

Project Status Report

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1 Project Description

Laser Mate! is a self-defined start-up dissertation project that has the potential to hit over a £2.5 billion annual profit. The goal of the software is to provide a platform for restaurant customers to order and pay for their meals online.

The unique prospect of this new system is the fact that it suppresses traditional ordering methods by the costs needed to perform the ordering duty, resulting in a saving of £16,800 - £33,600 per year for the restaurant owners. This comes from the fact that they will not need to take, record, and deliver the orders and give and take meal's payment as customers will perform these tasks instead. Since restaurant waiters will only require taking the customers to the table and deliver the meals, they will save at least 50% of the work. By reducing the number of people needed to maintain the restaurant waitering operations by 50%, restaurant owners would save an annual staff cost of 50%. A typical restaurant will have two waitering staff. Therefore, we could help restaurant owners save an annual cost of $£8 \times 6 \text{ hours} \times 350 \text{ days} = £16,800$. Furthermore, restaurant owners will save additional work on managing staff rota, training, supervision, and accounting.

The revenue-cost analysis indicates that each restaurant account signup would attract a £5,500 profit each year. Firstly, the transaction cost in mobile web is 1% lower than that in bank card ($0.39\% + 2\text{p}$ vs. 1.75% per transaction), allowing us to have an additional 1% profit. Taking this 1

The cost of business deployment and ongoing scaling is significantly low compared to the revenue potential. The operation of the company is mainly composed of the software, post advertisement and the menu registration and update. Given that it should be a partially deployable software by April 21, the cost of the software is the continuous development and maintenance cost - which could be around £100,000 per year. Since post advertisement may only take a few days, assuming that we have one employee who registers 10 restaurants a day, we will reach 3650 restaurants (£25 million) in a year at a low cost. Another competitive edge of this business model is the fact that we do not need to spend much time to maintain the operation of each restaurant after our clients have signed up to the system - we only need to update their menus and answer their enquiries once in a while.

The projected profit estimation is composed of the service charge and the difference in transaction fee. Upon taking 1% service charge per customer transaction, we will obtain £4,000 for each £400,000 restaurant sit-in annual revenue. The cost, £4,000, is reasonable compared to the waitering cost of around £16,800. Furthermore, the fact that online web transaction is 1% lower than card machine transaction means that our business will take another 1% revenue. Accounting this 1% service charge with the difference in transaction

cost (1%), we will have 2% revenue for each restaurant (£8,000). Consequently, assuming that we will earn £7,000 for each restaurant (due to tax and other negligible costs), given that there are around 1.5 million restaurants in the EU and U.S, it is estimated that with 50% market penetration, we will have a profit of £5 billion per year (750,000 restaurants x £7,000).

The automated nature of this software product demonstrates a prosperous future for all as we will then have a larger proportion of workforce redirecting to jobs that will matter more.

2 Progress Report

- Completed: project proposal, final software product demo, user stories, MOSCOW, software paper prototype, software design section, related software products, database organisation
- Ongoing: evaluation, software coding, testing

3 Project Planning

- Project Proposal: describe project work, unique selling point, revenue-cost analysis, annual profit, start-up cost, and literature review
- Final Software Product: showcase the platform design and descriptions for the restaurant customer platform, restaurant owner platform, company staff platform, and company CEO platform
- Software Requirements Statements: user stories and MOSCOW
- Software Design: paper prototype, justifications of design options, demonstrating related software products, relational database organisation
- Evaluation: paper prototype, testing documentation, final software product, future work

4 Problems and Risks

- Establishing legal and accountancy terms. Mitigation: recruit a legal and accountancy advisor pre-launch.
- Software security. Mitigation: crowd source a security company pre-launch.
- Integrity for payment portal. Ensure that the payment company is registered under the Financial Conduct Authority (FCA).

5 Ethics

- Write ethical consent form in evaluation.
- Consider ethical designs by establishing terms and conditions, legal policies, and staff health and safety.

- Deploying adequate software security measures for payment portal and hackers.
- Consider informed payment processing through system notifications.