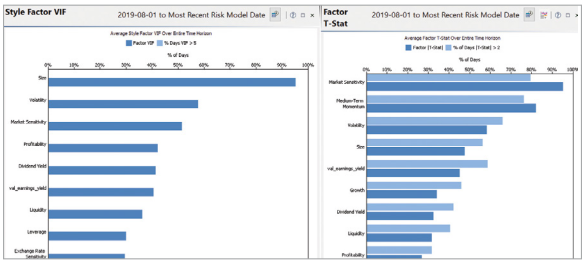
AXIOMA
Analytics by Qontigo

QONTIGO'S SUITE OF PORTFOLIO CONSTRUCTION TOOLS:

- ✓ Axioma Portfolio Optimizer™
- ✓ Axioma Portfolio Analytics™
- ✓ Axioma Risk Models™
- ✓ **Axioma Risk Model Machine™**

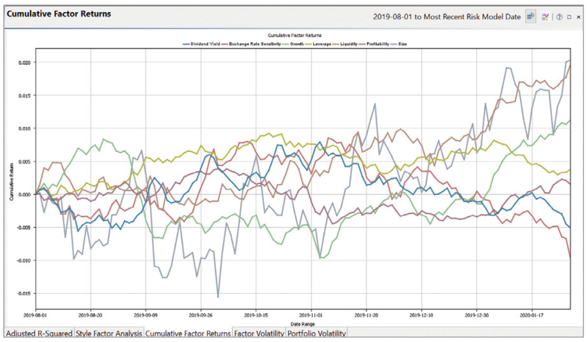
Axioma Risk Model Machine™

Customize risk models to align with your investment process



Qontigo's suite of portfolio construction tools help portfolio managers quickly and accurately implement their investment strategies.

Axioma Risk Model Machine (RMM) enables you to seamlessly build custom risk models so you can gain a competitive edge with unprecedented insights for risk forecasting, portfolio construction, client reporting and alpha research.



RMM aligns factors in the risk model with factors used in the returns model to avoid unintended risk exposures, pinpoint your sources of risk and gain valuable insights into performance drivers – offering greater transparency into your investment process.

What is the Axioma Risk Model Machine?

CUSTOM SOLUTIONS	> Leverage Axioma software, Axioma Equity Factor Risk Models and Axioma Factor Libraries to build customized risk models tailored to your investment process. > Use directly with our software or your own in-house analytical framework.
INNOVATIVE METHODOLOGIES	> Built using innovative methodologies and techniques from our time- tested risk model production system. > Continuously enhanced by the Qontigo Research Team with extensive experience developing innovative industry-leading methodologies for constructing risk models.
LINKED MODELS	> Combine any fundamental factor model to create a custom risk model that captures exposures from all regions or sectors. > View your risk without any inconsistencies or skewed reporting across your organization.

Custom Risk Models with RMM

What are the key benefits?

1 Improve the accuracy of portfolio risk forecasts

"See" the risk resulting from exposures to alpha factors not part of a standard risk model, better understand the factor exposures in your portfolio, catch your industry bets and focus on risk behavior specific to your investable universe.

2 Construct more efficient portfolios

Allocate risk to factors you believe will outperform, incorporate your own industry classification and focus your risk budgeting process.

3 Communicate your investment approach more effectively

Risk and performance analyses created using a custom risk model identify all the "bets"— exposures in the portfolio — you are taking, and calculate returns for all those exposures.

4 Gain insight into the performance of your alpha signals

Validate alpha factor performance using regression-based returns incorporating all the risk factors — then view the historical patterns of these "pure" factor returns and understand their long-term and short- term risk-adjusted return profile.

> Custom risk models enable you to build better portfolios and to gauge more accurately the performance and risks of your investment approach.

Why use RMM to build custom models?

1 Avoid wasting time and resources cleaning data

Use our high-quality risk models and factor library content as the starting point for creating your own risk models.

2 Test and refine your risk models before you deploy

In addition to high quality content and advanced model-building algorithms, RMM provides comprehensive diagnostic reports and interactive analytics views to assess the quality of your custom risk model.

3 Benefit from state-of-the-art processes

Leverage the proven algorithms created by the Qontigo Research Team to build Axioma Equity Factor Risk Models.

4 Let it flow

Validate alpha factor performance using regression-based returns incorporating all the risk factors — and use custom risk models in both production and research workflows. You can easily access custom risk models from all of Axioma's portfolio management software modules.

5 Incorporate linked models

Combine fundamental factor models to capture exposures from all regions or sectors while aligning your risk consistently across your organization.