

CASE STUDY

Increasing a multinational IT company's digital component capabilities

The Client is an American multinational information technology company that provides product design and engineering, enterprise services, data analytics, IoT and cloud computing to a variety of clients globally.



The Challenge:

The client came to PreScouter to help increase its digital component capabilities. This was a critical priority for the client in order to provide its customers access to fast, effective digital models to attain accurate and fast simulations of electronic systems. The client's main goal was to provide accuracy rapidly and with low latency (beyond what was currently achieved at the time). The project focused on identifying:

- Databases and digital models of relevant electrical components provided by foundries in various standards
- Advances in modeling/simulation of electronic systems to permit higher simulation speeds and lower latency than current standards
- A simulation of a digital camera, including all of its electric components



Methodology:

PreScouter put together a multidisciplinary research team composed of four Advanced Degree Researchers from PreScouter's global network with expertise in computer science, electrical engineering, and materials science. Due to the very technical nature of the project, PreScouter expanded the team to include two Subject Matter Experts (SMEs) from the global network with relevant competency and a rich history of work in the field.

The PreScouter team used several approaches to address the Client's challenge:

- A thorough **patent search and analysis** to identify relevant technologies
- A detailed search of **market reports** related to the electronics simulation software market to identify any companies that were developing relevant technologies
- A comprehensive search of major **simulation providers and their product catalogs** to evaluate various offerings
- A targeted examination of **literature** to see the state-of-the-art in the academic space, and to see if any significant research was being licensed or developed with a potential commercial supplier



Results:

The goal of this engagement was to provide the Client with an overview of solutions that would help the Client develop its digital component capabilities.

In the first round of research, after carefully examining patents, market reports, solution providers and academic literature, the PreScouter team selected and analyzed **33 technologies and relevant organizations** whose products and services most closely matched the Client's requirements. The results were presented to the Client directly with recommendations on which solutions appeared to be the most promising.

In the second round, PreScouter helped the client address the electronic design market and focus on electronic digital components (physically packaged) and IP (digital semiconductor intellectual properties). The availability of effective digital models enabled the Client to **provide fast and accurate electronic simulations** with high accuracy and stability of these digital models to ensure rapid evaluation inside a simulation kernel.

Finally, the SMEs PreScouter recruited brought to light close to **20 additional solutions** that may fit client requirements, and presented their targets and answered client questions during a check-in meeting.

Impact of PreScouter work:

PreScouter's results and expert recommendations helped the Client identify potential technology partners to proceed with their goals of enhancing digital component capabilities. PreScouter presented the results directly to the Client's team, and provided the Client with actionable data to assist in making more informed decisions.

The Client noted that the data garnered during this 4-week engagement saved their team months of researching a single technological solution that doesn't yet exist.



Explore how PreScouter can help solve your innovation challenges. Contact us [here](#) or email us at solutions@prescouter.com.

500+
CLIENTS
WORLDWIDE

4000+
RESEARCH
REPORTS CREATED

150,000+
HOURS OF RESEARCH
COMPLETED FOR CLIENTS

TERADYNE

 **Cabot
Microelectronics**


EMERSON

ASML

TOSHIBA
Leading Innovation >>>

 **Micron**

 **maxim
integrated**

 **Amkor
Technology**

 **NEPTUNE**
TECHNOLOGY GROUP

 **Entegris**

 **APPLIED
MATERIALS**

 **LATTICE**
SEMICONDUCTOR

About PreScouter

PRESCOUTER PROVIDES CUSTOMIZED RESEARCH AND ANALYSIS

PreScouter helps clients gain competitive advantage by providing customized global research. We act as an extension to your in-house research and business data teams in order to provide you with a holistic view of trends, technologies, and markets.

Our model leverages a network of 3,000+ advanced degree researchers at tier 1 institutions across the globe to tap into information from small businesses, national labs, markets, universities, patents, start-ups, and entrepreneurs.

CLIENTS RELY ON US FOR:



Innovation Discovery: PreScouter provides clients with a constant flow of high-value opportunities and ideas by keeping you up to date on new and emerging technologies and businesses.



Privileged Information: PreScouter interviews innovators to uncover emerging trends and non-public information.



Customized Insights: PreScouter finds and makes sense of technology and market information in order to help you make informed decisions.

500+
CLIENTS
WORLDWIDE

4000+
RESEARCH
REPORTS CREATED

150,000+
HOURS OF RESEARCH
COMPLETED FOR CLIENTS