costs of finance  
— Conducting ratio tests to understand longer term resilience |
| Recovery  Stage 3 | Reassessing and potentially restructuring the current financing situation | — Accommodation of different debt restructuring options in terms of quantum, timeframe, terms and hierarchies  
— Analysis of business debt capacity, EBITDA headroom and financial covenants  
— Functionality to update with actuals on an ongoing basis and forecast on that basis, so that clients can keep on top of how their situation is progressing |
| New Reality  Stage 4 | Ultimate restructuring and refinancing will require ongoing assessment of the impact on financial and business ratios and KPIs | — Sensitivity analysis which allows clients to see how funding options will impact key ratios and prepare for worst-case scenarios to inform their funding decisions  
— Detailed analysis of potential new financing paths, along with the associated flexibility in these paths and where stress periods are likely to occur |
Business Plan Modelling

Detailed cost benefit analysis to underpin business repositioning and transformation decisions

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| Reaction Stage 1 | Revisiting business plans in light of the current environment | — Adjusting drivers related to revenues, costs, payments and workforce  
— Identification of optimal levels of risk and reward, through consideration of quick wins and avoidable costs, as well as underlying dependencies |
| Resilience Stage 2 | Modelling of strategic business plans that support companies aiming to increase business resilience | — Modelling the impact of new measures such as diversification of supply chain, investment in IT infrastructure for remote working, and renegotiation of contracts  
— Functionality to update with actuals on an ongoing basis and forecast on that basis, so clients can keep on top of how their situation is progressing  
— Side by side comparison of different strategic options |
| Recovery Stage 3 | Understanding the interdependence between various costs and benefits in order to make informed decisions | — Definition and measurement of critical success factors  
— KPI dashboards to construct views of the case for different stakeholders  
— Incorporation of advanced analytics techniques to dive deeper into the case |
| New Reality Stage 4 | Undertaking business transformations in the longer term | — Detailed cost benefit analysis of any business transformation  
— Detailed scenario modelling overlaid with sensitivities on key variables |
**Automated Letter Generation**

**Tactical solutions for operations for generating letters, with pre-defined templates, at the click of a button at a time when traditional service lines are overwhelmed**

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<tr>
<td><strong>Reaction</strong>&lt;br&gt;Stage 1</td>
<td>Keeping in contact with customers who are looking for reassurance with many similar requests coming in</td>
<td>— Using KPMG’s pre-built tactical solution for automatically generating letters at the click of a button&lt;br&gt;— Rapid and easy deployment and adaptability</td>
</tr>
<tr>
<td><strong>Resilience</strong>&lt;br&gt;Stage 2</td>
<td>Adapting to centres having a low capacity for manual letter generation and very high volumes</td>
<td>— Pre-defined and customisable templates&lt;br&gt;— The ability for EUC to integrate with the client’s existing printing solutions to send the letter, or connect with their mailing house</td>
</tr>
<tr>
<td><strong>Recovery</strong>&lt;br&gt;Stage 3</td>
<td>Developing processes to respond to similar requests and prioritise vulnerable customers, who are likely to be the least tech savvy or may not have access to the internet</td>
<td>— Automated and standardised processes allow for operational time savings which can be used for client contact&lt;br&gt;— Customised templates and processes for vulnerable customers</td>
</tr>
<tr>
<td><strong>New Reality</strong>&lt;br&gt;Stage 4</td>
<td>Automated solutions that can integrate with existing solutions or mail houses to reduce pressure on operations and contact centres</td>
<td>— Personalised contact with customers which increases reassurance and reduces pressure on contact centres&lt;br&gt;— Cost efficiencies generated by pre-emptively applying and communicating one template to certain cohorts of customers without involving the contact centre (where appropriate)</td>
</tr>
</tbody>
</table>
Impairment Analysis

Models to support impairment testing and provisioning. These are easily updatable and support scenario analysis.

