**CONCLUSIONS**

In this paper, we propose a service recommendation scheme named *BC* *SRDS* which not only supports the data sharing among different platforms based on the consortium block chain but also provides an accurate service recommendation for users. Moreover, to guarantee data security, we encrypt the data by CP-ABE algorithm before sharing them to other cloud platforms. Through block chain, the cloud platforms can easily get the shared data and use it to maximize the pro\_ts, meanwhile, the DOS attack, DDOS attack and single point of failure are avoided. The security analysis show that *BC*-*SRDS* is capable of achieving data confidentiality, data integrity and tampering-proof. Finally, we evaluate our scheme based on WS-DREAM and carry out a series of experiments. The experimental results show that *BC*-*SRDS* can achieve a higher accuracy than other three schemes. Besides, its gas cost is entirely acceptable for the cloud platforms. Moreover, from metrics of the resource consumption, throughput and latency on consortium block chain, we can conclude that our scheme based on the consortium block chain is feasible.