**The Role of AI in Improving the Classification of IT Support Tickets in the Public and Private Sector**

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# **Abstract**

To date, there have been millions of IT support tickets submitted to organizations all around the globe that use this system to track and resolve issues. Normally, when a ticket is opened, it goes through a simple two step procedure. First, it is passed to an artificial intelligence machine (AI) run and administered by the organization itself which suggests where to classify the ticket based on previous qualifiers. Second, it is human verified for consistency and correctness and sent off to its destination. However, AI was implemented in the early 2000s and since then, modern research and advances in computing, silicon chips, deep learning, and algorithms have allowed for increased efficiency in AI. Yet, a large presence of human verification is still used and required in the IT industry. We asked whether current advancements in AI would allow us to minimize the human involvement in the process or remove completely. We also wondered what outcome this would bring and if the advantages would outweigh the disadvantages. To answer these questions, we made use of a recently made AI for this purpose against hundreds of existing qualifiers for tickets of various novelties and experimented how this newly trained AI would perform versus its predecessor. The two main factors to consider were accuracy of classification and the time taken. Simply put, our experiment found that accuracy was kept at numbers above 97% and time taken was cut down by more than 75%. We concluded that modern computing and algorithms help to make processes like the classification of IT support tickets a more streamlined and efficient process, while minimizing the use of IT staff that could focus their time and skills elsewhere in the taskforce.

# **Introduction**

# **Methods**

# **Results**

# **Discussion**

# **Conclusion**

# **References**

6 references, with 4 as original literature

# **Figures**