



## CASE STUDY

# Modernizing & Optimizing Global Financial Services Infrastructure

451 Planning Advisors helped a leading Canadian financial services firm assess its global data center portfolio, upgrade its capabilities, and develop an integrated Digital Infrastructure Roadmap™ to support anticipated business growth while delivering the reliability and availability its customers depend on for mission-critical investment and transaction activity.

## AT-A-GLANCE

CLIENT	Sun Life Financial
LOCATION	Canada
DATA CENTER TYPE	Enterprise
INDUSTRY	Financial Services
PROFILE	Sun Life Financial (Sun Life) is a leading international financial services company with more than \$13 billion in annual revenue.
SCENARIO	With aging electrical and other infrastructure systems at one key enterprise data center, and growing IT demands anticipated for its worldwide operations, Sun Life needed a thorough assessment of current equipment and systems and an integrated, strategic plan for managing expansion. Sun Life engaged 451 Planning Advisors to develop a Digital Infrastructure Roadmap, helping the company determine how best to utilize its global portfolio of enterprise and colocation/ managed data centers.
SOLUTION SET	451 Planning Advisors Digital Infrastructure Roadmap™
RESULTS	<p>The Digital Infrastructure Roadmap developed by 451 Planning Advisors helped the company to rationalize and “right size” their data center operations so that all of the capacity is utilized effectively and efficiently, avoiding unnecessary investment in overcapacity.</p> <p>Sun Life was able to take the right steps to upgrade its primary facility, now operating as a resilient, secure, Tier III concurrently-maintainable data center infrastructure that supports the storage, network, and server demands of the company’s mission-critical financial services operations, now and well into the future.</p>



## SCENARIO

Sun Life has built a global financial services business over 150 years. Headquartered in Toronto, Canada, it provides a diverse range of protection and wealth accumulation products and services such as financial planning, life insurance, health insurance, and investments to individuals and corporate customers. With more than 14,000 employees, Sun Life and its partners have operations that span North America, Asia-Pacific, the Caribbean, and the United Kingdom and Ireland.

Sun Life's new Data Center AVP, Rocco Alonzi, was facing a challenge: The company's Waterloo, Ontario data center was built in 1985. While it had been well maintained, some equipment and systems were reaching the end of their useful life. The Waterloo center was slated to become a primary operations center supporting the company's expanding global IT operation. To support this role and sustain a higher demand load, the center would need more capacity and an upgraded facility infrastructure.

The Waterloo data center was one of three in North America that supported the company's mission critical IT operations, along with several additional data centers in Asia. The Waterloo center had a computer room of approximately 22,000 square feet, including an office, network operations center, and international response center.

To assess the center's systems and capabilities and identify where improvements needed to be made to prepare for the growth of IT activity, Sun Life turned to 451 Planning Advisors. Sun Life appreciated the hardware agnostic approach and the deep subject matter expertise 451 Planning Advisors provides.

### 451 Planning Advisors helped Sun Life develop answers to the following questions:

What is the true capability of the existing facility?

For how long and to what level can it sustain operations in its current status?

To what extent can it be expanded, and what IT and infrastructure upgrades would be needed?

Will it be better to build or outsource additional capacity?

At what point will facility limits be reached?

