Lead Generation Marketing Platform

tsf.tech were appointed by an institutional investor to undertake a high level technical due diligence assessment of the target company's digital marketing platform, focused on their software engineering and development practices.

The investment was for further automating functionality on both an incremental basis and also implementing a longer-term AI oriented product roadmap, to build a scalable and more dynamic platform to meet the needs of current and future customers. Funding will also be used to scale headcount in key technology, process and client facing functions.

The Company had strong domain knowledge in the leadership team, and technology expertise. There was a high level, product roadmap and hiring plans.

The scope of the due diligence review was:

Is the software robust and sufficiently agile enough that it can be improved and developed in-house should any problems arise, and in order to develop further products?

Does the Company have adequate policies and procedures in place regarding the software and development to ensure there isn't too much over reliance on specific members of the technical team, and the development is properly documented.

Specifically, we were asked to identify any barriers to scaling.

The five areas we focused on in the follow up work are as follows:

- Technology team leadership, structure and hiring plans
- Cloud strategy, architecture and technology strategy
- Product roadmap strategy, development and management
- Engineering processes
- Project management and delivery processes

The due diligence review identified significant gaps across the business.

Leadership: The company evidenced a high level of strategic commercial leadership and structure in its product development planning. However, whilst well executed to date, growth ambitions outstrip product and technology development resources, capabilities, processes and procedures. This is not unexpected in a company of its current size.

We recommended the appointment of a Chief Operations Officer to enable the CEO to operate fully within that role, and a Chief Product Officer to secure operational capacity and leverage as operations scale for future growth. This was accepted, introducing a further £140k of cost into the business but recognised as a required investment for growth.

Product: From a technology perspective, the current product is innovative, stable and 'fit for purpose', built on a viable technical architecture and technology stack, which is robust and scalable in the near term. The tech team has established impressive credentials to execute and respond to customer demand. However, the software has no inherent IP, and this should be a key focus in the next twelve months.

Product-Market Fit: The business has a clearly articulated problem-solution and product-market fit strategy. Management has an ambitious and logical product growth strategy from a commercial perspective.

Product Roadmap: There is a clear need to improve product roadmap development and management. Current process relies heavily on the CEO-CTO axis, with new opportunity identification and customer feedback the drivers. Probably the biggest risk here was the focus on short term customer-driven features instead of on long term strategic product planning development. This needs to be addressed, ideally by appointing a dedicated Product Manager to own this process. This was accepted introducing an additional £45k cost to the business.

There were a number of risks identified across the technology elements of the business.

Architecture and Technology Stack: The knowledge about platform architecture is mainly confined to the CTO, there is no clear documentation, or diagrams available that would allow stakeholders or new team members to understand the inner workings of the platform. This is the product of ship-fast entrepreneurial culture in the business, which is understandable and has worked well to bring the tech platform to the current level as quickly as possible.

Cloud and Data strategy: The infrastructure and data strategy has been mainly driven by customer needs, which is understandable for the fast-growing entrepreneurial culture within the company. The move to Amazon Web Services cloud (AWS) is a good decision and will improve scalability of the platform in the long run.

However, scaling the business needs a clear strategy for resilience and scalability of the tech platform, which is not defined at present. Few of the critical components have a single point of failure deployment model. Although the platform runs below capacity currently, the lack of plans for resiliency and scalability of key components is a risk. The fragmented nature of the cloud resources

and data infrastructure (where UK Fast and AWS are used, in addition to consideration of on-premise servers), will require extra skills and resources as the business grows.

Technical debt: Start taking considerations to address technical debt - few key components in the tech stack have no or little internal knowledge and understanding, and lack of versioning and rollback strategy, could hamper technology development in the medium term as the business scales out.

Tech processes: Overall, the technical leadership provides for standard practices for a startup software product business, including code quality and readability and documentation. However, these need to be significantly improved universally for the company to realise its growth ambitions.

Project Management & Delivery. At face value, current practices are those of a startup, and this would seem a sensible approach given the resources available. However, it is piecemeal, driven by short-term demands, and lacks any sense of real objective planning and priorities. This environment would not support scaling and growth of the business.

As a result, we were appointed to address these shortfalls. Following a three month project, the funding was secured. As part of this consultancy, we also prepared and implements a Talent Management Strategy for the tech team covering the following:

- Workforce planning
- Job & organisational design
- Recruitment Marketing
- Recruitment & Selection
- Reward strategy
- Engineering Culture
- Performance Management
- Personal Learning & Development plans
- R&D and Innovation strategy
- Leadership training for seniors