**Project proposal „Customer Allocation Process to Bank Consultants“**

**Client: Swedbank**

**Contractor: TalTech**

**I Problem statement (from Swedbank)**:

In Estonian: *Meie (Swedbank) Klienditeenuste divisjonil on vajadus optimeerida Tallinna esinduste töötajate ühist graafikut vastu kliendivoogu. Meil on kasutada ca 100 töötaja ressurss. Graafiku tegemisel peame arvesse võtma ooteaegasid ja broneeritud kohtumisi. Ehk on graafiku genereerimist võimalik isegi automatiseerida?*

In English: Swedbank Customer Services Division has the need to optimize the joint schedule of employees of Tallinn branches against customer flow. They have a resource of about 100 employees. When making a schedule, one must take into account waiting times and booked appointments. Perhaps it is even possible to automate graph generation?

Additional information:

* The working Schedule is for the employees in Tallinn (approx 100 employees; 7 branches).
* Schedule has to take into account the diminishing customer flow and the efficiency of our workers.
* We have to be able to track the vacations, sickness leaves, national holidays, trainings. The information must be in the hands of one of the responsible employees.
  + If someone lets us know that they’re sick in the morning (e.g 9 AM), we have to be able to make quick changes in the working force.
* Our employees have different tasks they have to complete additionally to the regular job at the client office (calling lists – proactive selling our products by phone or video, working for the Consultation Center - receive incoming calls etc)
* We’ve different opening hours in our offices, 2 are open during Saturdays (for example some branches are open 10-17, some 10-18 in working days and 10-14 on Saturdays).
  + Working day usually begins at 8:40 and ~1 hour our teams can develop their skills, taking trainings, discuss important topics before we open branch to the clients.
* It’s important for us that we’re able to change information on the go.
* An app for the working Schedule would be the final outcome.

**II** **Relevant data / statistics / information needed for the project (prof Wolfgang Dieter Gestelberger, Department of Business Administration)**

* Relevant years for the following data/statistics – 2021, 2020 (2019 – before „Covid-19 time“)
* Number of branches and number of consultants per branch (including working hours in total per branch)
* Sick days (and other missing days) per branch / employee on average per month/year
* Number of customers per branch and per day (on average)
* Catalogue of different tasks of consultants and average time needed per task
* Statistics regarding what services the customers request per day / branch
* Any available statistics/data regarding „reported“ staff capacity problems in different branches in different times of day / week / month / year.
* Any available statistics/data regarding the „task structure“ and „time structure“ (how much time for different tasks) of single consultants in single branches looks like per day / week / month / year
* Any available information / data regarding how appointments with customers are made / updated / changed / cancelled
* Available customer and employee „response data“  
  (aggregated results of customer and employee satisfaction survey)
* We need list of different offered tasks with the following data:
  + Task name
  + Service / slot time
  + Filiale or Call Center
  + #tasks per day/week
  + Language preference:    %EE / %UK / %RU

If bundles of tasks are requested which are demanded together

* Service quality figures:

Timelineness:   services on time / all requested services

Waiting time:    time from request until delivery

* Staff profiles:

#employees with all different task portfolios and languages

e.g.  25 employees that do taksk1, task3, …, in languages EE & RU

         30 employees doing … in EE & UK etc

* For those tasks that are appearing randomly in the filiales we need

Per day & hour over the week the requests (arrival rate of clients)

* If possible, it would be good to know average service time plus StdDev.
* For bulding the model we need to know for the prediction for a better assessment for the visits in the branch or online appointments, not only the number of customers, but we also need to have the preferred language and the type of the service to have a fine grain assessment.

Any available information about (potentially) relevant corporate (e.g., HR / work environment) policies and specific legal conditions (e.g., data privacy/protection of customers’ and/or employees’ data)

**Next steps:**

* Find partners in the School of IT
* In-house discussion how to proceed with the project
* Preparation an offer:
  + Describe the necessary methodology for carrying out the work
  + Describe the schedule and activities in stages
  + Describe the necessary resources to carry out the work
  + Project budget, final cost