

Securing Europe through Accelerated Armament Production

Meet Growing Defense Demands
with Industrial Transformation



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Why Capgemini?

Executive Summary

Europe is under increasing pressure to strengthen its defense posture as global instability continues to rise. But as the threats grow, so do the gaps in Europe's military capabilities—gaps made worse by fragile supply chains and an outdated defense industry, ill-equipped for sustained, high-intensity conflict.

In response, EU member states are committed to increasing defense spending, with a collective goal of mobilizing €800 billion by 2030.¹

Over 30% of this investment is earmarked for equipment and manufacturing². But funding alone won't solve the problem.

Most defense manufacturers are already operating at full capacity, with limited flexibility to ramp up. Production cycles remain slow. Meanwhile, workforces are understaffed and under-skilled—further compounding the pressure on delivery.

Meeting the 2030 readiness target will require immediate action: scaling production, modernizing manufacturing systems, and building a workforce ready to support next-generation defense capability.

Capgemini can help drive this transformation. Through AI, advanced supply chain solutions, and automation, we help optimize operations and increase throughput. Whether modernizing brownfield sites or launching greenfield initiatives, we enable manufacturers to meet rising demand with speed, resilience, and confidence.

¹ Source ² Source



Defense at a Turning Point: Confronting New Realities

Europe stands at a critical inflection point in its defense strategy. Decades of underinvestment and a focus on low-intensity operations have left the continent ill-prepared for today's rapidly evolving security challenges.

Geopolitical tensions—driven by shifting global dynamics and changing alliances—have highlighted the urgent need for rapid-response capabilities. However, Europe's defense infrastructure remains fragmented, with outdated industrial systems and depleted inventories hindering the ability to respond swiftly to emerging threats.

To safeguard Europe's values and sovereignty, EU member states—supported by the defense industry—must take decisive action now. The need for Europe to secure its own defense and security capabilities has never been more pressing.



From Investment to Action: The Strategic Imperative

To meet this moment, European governments are accelerating defense investment. As part of this effort, the European Commission and High Representative have launched the ReArm Europe Plan—part of the broader Readiness 2030 initiative—to help mobilize over €800 billion in spending across member states.³

But despite this renewed momentum, fundamental challenges remain. Inventories are low. Manufacturing lead times are long. And progress is often slow: 75% of aerospace and defense programs exceed scheduled timelines, while more than 40% run over budget.⁴

This disconnect between investment and impact not only undermines Europe's ability to respond effectively—but also exacerbates supply chain vulnerabilities and intensifies pressure on national security.

Europe's future defense readiness now depends not just on how much is invested, but on how quickly and efficiently that investment is turned into capability.

EU aims at
mobilizing

800 bn

defense spendings
in the next four
years⁵



³Source ⁴Source ⁵Source

Opportunity vs. Obstacle: Navigating the Transformation

While the challenges are significant, this moment also presents a historic opportunity for Europe to redefine its defense capabilities. With demand surging for a modern, agile defense ecosystem, the potential for economic growth and technological leadership is immense.

But this opportunity is far from guaranteed. Deep-rooted structural barriers—fragmented production, outdated manufacturing models, and limited scalability—continue to hamper progress. Unless these issues are addressed head-on, Europe risks missing its window to convert momentum into lasting strategic advantage.



Speeding Up Production: Four Core Challenges Facing Defence Manufacturers

To meet the urgent demand for faster, larger-scale delivery, manufacturers must overcome four major barriers.



An Understaffed and Underskilled Workforce

A lack of skilled labor—across trades and technical roles—is limiting output. Many firms face aging teams and challenges attracting new talent.



Low Shopfloor Productivity

Outdated batch production and manual workflows are too slow to meet current delivery demands. Shifting to high-throughput, tacted production models is essential to accelerate timelines.



Outdated Infrastructure and Low Digital Maturity

Rigid, ageing facilities lack the flexibility to adapt to changing requirements or scale quickly. Limited digital adoption further reduces responsiveness and efficiency.



Supply Chain and Forecasting Gaps

A lack of clear demand forecasting and communication across the supply chain continues to disrupt production schedules—causing delays, missed deadlines, and growing uncertainty around deliver.

