

This happens because the absence of a team member causes the tasks allocated to the team member to be distributed equally among the rest of the available team members. This causes an increase in the workload of the rest of the team leading to an increased stress among the rest of the team members. Increased stress translates into a greater probability of being absent on the subsequent day for the stressed team members. This leads to a greater number of team members being absent on the subsequent days.

6. FUTURE WORK AND CONCLUSION

In this work we propose a model that incorporates human behaviour into simulated agent's working in an enterprise. We were able to factor in various elements of realism like backlog, absenteeism and spikes in workload. The intent of this work is to demonstrate a possible approach of modelling human behaviour into programmed agents. The human behaviour model presented here is limited when compared to real-world human behaviour in that it includes only bivariate relations. However, this approach allows the modeller to begin with simpler models and then incrementally add more complex behaviour until sufficiently realistic behaviour emerges. The model can then be used to understand a situation and devise interventions if necessary. One dimension for augmenting the current model is to factor in the social environment and social influences. A team would thus be modelled not just as a set of individuals but a network of networks of social and professional relationships. A related area of work which is notably difficult [12] is to extract insights from data generated by simulation of complex networked models with many behavioural variables.

We would also like to increase the number of behavioural variables that are at play. In particular, we would like to use various personality traits and their interplay with agent productivity. This would allow the modeller to compose teams of complex agents having diverse personality traits, which would lead to different behaviours for the organization as a whole. We would also like to model more outcomes of interest, like attrition and change in agent expertise.

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