

How Financial Services organizations can achieve a decisive edge in challenging times



The future is uncertain. That much we know. What really matters in Financial Services is being better at predicting the future, preparing for it, being better placed to profit from it, and, of course, mitigating its risks. There are no magical crystal balls, but we do have digital technology to help us be Always Optimal. You can gain a critical edge in a rapidly changing and challenging environment if you can process more combinations of possible outcomes and futures faster than your competitors.

To do that you need to ask more complex questions and leverage the power of combinatorial optimization to gain faster insights and make better decisions. It is the key to staying financially (and operationally) sound and profitable. There are more possible futures than any human brain can cope with.

And classical computing can't cope with them either. Which means, for most financial services enterprises, there are a huge number of possible futures that can't be analyzed using the tools currently available. If they try, it takes too long.

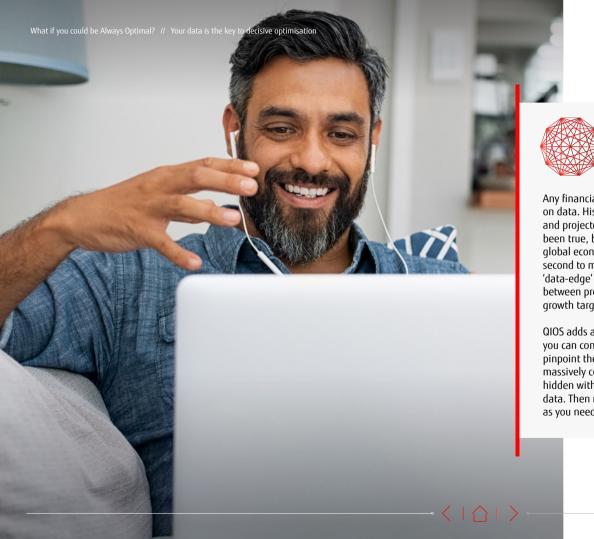
What you need is processing superpower so you can find the optimal solution from that huge number of complex variables and quintillions of options and do it in seconds. Then keep doing it so you can re-optimize your results as often as you need or want to. The ability to deliver combinatorial optimization at speed enables you to act more decisively.

Combinatorial Optimization is recognized as a key function by 57% of enterprises according to Forrester research conducted for Fujitsu.¹ And, the same research showed that the leaders of those enterprises see Quantum-Inspired Computing to the key to achieving an Always Optimal approach to leveraging the power of their data.

Delivering that lightning fast computing power is the simple idea behind Fujitsu's Quantum-Inspired Optimization Services (QIOS). You are able to seize new business advantages while always running your operations at their optimal level.

1. Forrester Thought Leadership Study: Data Review February 2020







Your data is the key to decisive optimization

Any financial services enterprise runs on data. Historical data, current data, and projected data. That's always been true, but in a hyperconnected, global economy that runs millisecond to milli-second, achieving a 'data-edge' can mean the difference between profit and loss and missed growth targets.

QIOS adds an extra dimension to how you can consistently (and quickly) pinpoint the best solution(s) from a massively complex set of possibilities hidden within very large amounts of data. Then repeat the process as often as you need to. The power to do that

reliably has not been possible until now. That means you get a richer understanding of what's happened, what's happening today, and what could happen tomorrow.

Fujitsu's QIOS gives you the calculating power to optimize complex models, processes, and services across an enormous range of use-cases.

This allows you to create business solutions which run faster, use less energy and space, and, crucially, cost less.

