



## Case Study: Applications for Victrex PAEK

## **SITUATION**

Victrex is a world leader in High Performance Aromatic Polyketone Solutions (PAEK). Over the past decade, Victrex has made product innovation and market understanding a top priority with a goal to listen and learn from the best, including existing and future customers. Following the McKinsey model for the horizons of innovation<sup>1</sup>, Victrex had achieved success in horizon 1 and horizon 2 projects, and now looked to accelerate their horizon 3 leading edge and innovation.



At the same time, Victrex wanted to move toward a more customer centric, evidence based, innovation model for horizon 3 projects A key challenge was conducting customer discovery research seeking problems to solve in markets and applications new to Victrex, with solutions that were also new. Victrex needed help finding and conducting direct interviews to test innovation hypotheses, and distilling insight from these interviews.

## **ACTION**

The SearchLite was engaged by Victrex's New Business Development team to conduct customer discovery and customer validation, to find and interview subject matter experts in a variety of domains new to the company, and to draw insights from those interviews. This research included projects in 10 different domains ranging from additive manufacturing, electrical vehicles, flexible printed electronics and medical implants. Over 150 interviews were conducted in a 3-year span. As an example, The SearchLite conducted approximately 50 subject matter expert (SME) interviews in the Flexible Printed Electronics global value chain, with industry leaders across multiple regions and functions.

## **RESULTS**

Throughout each of the multiple phases and targeted domains, key findings from interviews were synthesized and presented by The SearchLite to Victrex on a weekly basis. Once enough insight was generated to determine the best problem-solution fit applications within a domain, interviews shifted to customer validation with more emphasis on product-market fit/BD opportunities. Victrex was especially interested in identifying specific, niche opportunities where PAEK thin film may uniquely enable a new or emerging application.

In an example scenario for Flexible Printed Electronics, PAEK film was chosen as the best substrate based upon extensive material experiments driven by the need for high signal-to-noise performance and new form factors. The critical material characteristics needed were (1) Low dielectric loss at high frequency; (2) Good ink printing surface adhesion; (3) Flexibility and (4) Mechanical stability at 140c.

Several BD opportunities emerged from the three-year engagement in the form of new clients and partnerships. In addition, hypothesized, low-value applications were eliminated, allocating resources to more high-value growth areas.



<sup>&</sup>lt;sup>1</sup> https://www.executestrategy.net/blog/mckinseys-three-horizons-of-growth