### IS YOUR DATA CENTER ORGANIZATION FACING THESE OR SIMILAR QUESTIONS? 451 ADVISORS CAN HELP.

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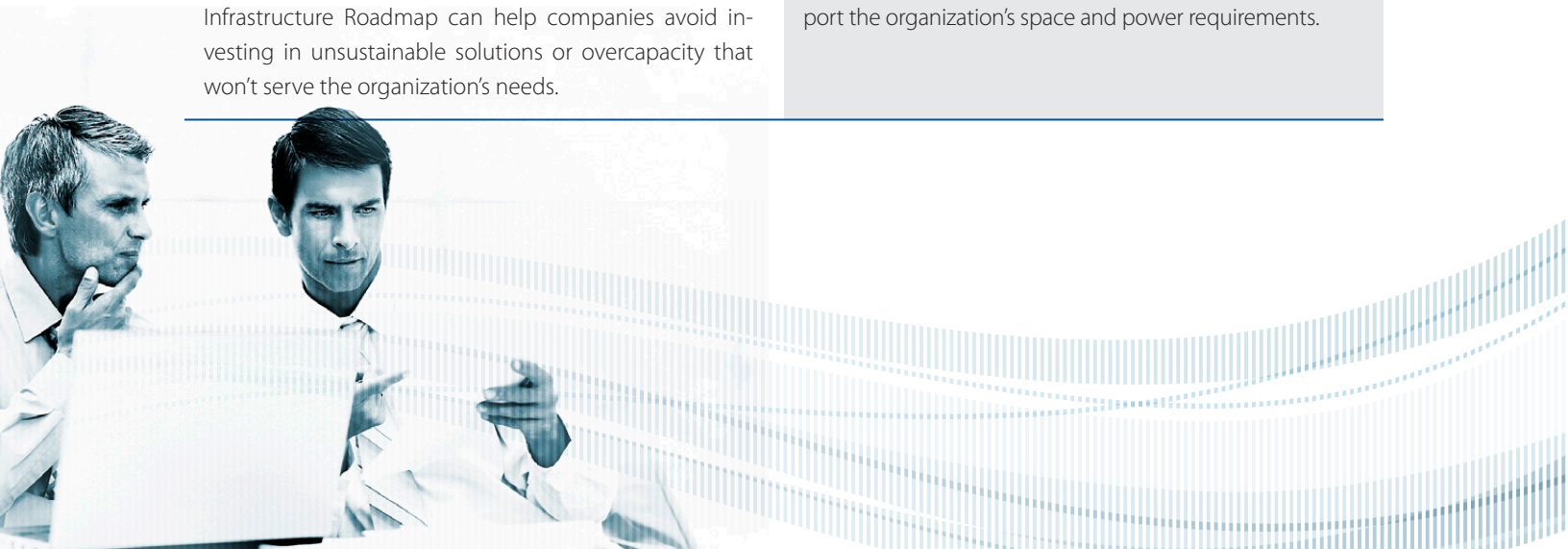
# SOLUTION

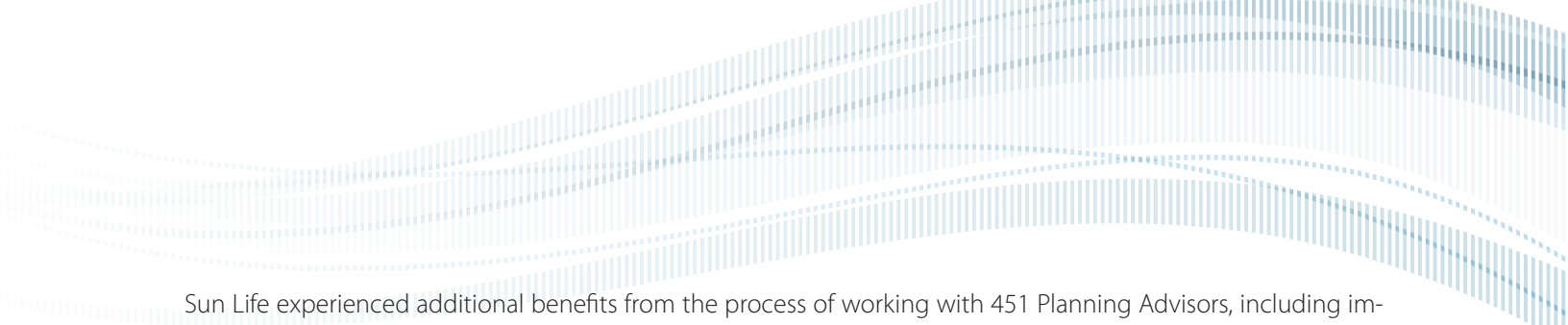
## DIGITAL INFRASTRUCTURE ROADMAP

In addition to its Waterloo data center, Sun Life has an enterprise data center in Toronto, an operation in Boston, and managed data center capacity in Asia. The company was planning to phase out the tertiary Boston data center, so would need to transition that activity to its other data centers. To create a more integrated strategy for managing this portfolio and ensure it had the most effective and cost-efficient platform to support the company's growing IT needs over the next five-to-ten years, Sun Life engaged 451 Planning Advisors to develop a Digital Infrastructure Roadmap™.