A Strategic Path to Faster Defense Production

Overcoming the production challenges facing Europe's defense sector demands more than incremental fixes—it calls for a structured, end-to-end approach. Manufacturers need to accelerate output while managing complexity, risk, and resource constraints.

Capgemini's Accelerated Production Framework offers a strategic path forward. Built on deep sector experience and industrial expertise, it helps manufacturers unlock speed, scale, and resilience through two clear transformation routes:

Brownfield: Optimizing Existing Facilities

Enhancing legacy production environments through advanced automation, leaner workflows, digital supply chains, and workforce enablement.

Greenfield: Designing New Digital-First Sites

Building high-performance, future-ready facilities from the ground up, with embedded flexibility, efficiency, and the ability to scale at pace

Brownfield Transformation: Scaling Faster Within Existing Sites

Capgemini enables defense manufacturers to modernize legacy production sites, unlocking higher output without full facility rebuilds. Our approach focuses on three key enablers:

1

Maturity Model and Roadmap

Assessing operational readiness and charting a path to industrial acceleration.

- Evaluates production maturity across digital, operational, and workforce dimensions
- Defines tailored roadmaps to scale output quickly and sustainably
- Aligns transformation plans with sub-sector needs (e.g., naval, ground, aerospace)

2

Workforce Optimization and Upskilling

Building a resilient workforce model for scaled, sustained defense production.

- AI-supported planning, recruitment, and onboarding strategies
- Targeted upskilling and access to external professional talent
- Culture-shaping programs that lower time and cost to hire and train

3

Shopfloor Performance and Flow Optimization

Reconfiguring production to boost speed, efficiency, and flexibility.

- Optimizes layouts, assembly lines, and material flow
- Introduces takt-based scheduling for repeatable, high-throughput processes
- Retrofitting and upgrading legacy machines to support modern demands

Greenfield Acceleration: Building Smart, Scalable Production from Day One

For new facilities, Capgemini helps defense manufacturers design and launch future-ready operations—digitally integrated from the ground up. Our Greenfield approach focuses on three foundational capabilities:

1

Digital Twins and Simulation-Driven Design

Enable smarter decisions from the start with integrated simulation and digital engineering tools.

- Use digital twins to model and test industrial system designs before deployment
- Apply data-driven methods to optimize layout, throughput, and resource allocation
- Enable real-time performance feedback for continuous improvement after launch

2

Full Automation and Intelligent Workstations

Maximize efficiency and flexibility with advanced automation and connected operator support.

- Implement optimal automation levels tailored to production complexity and volume
- Deploy intelligent workstations that support both manual and assisted tasks
- Connect production assets and workers for predictive maintenance and adaptive workflows

3

Supply Chain Control Towers and Real-Time Visibility

Establish connected ecosystems that respond dynamically to demand and disruption.

- Deploy digital control towers to monitor material flows, capacity, and risk in real time
- Improve coordination across suppliers, production, and logistics with live data integration
- Accelerate time-to-production by aligning planning, scheduling, and shop floor execution

