

## **Executive Summary for iMerit**

iMerit Technology Services trains and employs marginalized Indian youth in the IT sector while providing dataset curation data services for many U.S and European technology companies. As two Global Social Benefit Fellows, we helped iMerit evaluate potential strategic opportunities for its growth. We analyzed its software system needs and prepared a software system specification (SRS) document. We recommend strategies for expanded use of machine learning.

Semi-structured interviews and self-efficacy surveys with employees, and 5 weeks of observation, informed our research. We investigated employee skill sets, assigned projects, morale, and perceptions of work tasks. We analyzed business needs to determine software system requirements. Our research generated ideas for improved employee training modules and requirements specifications for a customized software solution to streamline business operations.

iMerit has begun to use machine learning, building upon several competitive advantages: established company practices of confidential data protection, strong peer bonds among workers due to their shared cultural background, and productive technology work habits rooted in training. iMerit employees demonstrate intellectual engagement with their work, and report being empowered by their work.

Our research yielded a preliminary report on iMerit's machine learning, and will inform a senior honors thesis. The thesis will explain the needs of the computer vision industry by focusing on iMerit as an example of a social enterprise engaging in machine learning data processing, drawing on the experience of employees for insight into their capability, self-efficacy, and potential to acquire skill over time, and thus evaluate their position in the delivery chain of machine learning technologies. We recommend that iMerit transition from primarily working in the business process outsourcing sector to working in dataset creation services.

The SRS document we generated describes the functionalities of a centralized platform for iMerit. The SRS includes functional requirements and non functional requirements that explain what the system must accomplish and in what manner. Use cases are provided; these describe the sequence of actions users take to achieve their goals. The SRS document can aid iMerit in deciding whether to invest in a customized software solution.

We encourage iMerit to consider incorporating machine learning into its training modules and programs for new employees. Doing so has the potential to increase productivity rates. We recommend that iMerit use the SRS document to explore relative costs and benefits for building a centralized software system.