For example, Sun Life IT engineers had been contemplating adding server capacity at Waterloo by expanding to three blades per cabinet. However, an assessment of the center had revealed that the current infrastructure would not support that plan. The Digital Infrastructure Roadmap provided a better configuration strategy to support the organization's space and power requirements.

OVERVIEW: DIGITAL INFRASTRUCTURE ROADMAP PROCESS	SNAPSHOT: SUN LIFE FINANCIAL EXPERIENCE
<p>The Digital Infrastructure Roadmap takes a holistic look at current capacity, enterprise needs, the business objectives the company wants to achieve, and what level of infrastructure and performance is needed to support those objectives.</p>	<p>451 Planning Advisors reviewed the company's hardware selection, growth, and implementation practices, and provided Sun Life with five-year growth modeling that included multiple "what-if" scenarios. The planning process took into consideration production, non-production, and disaster relief environments. It assessed space, power and cooling capacity, power density restrictions, and constraint issues.</p>
<p>The Roadmap process helps organizations create an integrated plan based on a clear-sighted assessment of both the current infrastructure and the desired endpoint, with actionable steps to make the transition. It ensures that organizations are investing in the right places to achieve their short, medium, and long-term IT goals. The Digital Infrastructure Roadmap can help companies avoid investing in unsustainable solutions or overcapacity that won't serve the organization's needs.</p>	<p>For example, Sun Life IT engineers had been contemplating adding server capacity at Waterloo by expanding to three blades per cabinet. However, an assessment of the center revealed that the current facility infrastructure would not support that plan. The Digital Infrastructure Roadmap provided a better configuration strategy to support the organization's space and power requirements.</p>





Sun Life experienced additional benefits from the process of working with 451 Planning Advisors, including improved relationships and collaboration within its organization. 451 Planning Advisors consultants met with various members of facilities and IT, they were able to ask the right questions and draw out information specific to each functional area such as servers, networks, electrical equipment, storage, vendor management, and more. By demonstrating deep subject matter expertise combined with big-picture perspective, the consultants gained the trust of all stakeholders, brought alignment to the project objectives, and quickly obtained universal buy-in to the recommended infrastructure pathway.

## RESULTS

The Sun Life Waterloo data center now operates as a very resilient, secure, Tier III maintainable data center supporting the storage, network, and server demands of the company's mission-critical financial services operations. Sun Life's environment features high availability for IT applications, can run in a wide range of modes including hot/hot and warm/warm, with application mirroring that ensures no gaps in performance. A third (active/passive) site provides disaster recovery backup with daily synching and the ability to rollover production in the event of a catastrophic event with only minimal downtime.

The Digital Infrastructure Roadmap helped the company to rationalize and "right size" their data center operations so that all of the capacity is utilized effectively and efficiently. By evaluating which mission-critical applications needed to be run in the active production environment versus those which could be moved to other platforms, Sun Life avoided unnecessary investment in overcapacity.

Going through the Digital Infrastructure Roadmap process also helped build bridges between different functional areas—from IT to security to facility maintenance—instilling a new sense of teamwork and collaboration across the entire organization.

451 Planning Advisors provided unbiased perspective that tied together facility infrastructure and IT considerations including capacity, technology refreshes, growth, and efficiency. The result: a 360-degree view of digital infrastructure that meets Sun Life's business and IT needs more cost effectively in the near- and long-term.

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*We found it tremendously valuable to go through the assessment and planning process with the experts at 451 Planning Advisors. With their up-to-date domain knowledge, mastery of data center infrastructure and operations, and experience with financial industry best practices, they understood the issues we faced and knew what questions to ask. We were able to get a "level set" on our facilities from a capacity perspective, addressing both today's needs and thinking five...eight...twenty years down the road. Through this process, our IT and Facilities teams gained a new appreciation for each other's respective roles and how to integrate their activities collaboratively to achieve business and operating goals.*

**Rocco Alonzi, AVP, Sun Life Financial**





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