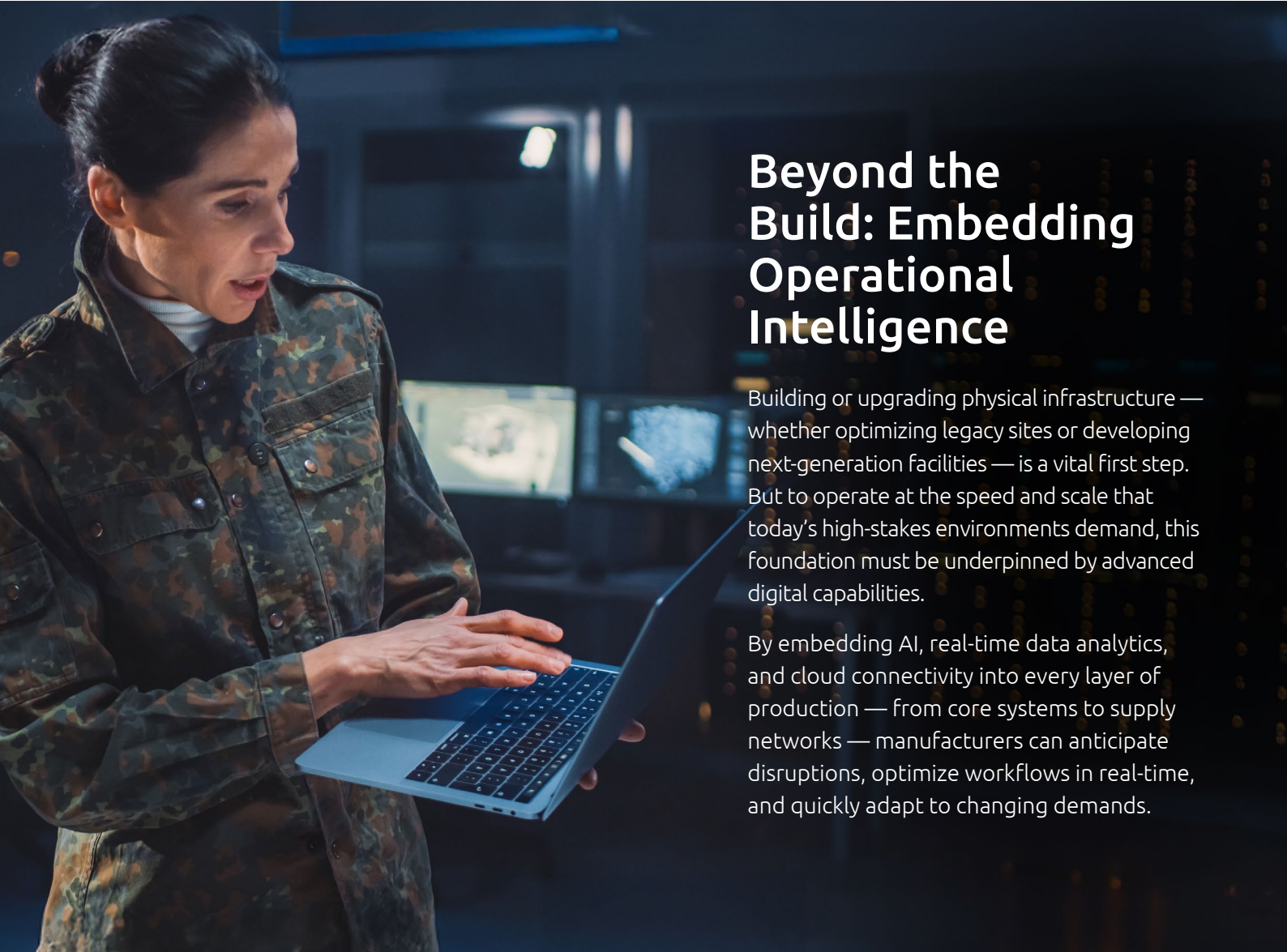
Adapting to Context: The Role of Industrial Archetypes

No two defense programs are the same. Even within Brownfield or Greenfield environments, production requirements vary widely based on the type of platform, technical complexity, and pace of execution.

To drive real operational impact, Capgemini maps its acceleration strategies to four distinct industrial production archetypes. Each one reflects a different manufacturing profile—from high-volume, repeatable outputs to low-rate, bespoke systems.



Capgemini provides bespoke strategies for each production archetype—ensuring scalable, efficient solutions that meet the distinct challenges of both the platform and its delivery requirements.



Beyond the Build: Embedding Operational Intelligence

Building or upgrading physical infrastructure — whether optimizing legacy sites or developing next-generation facilities — is a vital first step. But to operate at the speed and scale that today's high-stakes environments demand, this foundation must be underpinned by advanced digital capabilities.

By embedding AI, real-time data analytics, and cloud connectivity into every layer of production — from core systems to supply networks — manufacturers can anticipate disruptions, optimize workflows in real-time, and quickly adapt to changing demands.

Core Enablers of Data-Driven Acceleration

5G and Edge Computing

Enables greater production agility and enhanced situational awareness.

Cloud Platforms

Supports secure, scalable collaboration and real-time decision-making.

