

Selection of Multi-Agent Model in e-Commerce using Data-Mining/Machine Learning

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Abstract

The field of data mining is very big and there is several research areas are embedded with this field. The multi agent integration with data mining may help to provide many innovative solutions and helps information technology to provide the pattern for recommendation of web extraction data using many data mining algorithms. The multi agent model diagnose on many problems. The main benefit of using multi agent and data mining is that they can combine use the deep learning and artificial intelligence. Using such systems helps to store the data sets for further study and the AI helps to provide the better solution of any problem. By every six month the ecommerce industry is taking new shape. New techniques and methodologies of sales and customer handling is introducing by every year. The commerce models are divided into three categories. In first category the small business interacts with big business known as B2B eCommerce. The second category deals with business to customer known as B2C eCommerce. The third category known as C2C ecommerce deals with customer to another customer business relations. The multi agent keeps tracks for such applications and using machine learning provides an mModel for the advancement of business and techniques. In this research such methods are studied.

Keywords: *Multi User Agent, eCommerce Technologies, Machine Learning, Deep Learning, Artificial Intelligence.*

1. INTRODUCTION

Data mining is the process of extracting the required information from the bulk web of data and supply it to process where it can be evaluated for the purpose. The field of information mining is exceptionally enormous and there is a few research zones are installed with this field.

The multi specialist incorporation with information mining may give numerous inventive arrangements and encourages data innovation to give the example to proposal of web extraction information utilizing numerous information mining calculations.

