

## Case Study

# Capita Continues Transformational Journey to Become a World-Class Technology-Led Global Consultancy



## The Business Need

Capita, a rapidly-growing consulting, transformation, and digital services organization with locations in the UK, Ireland, and India, is committed to building a world-class technology-led organization to help its customers achieve better business outcomes. Central to achieving that goal is improving their Digital Development Center (DDC), Capita's hub for software development, with three locations in India. Because of their continuing growth, this group identified the need to develop a better process framework aligned to best practices in the software industry, to simplify, standardize and strengthen their software development capabilities. To accomplish this, Capita selected the CMMI model to help build and evaluate their process framework, which was then adopted across the DDC and ultimately the entire organization. Capita's main objectives were to improve:

- Delivery efficiency
- On-time delivery
- Employee satisfaction

## The Solution

The CMMI Development (DEV) view was selected because its integrated set of best practices improves performance and key capabilities for organizations that develop products, components, and services. Capita achieved Maturity Level 3 in 2017. For their latest appraisal, Capita targeted and achieved Maturity Level 5 for both Development (DEV) and Services (SVC).

## Company Background

Capita is a consulting, transformation and digital services business with locations in the UK, Ireland and India, providing innovative solutions to help businesses and the public sector operate effectively and efficiently while transforming customer and citizen experience.

Capita is on a journey to build a world-class technology-led organization, partnering with clients and providing them with the insight and cutting-edge technologies that give time back, allowing them to focus on what they do best and making people's lives easier and simpler.

For more information, go to [capita.com](https://capita.com)



Adopting CMMI helped Capita create the required process and discipline to create a repeatable and scalable methodology for software development and helped them standardize the way they work. Capita chose to concentrate on these capabilities for their latest appraisal:

- Ensuring Quality
- Engineering and Developing Products
- Delivering and Managing Services
- Planning & Managing Work
- Managing Business Resilience
- Managing the Workforce
- Supporting Implementation
- Sustaining Habit and Persistence
- Improving Performance

## Key Performance Goals Achieved

### **CAPITA IDENTIFIED AND SOLVED KEY PERFORMANCE AND PROCESS ISSUES**

Capita's Action Learning Projects (ALP) initiative was a key factor in helping Capita identify and achieve its goals. These are cross-functional teams that included executive management and key staffers that define business objectives and strategies, review actual performance and revise business strategies and business objectives on an on-going basis.

They deployed an organizational scanning exercise to identify improvements that can be tested and then deployed across the larger organization. They focus on both smaller kaizen-like improvements, which help local level automation reduce inefficiency or eliminate non value-added activities, and also focused on CMMI's Causal Analysis and Resolution (CAR) Practice Area which at Practice Group Level 5 requires a formal statistical rigor. Process Performance Models (PPMs) are also leveraged to use historical data to identify the criticality of problems in terms of the certainty of achieving the project or business objective, and identification of critical sub-processes using sensitivity analysis.

**“We are very proud that our software expertise and talented colleagues have received the highest form of validation by CMMI. Our software development capabilities are industry-leading and we continuously look to anticipate our clients’ needs, developing solutions that prepare them for the future. This achievement validates our commitment to consistently providing high-quality software and services to our clients and benchmarks us against the highest industry standards.”**

**Alan Hartwell, Chief Operations & Technology Officer, Capita Software**




These processes helped to identify and achieve big and small wins throughout the organization. For example, a wide range of employee recruitment and onboarding metrics improved significantly. To improve delivery efficiency, Capita's Automated Code Review tool was adopted by 90% of the organization.

In particular, Capita's domain competency saw dramatic improvement. Capita determined that improving story completion ratio was a key objective and used a formal Causal Analysis and Resolution (CAR) process. Capita built a predictive model to show where domain skill would have a high impact on story completion ratio. The specific improvement instituted were to:



- Create a domain competency matrix
- Create a Structured Domain Knowledge repository for improvement of the proficiency
- Initiate workshops on job mentoring and multiple sessions for improvement of people skills
- Initiate measurement of Domain Skill Index to track team performance

These domain competency initiatives helped Capita realize significant business improvements by adopting CMMI best practices, including:

