

## **Distribution Mechanism with Block Chain Technology to Protect Customers from Counterfeit Herbal Medicine**

**Inayatulloh, Prasetya Cahya S, Siti Elda Hiererra**

Information Systems Department  
School of Information system  
Bina Nusantara University  
Jakarta, Indonesia 11480

Inay@ binus.ac.id, prasetyacs@ binus.ac.id, [elda.siti@binus.ac.id](mailto:elda.siti@binus.ac.id)

**Rivaldhy N. Muhammad**

Study Program of Law, Faculty of Law,  
Social and Political Sciences  
Open University, Indonesia  
[valdhymuhammad1@gmail.com](mailto:valdhymuhammad1@gmail.com)

**Enggal Sriwardiningsih,**

Management Department, Binus Business School,  
Bina Nusantara University,  
Jakarta, Indonesia  
[enggal@binus.ac.id](mailto:enggal@binus.ac.id)

**Sugeng Riyanto,**

STIE Pertiwi  
Bekasi , Indonesia  
[sr7752413@gmail.com](mailto:sr7752413@gmail.com)

**Nico Djundharto Djajasinga**

Politeknik Transportasi Darat Indonesia-STTD  
[nico.djajasinga@ptdisttd.ac.id](mailto:nico.djajasinga@ptdisttd.ac.id)

**Destiana Kumala**

Sekolah Tinggi Ekonomi Bisnis Islam Syariah Bina Mandiri  
Bogor, Indonesia 11480  
[destiana.kumala@binamandiri.ac.id](mailto:destiana.kumala@binamandiri.ac.id)

### **Abstract**

Indonesia is famous for herbal medicine or Jamu which has become part of culture and daily life. The benefits of herbal medicine have been proven to be able to maintain the body's resistance and can cure diseases. However, currently there are many fake herbs circulating with contents that are not in accordance with the provisions that should be, even fake herbs contain harmful substances. Based on this problem, a mechanism is needed that can control the content of herbal medicine from harmful substances that will harm customers. Blockchain technology offers a high level of security and transparency for every transaction on its network. The purpose of this research is to help herbal medicine companies protect the originality of their products and protect customers from counterfeit herbal medicine. The result of this research is a tracking system model for herbal medicine distribution using blockchain technology.

The research method uses a qualitative approach through literature review and observation related to the circulation of traditional herbal medicine.

### **Keywords**

Distribution, Mechanism, Herbal Medicine, Block Chain, Counterfeit.

### **Biographies**

**Inayatulloh SE.MMSI,CDMS.CSCA** is a lecturer at Bina Nusantara University, School of Information System Jakarta Indonesia and also a doctoral candidate of computer science, experienced in managing systems in the retail, automotive, convection and education industries. research domain in e-learning, e-business, e-commerce, cloud computing, IoT and block chain technology.

**Rivaldhy N. Muhammad** is a Lecturer at the Open University which is one of the State Universities in Indonesia. holds a Bachelor of Laws degree at Khairun University Ternate and a Masters degree at Janabadra University Yogyakarta. Since becoming a Lecturer in 2018, he has been assigned to Jayapura Papua Open University as a Lecturer in the field of Legal Studies who always provides teaching and guidance to students who need good knowledge. Before becoming a lecturer, Rivaldhy N. Muhammad was a lawyer who always helped people who needed legal aid services.

Prasetya Cahya S is a Faculty Member at Bina Nusantara University as well as a practitioner and technopreneur in the field of information systems. He is an alumnus of the University of Indonesia Master of Information Technology program and has more than 25 years of experience both as a lecturer at several universities and a consultant for several IT projects such as the State Gas Company, the Indonesia Stock Exchange, Bank Indonesia and also the World Bank.

Dr. Enggal Sriwardiningsih SE. M.Si is a lecturer at Bina Nusantara University. Management Department, Binus Business School, Jakarta, Indonesia. She graduated bachelor and master's degree from Economics department, Gajah Mada University, Yogyakarta. Doctoral degree from Doctoral Research Management, Bina Nusantara University, Jakarta, Indonesia. Her focus in consumer / producer behaviour, SMEs, e-commerce and e-learning.

Siti ELda Hiererra is a doctoral student in computer science/information systems (DCS) at Bina Nusantara University Jakarta. She was practically experienced working as a business and technology development for Digital Creative Start Up Company especially in Child Education. Her academic background has obtained a bachelor and master degree from Bina Nusantara University majoring in Information Systems. ELda is currently a faculty member at School of Information Systems Binus University.