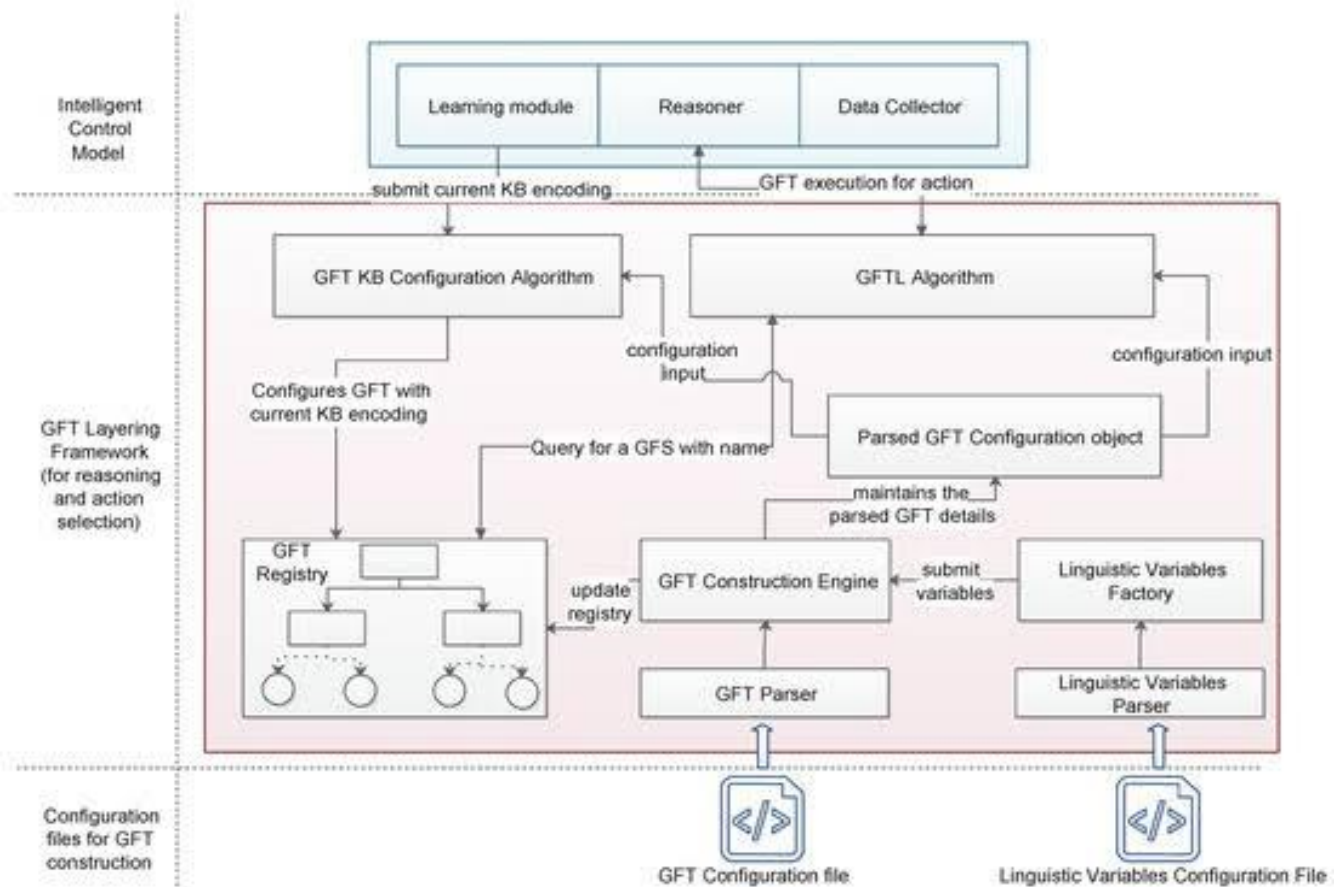


Figure 1. Multi Agent Based System Architecture

The multi specialist model analyze on numerous issues. The primary advantage of utilizing multi operator and information mining is that they can consolidate utilize the profound learning and man-made brainpower. Utilizing such frameworks stores the informational indexes for further investigation and the AI gives the better arrangement of any issue.

By each half year the web based business industry is taking new shape. New strategies and approaches of offers and client taking care of is presenting by consistently. The trade models are separated into three classes. In first class the independent venture collaborates with enormous business known as B2B eCommerce. The subsequent class manages business to client known as B2C eCommerce. The third class known as C2C web based business manages client to another client business relations.

