# **CASE STUDY**

## Blue People Perfects On-Time Delivery and Scales Scrum with CMMI® High Maturity Practices

Mexico-based Blue People Reduces Schedule Deviation from 80% to 1% by Implementing Processes that Meet the Intent of CMMI Maturity Level 5 Practices



# THE BUSINESS NEED

Founded in 2015, Blue People is an IT company providing software development, nearshoring, recruiting, and consulting services via a specialized team in Mexico. As business rapidly grew, Blue People found that the Scrum methodology which had enabled the organization's success was unable to scale to meet its quickly growing demands. Blue People looked outward to find a solution that would help the organization continue to move forward without the "growing pains" associated with other fast-moving organizations.

Blue People wanted to improve the organizational consistency of the company's accelerated Scrum-based processes in an orderly manner. "We used the Scrum methodology adapted to

our organization, but we lacked maturity in terms of documentation and knowledge transfer to new team members," notes David de la Garza Varela, Process Manager at Blue People. They wanted to choose an internationally-recognized solution that would recognize and validate the quality of the company's work. To meet these needs, Blue People decided to adopt the CMMI model.

# THE SOLUTION

Blue People had two goals regarding the adoption of CMMI. "First, we wanted to demonstrate process maturity to our customers. Then, we wanted to scale up in an orderly manner, so we needed to standardize our processes while keeping them lean and agile," explains Enrique Carro, CEO of Blue People. They knew the CMMI Development model would make this possible.

Varela elaborates, "The CMMI model generates a great advantage for the organization because it

#### COMPANY BACKGROUND

Implementing the use of information technologies in multiple areas to improve the efficiency of client products and processes, Blue People offers clients personalized services by accurately identifying their needs, providing advising and consulting services, and maximizing their performance throughout different business phases. Blue People works with the top 1% of all software developer engineers in Mexico, through their own recruitment methodology involving multiple programming and logical evaluations to offer their clients the best experience in different IT areas.



tells you what to do but not how to do it, giving the freedom to adapt each process and practice to our unique organization and objectives, covering all the necessary aspects for the development of high-quality software."

Initially Blue People targeted CMMI Development Maturity Level 3 (ML3), because they knew that standard processes would enable and improve their organizational consistency and help define more efficient processes. After achieving Maturity Level 3, Blue People set their sights on Maturity Level 5 (ML5). "After achieving Maturity Level 3 we had our set of standard processes and a framework for improvement, but we needed to take it to the next level and statistically support our improvement. We knew that this was the next step, and as we worked towards ML3, we already had our minds set on ML5," notes Carro.

Blue People's main goal to achieving Maturity Level 5 was to set up a framework that would allow them to identify key processes, measure those key processes through process performance metrics, and initiate improvement plans based on an analysis of metrics. Through statistical analysis of process performance metrics, Blue People hoped to improve the predictability of their schedule and performance deviation.



# RESULTS

Through their successful adoption of CMMI, Blue People quickly grew 440% in revenue within an organized process without the problems commonly experienced by companies on a similar accelerated growth trajectory. "CMMI adoption helped us accelerate our journey to process maturity, ensuring we cover all aspects and best practices of high-quality software construction," explains Carro; "the adoption of CMMI Development ML5 practices enabled us to achieve a deep statistical understanding of our daily performance to ensure quality at all levels of development." Organized, documented processes aided knowledge transfer to new team members as the organization expanded.

The implementation of processes that met CMMI practices also improved effort and schedule predictability for all projects within the organization, providing a deeper understanding in order to better allocate resources and provide results to clients within the agreed-on timeline and cost. Blue People saw marked improvement when they adopted CMMI ML3; after adopting CMMI ML5 they saw even more significant improvement. They brought their effort performance deviation down from 55% (initial baseline without CMMI) to 20% (after adopting CMMI ML3) to 12% (after adopting CMMI ML5). They brought their schedule performance deviation in from 80% (initial baseline without CMMI) to 15% (after adopting CMMI ML3) to 1% (after adopting CMMI ML5).





By adopting CMMI Maturity Level 5, Blue People:

- Increased customer satisfaction by more accurately predicting delivery dates and meeting commitments.
- Increased project effectiveness and deviation performance by building a tailored process for each project, based off of prediction models.

Carro notes, "our adoption was successful not only because we were able to meet and exceed our customers' needs and Development Center's set Quality and Process Performance Objectives (QPPOs), but also because our Strategic Improvement Plan yielded a 6 to 1 ROI. It's also worth mentioning that we fully implemented ML5 in just under 9 months."

# **KEY TAKEAWAYS FOR ENABLING SUCCESS**

Carro explains that the biggest thing that other organizations could learn from Blue People's approach is that "CMMI must be adopted in a way that feels natural and makes sense to their particular organization and not just the way others have done in the past." What worked for Blue People was designing process with both CMMI and Agile in mind, building support to institutionalize their process, and seeking to continuously improve and never settle.

#### Design Agile Processes with CMMI Practices

Blue People focused first on the principles of each one of the most current methodologies (Scrum for constant communication practices and ceremonies, Kanban for visual aid and team alignment, TSP/PSP for precise data and quantitative analysis), extracting the value of each. They then developed platforms (Blue Surf for process management, to daily statistically manage and control projects through process performance metrics, and Blue Wiki for process documentation, to map CMMI practices to all the processes, events, and documents that meet them) in order to monitor their projects from start to finish.



"By focusing on the principles instead of the methodologies we were able to design processes that were achievable, doable, and with little to no overhead, that allowed everyone to keep their attention on the task at hand and gain maximum value from the model," emphasizes Carro. "CMMI gave us a roadmap that incorporates all of these principles and best practices into our lean/Scrum approach."

# Institutionalize Processes with Organizational Support

Blue People was able to implement CMMI throughout the entire organization in an accelerated way only because the company, management, and process owners were completely committed to the implementation and continuous improvement. As personnel saw how CMMI-based processes accelerated their work – for example in using performance models to enhance project planning, providing project managers with tools to predict project outcomes based on statistical analysis – enthusiasm grew.



Blue People proved that processes that meet the intent of CMMI High Maturity practices can be implemented in a way that yields great results when the whole team is fully committed and understands the principles and objectives of implementation. "CMMI helped us to create processes in a way that fits our organization without forcing tedious processes, keeping a high adherence to the process and a high sense of belonging for everyone," explains Carro.

#### Continuously Improve and Look to the Future

Blue People is already looking forward to the next step as they continue to actively improve their process performance capabilities related to quality and schedule delivery performance. Before adopting CMMI ML5, Blue People didn't have the ability to compose a defined process for each project during the planning stage and select subprocesses or attributes based on predictions. While Blue People was already used to basing decision making and improvement proposals on quantitative root cause analysis after achieving CMMI ML3, CMMI ML5 has opened a path for more successful improvement into the future. Carro explains, "by gaining the capability to statistically manage our projects and processes, our improvement path going forward became clear and, with the framework we have in place, we intend to keep changing, adapting, and improving."

## ABOUT CMMI® INSTITUTE

A subsidiary of ISACA Enterprises, CMMI Institute (**cmmiinstitute.com**) is the global leader in the advancement of best practices in people, process, and technology. CMMI Institute enables organizations to elevate and benchmark performance across a range of critical business capabilities, including product development, service excellence, workforce management, data management, supplier management, and cybersecurity.

For over 25 years, thousands of high-performing organizations in a variety of industries, including aerospace, finance, healthcare, information technology, software, defense, transportation, and telecommunications, have achieved sustainable business success through CMMI adoption and demonstrated their ability as capable business partners and suppliers.