Digital Lean Processes

Enables continuous monitoring and improvement of shopfloor operations.

"5G in a Box"

Brings tactical, mobile connectivity to remote or fast-moving environments.

Trusted by Leading Defense Manufacturers

Across both legacy and next-generation environments, Capgemini enables defense manufacturers to solve complex production challenges and deliver measurable outcomes.

Driving Efficiency in Naval Manufacturing

Partnered with a leading shipbuilder to reduce lead times by 30% through end-to-end process optimization and digital collaboration.

Accelerating Fighter Jet Output with Digital Twins

Supported a next-gen fighter jet program by deploying digital twin technology to streamline ramp-up and improve system integration.

Scaling Missile Production with Smart Automation

Enabled a missile manufacturer to increase throughput by 550% using integrated automation, AI-powered workflows, and adaptive production methods.

Enhancing Supply Chain Agility with 5G and Cloud

Worked with a defense manufacturer to embed 5G and cloud infrastructure, improving supply chain visibility and real-time operational coordination.

Why Capgemini is the Right Partner for Defense



Expertise That Delivers

Decades of experience in aerospace and defense production acceleration.



Trusted by Industry Leaders

A proven partner to leading defense OEMs across Europe.



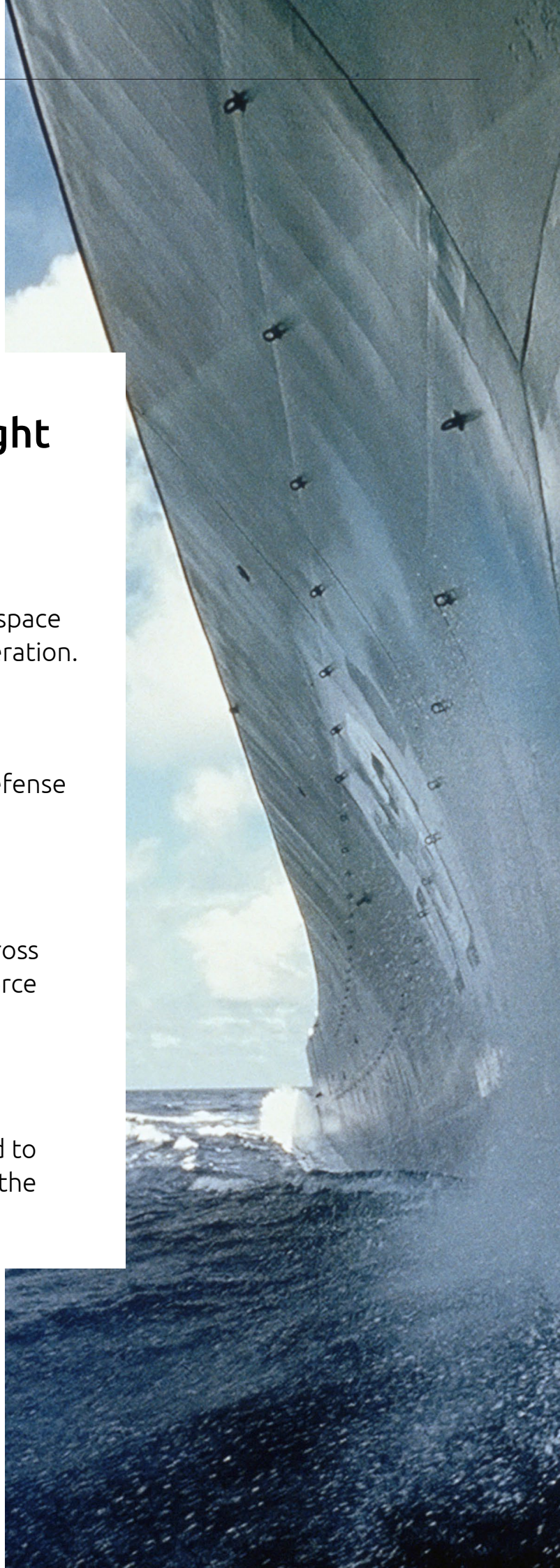
End-to-End Capabilities

From strategy to execution across digital, operations, and workforce transformation.



