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| **Role title:** | Data Scientist | **Responsible to:** | Data Science and Analytics Manager |
| **Division:** | Commercial Services | **Department:** | Product & Pricing |
| **Direct Reports and Level:** | N/A | **Scope:** | Global – all products, all territories |
| **Scale:** | N/A |
| **Regulated Function(s) Held:** | No |
| **Evaluation Level** | Implement – Level 2 | **Role Family** | Member Risk and Exposure |

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| **Overall Role Purpose** |
| The Data Scientist will be responsible for developing, maintaining, iterating and running data science models, using big data and AI/ML techniques, to enhance MPS’s ability to price competitively, underwrite effectively, acquire and retain members efficiently and design and develop products that meet and exceed the needs of members.  |

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| **Accountabilities (RACI)** | **Measures of Success/KPIs** |
| **Strategic Leadership** * Provide matrix support to analysts (in Product and Pricing) to reinforce desired culture and delivery of strategic priorities
* Provide SME input, on behalf of Product and Pricing, into relevant change programmes
 | * Corporate Strategic priorities Vs plan
* MPS engagement index Vs plan
* MPS leadership index Vs plan
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| **Financial*** Deliver MPS data science strategy ensuring the sustainability of MPS through a robust actuarial and technical pricing methodology which is then informed by market and competitive insight to result in the final retail price (subscriptions) taken to market
 | * Member numbers Vs plan
* Income Vs plan
* MPS Combined Operating Ratios
* MPS Target Pricing Strength Achieved
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| **Member*** Understand effect of data science models on members and broaden understanding of data science techniques and their impacts within stakeholder groups
* Provide key business understanding of member data and products to support Product and Pricing leaders
 | * Net Promoter Score
* Member Satisfaction Survey
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| **People*** Provide technical guidance across Commercial Services in all areas of data science, particularly what data science is and how it can be used to support
* Identify learning opportunities and support upskilling that enhances departmental resilience
 | * Engagement Index Vs MPS
* Leadership Index Vs MPS
* Strong Talent and Succession Plans
* HR Metrics – attrition, absence
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| **Risk*** Create an environment where colleagues recognise the importance of risk identification and management.
* Ensuring that data science is cognisant of the risks involved in clinical negligence and indemnity (both claims and ‘non-claims’) particularly regarding long-tail exposure to birth injury risks and periodontal disease
* Ensure that data science models are cognisant of the risks involved in data processing, including but not limited to, adherence to GDPR and other relevant compliance requirements
 | * Risk & Control Self- Assessments Audit Actions
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| **Responsibilities (RACI)** |
| * Extract, mine and understand MPS’s data by exploring further areas by which MPS can price as well as looking at further measures, such as lapse rates, lifetime value and contribution.
* Add additional insights which may inform the pricing and reserving work by using advanced statistical multivariate techniques where appropriate.
* Work with the MI and Data Analysts to ‘productionise’ existing and future models to ensure that there is a strict model governance, change process as well as agility to make any adjustments
* Monitor the performance of existing models and ‘iterate’, where required, by considering new data and new modelling techniques. Assist the MI and Data Analysts with the maintenance and development of Product & Pricing’s databases and subsidiary analytical systems, determining the analytical requirements for enhancements to monitoring suites
* ’Speculate’ on what could be relevant and useful external datasets to be added to Product & Pricing’s databases and make sure that data quality is of the highest standard, or when not, score the credibility of the data with a view to revisiting or implementing cleansing programmes.
* Recommend and acquire valuable external data by liaison with external parties or by using web-scraping techniques.
* Assist with projects as identified by the Pricing Consultant and agreed by the Head of Product and Pricing making sure projects proceed as planned, answering any queries relating to progress and attending project meetings.
* Be seen as a Subject Matter Expert (SME) and offer coaching and support to the wider team. Work with the other seniors to ensure key tasks and projects are adequately resourced for and tasks are completed on time
* Drive change by influencing decisions using data science models to support one of MPS’s strategic pillars, Data
* Work closely with all areas of the business to understand problems and pro-actively identify opportunities where data science techniques can be utilised to enhance decisions and provide real business benefit.
* Undertake other duties and tasks that from time to time may be allocated to the role holder that are appropriate to the level or role.
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| **Key Governance Responsibilities** |
| * Attendance at PPUC (Product, Pricing and Underwriting Committee) or pricing sub-committees as required
* Attendance at UMAR
* May attend other governance committees as required (eg. data governance etc.)
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| **Leadership Framework Competencies** | **Level** |
| Fresh Thinking | Leading Others |
| Building Capability in Self and Others | Leading Others |
| Influencing Others | Leading Self |
| Collaborating for Results | Leading Others |
| Leading Self and Others | Leading Self |
| Commercial and Risk Thinking  | Leading Others |

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|  | **Knowledge and Qualifications** | **Skills** | **Experience** |
| **Essential** | * Numerical first degree
* Relevant postgraduate qualification or relevant analyst experience
* Associate level actuarial, CII exam experience, data science certification or equivalent on the job learning
 | * Analytical programming skills preferred (SQL, and R) as is knowledge of predictive modelling techniques and machine learning.
* Keen analytical, project management and problem-solving skills
* Pragmatic business sense including understanding of finance, accounting, economics
* Ability to communicate complex issues in a clear manner.
* Solid communication skills (oral and written)
* Strong computer skills
 | * Experience in development and maintenance of statistical models
* Experience in utilising Generalised Linear Models for pricing
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| **Desirable** | * Knowledge of clinical negligence indemnity
* Knowledge of general insurance market
 | * Experience of Python
 | * Experience of using pricing software
* Experience of working in regulated environment
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