

Project Proposal Template

Project Proposal – ‘Recommendation engine’

1. Introduction

FootBalance currently offers a unique retail concept based on patented technology for customized insoles and footwear. FootBalance’s vision is to become a new standard in the consumer footwear market, providing a unique fit for feet and an inspiring experience accessible to all.

The key drivers for company future growth are digital innovations, including a measurement ‘Kiosk’ with a recommendation engine software. The recommendation engine will reduce the demands for store personnels’ time and training in the existing sports retail environment – it will also enable a full self-service shoe / lower limb product shopping experience. The customer can also purchase the recommended products online.

The Kiosk will provide an attractive offering to footwear / sports retailer, enabling the company to create new revenue streams, as well as making the purchase process for FootBalance products easier for the consumer. The target end users are all shoe and foot support product customers.

2. Project goals

The goal of the project is to develop a recommendation engine to a measurement device we call the ‘Kiosk’. Based on the data collected from customer in the Kiosk by measurements and questions, the software will recommend the best fitting products for the feet / lower limbs from a selection the provider has in use. The selection can include products such as shoes, socks, compression & support products, insoles. There can be hundreds of products in the selection.

This SW project is a part of the larger development project for the ‘Kiosk’ and the supporting infrastructure.

3. Technologies

We open to hear suggestions from students about the used technologies for recommendation engine. Used technology to be agreed in the beginning of the project.

Technologies currently in use in the Kiosk program:

- Cloud services (Amazon + others) including DB servers, back end servers and supporting services
- Front end: web technologies including Electron.JS & React
- Win10 IoT front end (Kiosk OS)
- 3D HW + software

4. Requirements for the students

Some AI/statistical analysis skills are required from the project team.

This project is most likely demanding and requires good understanding of technologies in this field. Also, the low quantity of initial measurement data and plan for collecting it for the recommendations will add an extra step for the project.

5. Legal Issues

Intellectual Property Rights (IPR):

The client gets all IPRs to the results.

Confidentiality:

The client will share some confidential information with the students.

6. Client

FootBalance is a Finnish consumer goods company in sports & health domain with operations in 50+ countries. The global headquarters with R&D and other key functions are in Vantaa.

FB core team: Erkki Hakkala / business owner, Pasi Seppänen / overall IT, New Person / IT development

Extended team: Subcontracting, back end development, front end development, 3D development, robot manufacturing, etc. Technical specialists can participate some meetings (for example project milestone meetings). Technical Specialists: Tuomas Asikainen (SW / 3D imaging), Pasi Sorsa (SW / 3D imaging), DooSolutions Oy

The FB core team is located in Vantaa and is heavily involved in the development program of the 'Kiosk' - and therefore also to support the Recommendation engine project. The project team will have access to and possibility to use the software / environments / tools in the 'Kiosk' program as necessary.

Client representative(s)

- Key contact: Erkki Hakkala / Director of Business Development
- [erkki.hakkala\(at\)footbalance.com](mailto:erkki.hakkala@footbalance.com)
- +358 50 368 7713
- Tammiston kauppatie 7, Vantaa, 01510

Preselected Student Team Members

- N/A