### Reaction
**Stage 1**
- **Client needs**: In depth valuation across the whole book or asset base
- **How modelling can help**:
  - Help clients to assess the impact on the business, assets / product books and provisions
  - Reduce pressure on operational time
  - Quick and easy deployment of models and tools

### Resilience
**Stage 2**
- **Client needs**: Understanding balance sheet resilience
- **How modelling can help**:
  - Identify the portfolio or assets which may be required to take a financial hit if necessary, and how to restructure the books
  - Perform stress testing to gain better insight into resilience

### Recovery
**Stage 3**
- **Client needs**: Considering any knock-on impacts on KPIs and covenants and building in protection mechanisms
- **How modelling can help**:
  - Evaluate time to recovery for product, segment and each customer and what this means for business and financial KPIs
  - Modelling recovery scenarios as adaptive and protection mechanisms are built in

### New Reality
**Stage 4**
- **Client needs**: A holistic understanding of the book as well as a granular analysis to regularly understand any high-risk areas in the business structure and how these can be mitigated
- **How modelling can help**:
  - Incorporate scenario modelling into impairment models based on how long the disruption might last
  - In-depth understanding of the impact on the business
Workforce Analytics

Modelling to support strategic workforce planning and optimisation including scenario analysis for all the different options for each stage of the cycle: reaction, resilience, recovery and the new reality

<table>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Making difficult decisions as a result of huge changes to workforce requirements</td>
<td>Easy and fast deployment of workforce planning tools for quick demand and supply simulations</td>
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<td>Outputs visualised by job family, capability, skill group, location or division</td>
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<table>
<thead>
<tr>
<th>Resilience</th>
<th>Stage 2</th>
<th>Client needs</th>
<th>How modelling can help</th>
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<tr>
<td></td>
<td></td>
<td>With large sections of the workforce experiencing limitations in home working, health constraints and childcare, requiring the flexibility and ability to pre-empt reductions in productivity to limit overall impact and become resilient</td>
<td>Dashboard outputs giving management the ability to slice and dice the data in different ways, to provide better insights</td>
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<td>Users provided with the choice between FTE and cost views, with visibility of the bottom line impact of every option</td>
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<table>
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<tr>
<th>Recovery</th>
<th>Stage 3</th>
<th>Client needs</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Successful workforce planning being the key to recovery</td>
<td>Evaluate time to recovery for capability, location and division</td>
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<td>“Unpeeling” of emergency measures such as furlough</td>
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<th>New Reality</th>
<th>Stage 4</th>
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<tbody>
<tr>
<td></td>
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<td>Making longer term decisions about the workforce in order to decide what the new “normal” will look like</td>
<td>Generation and analysis of an unlimited number of demand and supply scenarios</td>
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<td>Evidence based insights</td>
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</table>
**Conversation AI Assistant (Chatbot)**

Internal or external communications solution. Can be used to provide FAQs and triage queries to the right teams, essential for currently overwhelmed services.

**Reaction**

*Stage 1*

**Client needs**
Keeping contact with customers and staff and provide reassurance

**How modelling can help**
- Using KPMG’s pre-built chatbots which can be easily configured to clients’ requirements and used as internal or external solutions.
- Quick and easy deployment
- Use of the firm’s preferred technology

**Resilience**

*Stage 2*

**Client needs**
Provision of standardised and consistent responses to FAQs, which can be updated quickly and easily as the situation changes

**How modelling can help**
- Work with clients to understand the key areas of concern for staff and customers.
- Example uses include: Chatbot for internal staff for COVID-19 related FAQs and policies, Chatbot for external Customer FAQ, or to triage current customer queries to the right teams

**Recovery**

*Stage 3*

**Client needs**
Adapting to volatility in contact centre capacity and volumes by handling similar requests consistently on an ongoing basis

**How modelling can help**
- Enable chatbots to run 24/7, ensuring information is always available
- Reduce pressure on contact centres

**New Reality**

*Stage 4*

**Client needs**
Provision of clear information both internally and externally and triaging current customer queries to the right teams

**How modelling can help**
- Ensuring ease of updates to latest information so that decisions are made in line with the latest policies
- Efficient deployment of operational / contact centre resources
Contact details
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