Analytical Features for Data Science and Machine

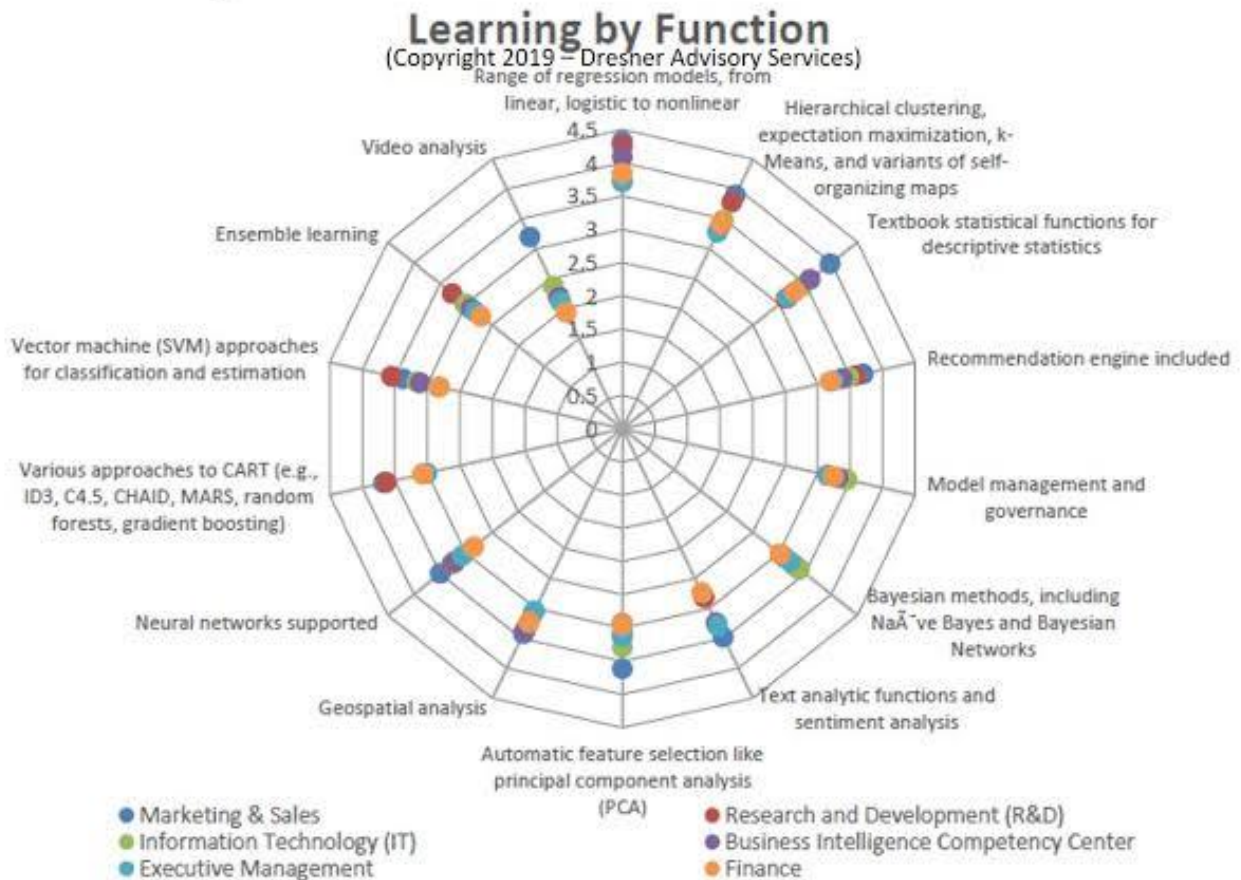


Figure 2. Artificial Intelligence Model and Data Science

The multi specialist keeps tracks for such applications and utilizing AI gives a mModel to the progression of business and methods. In this examination such techniques are considered.

2. MULTI AGENT MODELING AND ECOMMERCE

Computer based demonstrating and reproduction of (reality) complex frameworks has been one of the main impetuses in the improvement of PC frameworks. A general meaning of a reproduction is the impersonation of the activity of a procedure or a true framework through time [7]. A computational model is the portrayal of a genuine framework through a PC program, communicated by a lot of calculations and numerical recipes executed as code in a programming language. Conversely with unadulterated numerical models, the target of computational models isn't more often than not to acquire systematic answers for explicit inquiries. Rather, computational models enable the plan of trials to test the created models under various situations (with various parameter arrangements).

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      <containers>
        <container name=" Execution -Node-1">
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            <agent name=" performer1" type="WE_Agent" />
            <agent name=" performer2" type="WE_Agent" />
          </agents>
        </container>
      </containers>
    </host>
  </hosts>
</platform>
```

Multi-Agent Configuration

These examinations are completed with the goal of testing the conduct of the demonstrated frameworks under a specific arrangement of suspicions [7].

3. DATA MINING ANALYST

Satellite picture mining, otherwise called remote detecting picture mining, is a picture mining process. Remote detecting picture mining manages the test of catching examples, procedures, and operators present in the geographic space, so as to separate explicit learning for issue comprehension or basic leadership identified with a lot of applicable points, including area change, atmosphere varieties, and biodiversity examines. Occasions like deforestation designs, climate change connections, and species elements are instances of valuable information contained in remote detecting picture archives [27].

The spatial and multiband qualities of the satellite pictures contrast from the general class of picture information. Subsequently, remote detecting picture mining requests explicit picture mining apparatuses. GeoDMA is a tool stash for remote detecting picture mining that emerged dependent on procedure proposed by Silva et al. [28]. The product consolidates assets for division, highlight determination, include extraction, grouping, and multitemporal techniques for change identification and examination of remote detecting information [29].

4. CONCLUSION

In this research a number of multi agent data mining methodologies for eCommerce is studied and its advantages are evaluated. Satellite picture mining, otherwise called remote detecting picture mining, is a picture mining process. Remote detecting picture mining manages the test of catching examples, procedures, and operators present in the geographic space, so as to separate explicit learning for issue comprehension or basic leadership identified with a lot of applicable points, including area change, atmosphere varieties, and biodiversity examines. Occasions like deforestation designs, climate change connections, and species elements are instances of valuable information contained in remote detecting picture archives [27].

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REFERENCES

1. Banks, S.: Agent-based Modeling: A Revolution? In: Proceedings of the National Academy of Sciences, 7199--7200 (1999)
2. Banks, J.: Handbook of Simulation. John Wiley & Sons (1998)
3. Beam, C., Segev, A.: Automated Negotiations: A Survey of the State of the Art. *Wirtschaftsinformatik* 39(3), 263--268 (1997)
4. Berry, M.J.A., Linoff, G.: Data Mining Techniques for Marketing, Sales, and Customer Support. John Wiley & Sons, Inc., USA (1997)
5. Blake, C.L., Merz, C.J.: UCI Repository of Machine Learning Databases. Department of Information and Computer Science, University of California, Irvine, CA, USA (1998)
“<http://www.ics.uci.edu/~mllearn/MLRepository.html>”