Four ways QIOS could make a big difference in Financial Services

- QIOS enables a general insurer to achieve an Always Optimal view of how their customers are engaging with their products and services as well as insights into a broad spectrum of their day-today behaviors. The ability to process a huge number of possibilities and models delivers deep insights into how customer engagement can be improved and innovative products developed and launched in a fast moving marketplace.
- A specialist insurer can offer a client with complex needs a much better-balanced product offering based on a deeper analysis of an array of risk priorities associated with the building of a shopping and entertainment complex. The ability to calculate many complex models linked to the construction, operation, and public liability issues, means that the final deal is priced optimally to win and retain the business.
- Portfolio managers strive each day to maximize returns whilst minimizing risk to achieve the socalled Efficient Frontier. QIOS delivers a processing superpower which enables them to go beyond that and find the Optimal Frontier where a wide range of defined factors that balance high- and low-risk investments with daily return targets are calculated at speed. The quantuminspired approach means that more complex models can be run more often to add a critical dimension to decision making hour by hour.
- All financial institutions must comply with stress testing demands from regulators. QIOS enables the complex and timeconsuming process of Reverse Stress Testing (RST) to be carried out much faster than ever before. The ability to deploy superpower processing means that the RST can be carried out more often. optimizing the agility and resilience of the institution as well as satisfying regulators.















Optimize everything, always

QIOS delivers the power to focus on optimization in any area of your business by enabling you to transform the way you deal with combinatorial optimization challenges. It's a power you can focus on the way you work across your organization and how you engage with your markets.

So, you can:

- Identify the addressable, valuable outcomes you want from your Digital Transformation though our unique Human Centric Design cocreation methodology and with the support from Functional or Industry Consultants which puts you and your needs at the heart of how QIOS works across your enterprise. Our Digital Annealer is the processing superpower which delivers transformation at lower risk. Our Proof of Business consultancy ensures you stay focused on achieving your objectives.
- Start quickly: our Quantum-Inspired
 Optimization Services are powered by the
 Digital Annealer technology that is available now and already helping businesses overcome their combinatorial optimization challenges.

- Control costs: PoBs control initial costs whilst testing the real business case.
 Flexible delivery options provided on premise or through the cloud 'as a service', help control Capex/Opex.
- Overcome skills gaps to ensure you have the right internal skills to achieve your ambitions, we offer an end-to-end solution which includes platform consulting, integration, training and support services.
- Integrate it all with your existing operations - that's essential to leverage value, so we integrate Digital Annealer cloud services to legacy infrastructure. When it's more appropriate, QIOS is also available on-premise and comes with full integration support and services.









Beyond optimization to Always Optimal

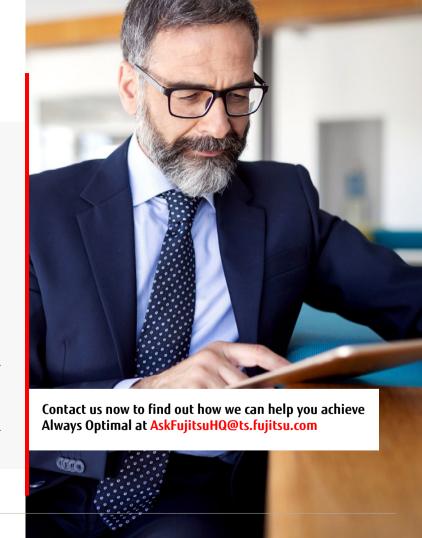
You can drive those key benefits that really matter to your business now and over the long-term:

- Productivity gains: with systems and processes transformed to drive even higher productivity by optimizing processes, systems and assets
- Greater Efficiency: optimize your processes as often as needed, meaning you're constantly running at maximum efficiency
- Transformation: by reaching a new level of business transformation in your Digital Transformation (DX) journey
- Flexibility: through the ability to become Always Optimal from a range of more dynamic processes, operation or environments
- Trust: that your business is running at Always
 Optimal and there's no more cost/outcome
 trade-offs, with the comfort from more accurately
 constrained models, that are operating efficiently

 Sustainability: by running at Always Optimal, your organization is being a more resourceful and sustainable business

As we've stressed, QIOS enables you to ask more complex questions and achieve combinatorial optimization using lightning fast, innovative quantum-inspired computing. If you can make the most of your data, see more, do more, learn more, and do it all faster. That means you're Always Optimal – always ready to cope with the things you can't control, and control those you can in ways which drive your business forward, delight, engage, and surprise your customers, and grow your business no matter how challenging the market becomes.

Ensuring that your business is Always Optimal is critical in a rapidly changing financial sector.





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