- Domain skill index increased from 48% to 57%, and reached 63% by September 2020
- Overall SCR improved by a mean of 97% with a significantly reduced variation of 5%
- This helped improve percentage of projects meeting the story completion target within a year by nearly 10%

| Business Objectives  | Before Improvement Quality and Process Performance Objectives (QPPO) | Improvements Made  | Post Improvement Results of Quality and Process Performance Objectives (QPPO) | Business Benefits  |
|--|--|--|---|--|
| <b>Improve Delivery Efficiency</b><br> | Backlog Horizon was 2.2  | BDD was rolled out to improve team skills and usage of tools like SpecFlow, Cucumber and Gherkin languages to write feature files<br><br>Analysis of specific variations (e.g., inadequate time spent on refinement sessions) were addressed at the project level and improved | <b>Backlog Horizon increased to 3 at the end of 2020</b>                      | Improved work pipeline and enhance DDC business                      |
|  | Dev to Fix Ratio was at 75%  | Special regression variation issues that were not part of initial sprint planning, were analyzed at project level and addressed  | <b>Dev to Fix Ratio improved to 90.9% by end 2020</b>                         | Achieved balance with the new feature development vs. technical debt |



| Business Objectives   | Before Improvement Quality and Process Performance Objectives (QPPO) | Improvements Made  | Post Improvement Results of Quality and Process Performance Objectives (QPPO) | Business Benefits  |
|---|--|--|---|--|
|   | Productive utilization performance was 84%                           | Brought stability in sprint commitments, people initiatives thru Action Learning Projects (ALP) tracks   | <b>Productive utilization improved to 95% by end of 2020</b>                  | Improved offshore utilization and enabled offshore teams to increase productivity and business share. Autonomy increased from 46.9% to 57% |
| <b>Improve On-Time Delivery</b><br>        | Story completion ratio performance was 90%                           | Included Domain BA Workshops as a new process. The process change was successfully piloted in two projects and rollout to other projects is underway. Special causes like alignment of Definition of Done were analyzed at project level and addressed   | <b>Story completion ratio improved to 95% by end of 2020</b>                  | Improved stability in commitment from teams. Sprint planning and execution process improved  |
|   | Turnaround time for medium tickets was 3.49 days                     | TAT is plotted on a control chart and any outlier's analysis with RCA for special causes. The TAT is also monitored for process shifts due to the skill improvement ALP and statically analyzed to see the shift<br><br>Domains have been taken up with onshore teams to understand future volumes and made part of the ALP track for skilling | <b>TAT reduced to 2.9% And resolution maintained at 100% by end of 2020</b>   | Improved timely delivery performance, and helped organization improve delivery service   |
| <b>Improve Employee Satisfaction</b><br> | Team Health Index was 63%  | Employee friendly initiatives, tool-enabled collaboration with stakeholders created continuous learning avenues, reducing onshore dependency   | <b>Team Health Index improved to 88% by end of 2020</b>                       | This resulted in happier employees and provided positive impact on productive utilization  |

## Lessons Learned

As a result of their CMMI journey, Capita was able to optimize software development and business processes and predictability. This in turn helped Capita build confidence and trust with their customers and employees. The results, which are now benchmarked against the highest industry standards, validated Capita's approach and helped Capita continuously and proactively anticipate clients' needs.



They realized that the CMMI DEV view was better suited for their agile development process than previous models, because it focused on business improvements. The journey from ML3 to ML5 created both significant process improvement and a complete organizational cultural shift focused on data-driven decisions rather than people-driven decisions, with increased emphasis on Governance and Right Infrastructure. This model helped Capita transform the entire organization by turning 'local discoveries' into 'global improvements'. This allowed Capita to identify and codify best practices throughout the DDC.

**“The CMMI adoption helped us to deliver more releases which enabled the customer to meet or exceed their end customer’s expectations.”**

**Alan Hartwell, Chief Operations & Technology Officer, Capita Software**

By focusing on their own process improvement and identifying best practices in the DDC, Capita helped align the entire global organization towards a common vision and goals. Employees now understand how their individual efforts help not only their team, but help the entire organization achieve its goals.

The CMMI appraisal also helped to future-proof the organization in the ultra-competitive software development market: the DDC’s new proprietary innovation methodology, Pocathon, helps Capita develop new products faster based on real-world applications. Using hackathon principles, subject matter experts, and digital innovators, Pocathon enables Capita to produce viable 'proofs of concept' to drive customer adoption of digital innovation. This helps to differentiate Capita in a crowded and competitive marketplace.



## The CMMI Performance Report in Action

**See for yourself how organizations around the globe are leveraging CMMI to improve business performance and create a sustainable competitive edge.**

**Download this report to view the analysis of the performance improvement results found in CMMI appraised organizations' Performance Reports. Go to [www.isaca.org/cmmi](http://www.isaca.org/cmmi) to download your complimentary copy.**



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