

**DESIGNING THE INFORMATION SYSTEM OF  
PATCOULI OIL SUPPLY CHAIN IN SUMATERA  
BARAT**

**FINAL PROJECT**

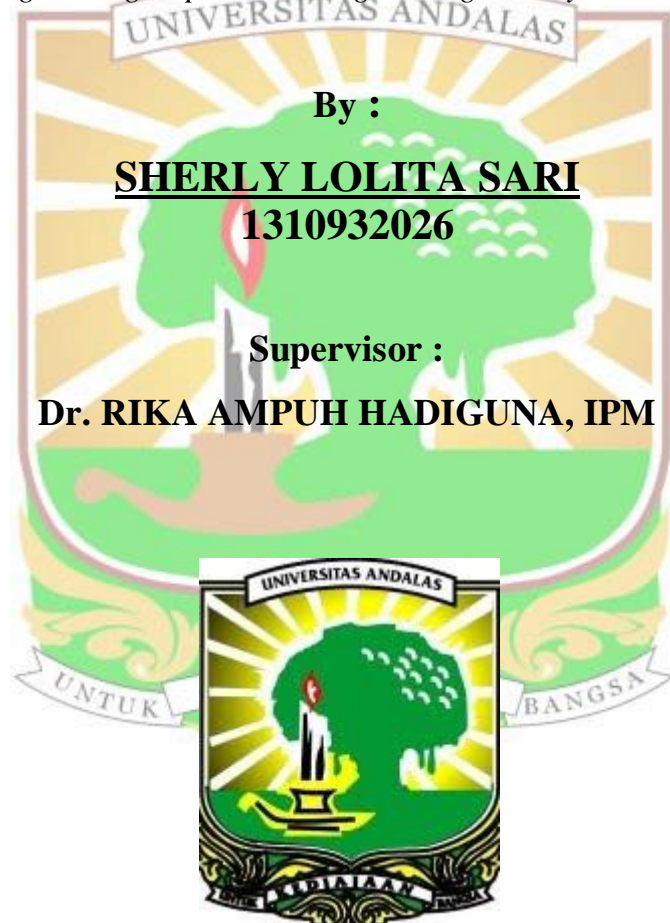


**DEPARTMENT OF INDUSTRIAL ENGINEERING  
FACULTY OF ENGINEERING  
ANDALAS UNIVERSITY  
PADANG  
2018**

**DESIGNING THE INFORMATION SYSTEM OF  
PATCHOULI OIL SUPPLY CHAIN IN SUMATERA  
BARAT**

**FINAL PROJECT**

*As a Requirement to Achieve Bachelor Degree in  
Industrial Engineering Department, Engineering Faculty, Andalas University*



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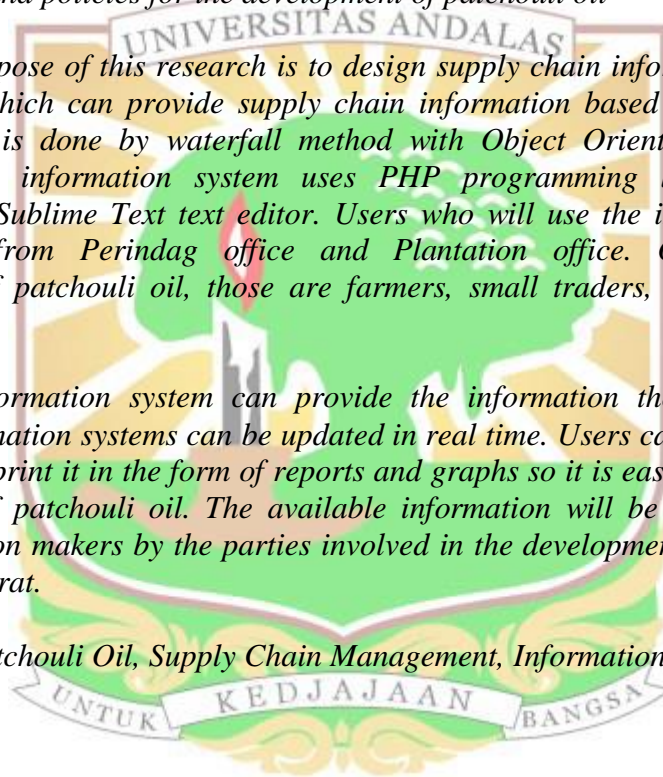
## ABSTRACT

