

SOFTWARE-DEFINED INFRASTRUCTURE FOR EMBEDDED APPLICATIONS IN AUTOMATION



A Global Leader in Automation Products and Services

The Client engaged PreScouter in this Research Support Service Project to help them learn more about which software-defined infrastructures for embedded applications they should begin adopting into their automation products.



CHALLENGE

To help formulate a product development strategy for the next few years, the Client team wanted to know what container infrastructures and platforms were in use for automation and how were they being used; what the alternatives to containers were; whether functional programming or a new approach was becoming prevalent in embedded systems; and who were the leading suppliers of embedded applications.



APPROACH

PreScouter approached this project in stages, beginning by developing an overview of approaches for solving data switching problems that utilize a container infrastructure and analyzing platforms in use by the automotive and telecom sectors. Next, the team provided an overview of developing and commercialized hardware platforms for containers.

PreScouter then engaged a Subject Matter Expert to gain insights into the use of embedded systems and best practices for a container and alternative approaches. Finally, PreScouter provided an academic overview of embedded systems research regarding functional programming, using containers for data management, and alternatives to the container approach.



OUTCOME

PreScouter identified **4 development paths** for the Client team to investigate further that used technologies and approaches at the cutting edge.



Impact of PreScouter's Work: A hybrid approach for embedded applications was recommended to the Client team and shared with management in order to develop new products and services.