Committed to Europe

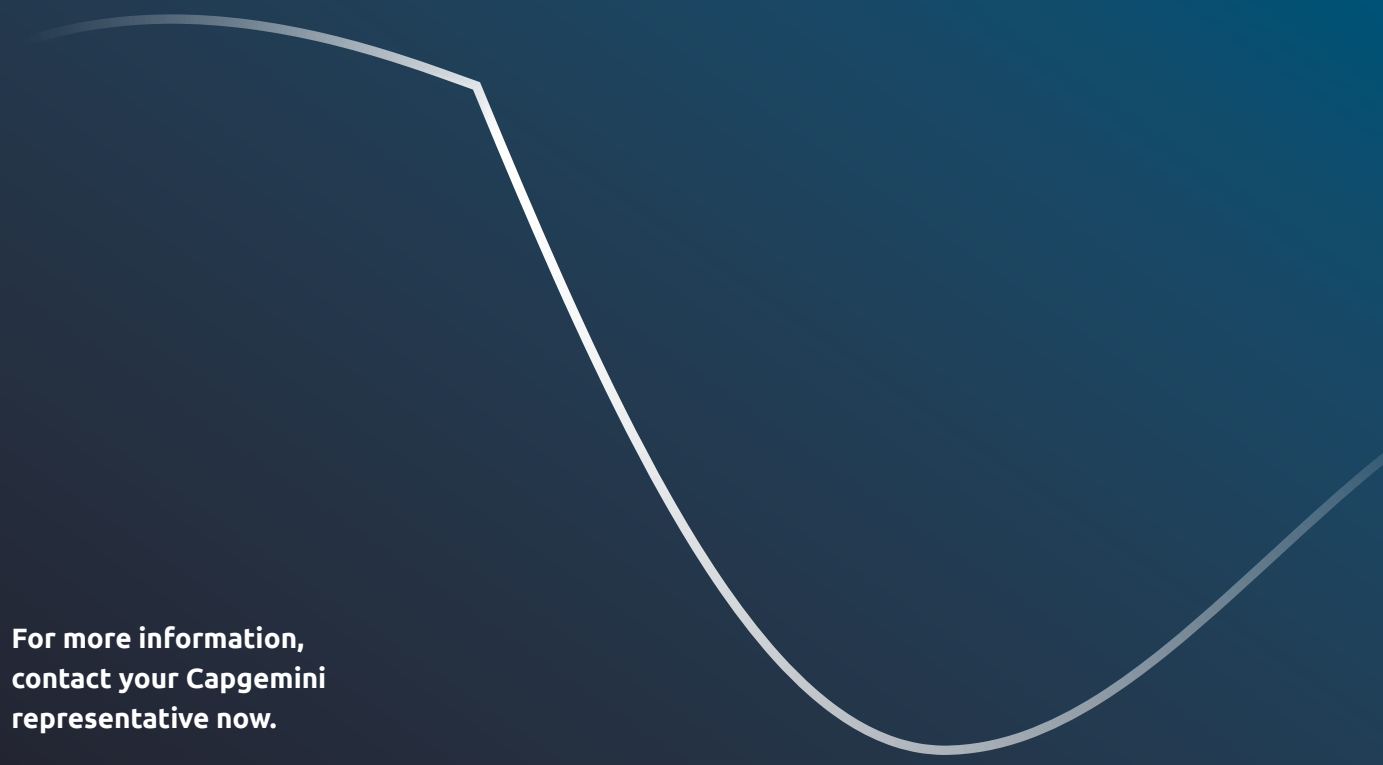
European-based and dedicated to helping secure the defense of the continent we share.



Supporting Your Path to Accelerated Production

At Capgemini, we understand the complexities involved in defense production acceleration. If you're ready to explore how to optimize your operations, we're here to support you.

Our tailored Discovery Workshop and Quick Assessment services offer valuable insights to address your most pressing challenges and create a clear path forward. Whether it's a one-day deep dive or a focused shop floor evaluation, we'll help you make the informed decisions that drive operational success.



**For more information,
contact your Capgemini
representative now.**