*Patchouli oil is one of Indonesia's leading export commodities. Every year patchouli oil is always needed in the international market because patchouli oil is needed for perfume, pharmaceutical, and flavoring industries. Sumatera Barat is one of the main providers of patchouli oil in Indonesia besides Nanggroe Aceh Darussalam and North Sumatra. However, in addition to having the potential there are some challenges that hinder the development of patchouli oil in Indonesia, including West Sumatra. Some common obstacles such as price fluctuation, difficulty of market information, especially by farmers, poor quality of patchouli oil, simple technology, pests, global warming and global crisis. One of the causes of the problem is the limited information that makes it difficult for the parties involved to take decisions and policies for the development of patchouli oil*

*The purpose of this research is to design supply chain information system of patchouli oil which can provide supply chain information based on patchouli oil. System design is done by waterfall method with Object Oriented Programming approach. The information system uses PHP programming language, MySql database, and Sublime Text text editor. Users who will use the information is the policymakers from Perindag office and Plantation office. Other users are stakeholders of patchouli oil, those are farmers, small traders, wholesalers, and exporters.*

*The information system can provide the information the user needs. In addition, information systems can be updated in real time. Users can search the data as needed and print it in the form of reports and graphs so it is easier to monitor the development of patchouli oil. The available information will be analyzed for the needs of decision makers by the parties involved in the development of patchouli oil in Sumatera Barat.*

**Key Words:** *Patchouli Oil, Supply Chain Management, Information System.*



## ABSTRAK

*Minyak nilam adalah salah satu komoditas ekspor unggulan Indonesia. Setiap tahun minyak nilam selalu dibutuhkan di pasar internasional karena minyak nilam diperlukan untuk industri parfum, farmasi, dan penyedap. Sumatera Barat adalah salah satu penyedia utama minyak nilam di Indonesia selain Nanggroe Aceh Darussalam dan Sumatera Utara. Namun, selain memiliki potensi terdapat beberapa tantangan yang menghalangi perkembangan minyak nilam di Indonesia termasuk Sumatera Barat. Beberapa kendala yang biasa terjadi seperti fluktuasi harga, kesulitan informasi pasar terutama oleh petani, mutu minyak nilam yang kurang diperhatikan, teknologi yang masih sederhana, hama penyakit, global warming dan krisis global. Salah satu penyebab permasalahan adalah terbatasnya informasi sehingga menyulitkan pihak yang terlibat untuk mengambil keputusan dan kebijakan untuk pengembangan minyak nilam*

*Tujuan dari penelitian ini adalah merancang sistem informasi rantai pasok minyak nilam yang dapat menyediakan informasi berbasis supply chain minyak nilam. Perancangan sistem dilakukan dengan metode waterfall dengan pendekatan Object Oriented Programming. Sistem informasi menggunakan bahasa pemrograman PHP, database MySql dan text editor Sublime Text. User yang akan menggunakan informasi adalah pengambil kebijakan yaitu Perindag office dan plantation office. User lain adalah stakeholder minyak nilam yaitu petani, pedagang kecil, pedagang besar, dan exporter.*

*Sistem informasi dapat menyediakan informasi yang dibutuhkan user. Selain itu sistem informasi dapat diperbaharui secara real time. User dapat mencari data sesuai kebutuhan dan mencetaknya dalam bentuk laporan dan grafik sehingga dapat memantau perkembangan minyak nilam. Informasi yang tersedia akan dianalisis untuk kebutuhan pengambil keputusan oleh pihak-pihak yang terlibat dalam pengembangan minyak nilam di Sumatera Barat.*

**Kata Kunci:** *Minyak Nilam, Manajemen Rantai Pasok, Sistem Informasi*