Quantitative Analyst

Subsector: Investment Banking

Job Family: Quants

Impact Level

Today, this role implements complex mathematical models to evaluate financial instruments or markets, as well as calculate accounting adjustments and validate models to ensure regulatory fit.

Medium Impact

Consolidated Activities

	Today	Future
Trading Model Validation	Execution focuses on ensuring the quantitative models fit within regulatory requirements, including managing the library of existing code. In some countries, these tasks have already been offshored to lower cost centres.	The offshoring trend will continue to reduce the need for this role to perform trading model validation.
Product/Price Valuation and Verification	Execution requires technical expertise and knowledge, but it can be enabled by technology. The current landscape of Independent Price Verification (IPV) systems comprise largely of in-house, End-User Computing (EUC) solutions that lack clear control and transparency.	RPA or cloud-based service providers can help managers to source different prices from a variety of sources. Collating, ranking and defining those prices in a central repository where records can easily be audited. Advanced Analytics can leverage the new sources of data to predict and evaluate assets.
Trading Model Development	Execution involves close collaboration with traders and the technology team to build trading tools.	With AI, this will be a new task for the role. This job role will support and possibly lead the development of trading algorithms and work closely with technology specialists to contribute to alpha generation on a systematic trading desk.

In the next 3–5 years ...

This role will evolve as trading desks are increasingly being automated. As there is a shift away from model validation, the job holder will lead the development of trading algorithms, working closely with traders and technology specialists to develop trading tools.

Skills Differentiators:

- **Analytics and Computational Modelling:** This skill will remain important in the construction of mathematical models designed to provide insight into complex financial systems.
- **Programming and Coding:** Fluency in programming languages (e.g., C++, Python, Perl, Java etc.) will be vital to develop and implement mathematical models.
- **Risk Awareness:** Solid understanding of various types of financial risk is indispensable for this role.
- **Technology Design:** Close collaboration with the technology team in designing appropriate systems to run the developed models, requires the job holder to have a basic proficiency in technology design to facilitate an effective partnership.
- **Advanced Digital Acumen/Literacy:** In addition to advanced excel skills, the job holder should have expertise in advanced statistical analysis software or other tools.

RPA | Advanced Analytics | AI