

PERPUSTAKAAN UMP



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KNOWLEDGE MANAGEMENT SYSTEM OF COCONUT

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ABSTRACT

Knowledge Management System Of Coconut (KMSOC) is Knowledge Management online System for Pahang State Agriculture Department. This system can guide and help users especially farmers through sharing knowledge and experience. Farmers or users who are hard to control pests and care of coconut crop without knowledge and experience. Farmers and users can not share their knowledge and experience without this Knowledge Management online system. This KMSOC is online system can assist users to share their experiences to each other. Any knowledge and information that farmers share will save into database that is MySQL. To complete this system built, Waterfall Software Development Life cycles (SDLC) is used. This system development methodology has five phrases that are planning, analysis, design, implementation and maintenance. Target users of this system are farmer, supplier, customer, expert, staff and admin. This is because KMSOC can let farmers share coconut knowledge based on their experience to users who are using this system. Suppliers can post their any coconut products in Coconut Advertisement. As a result, It will help users especially farmers who will get knowledge from other people.

ABSTRAK

Sistem Pengurusan Pengetahuan Kelapa (KMSOC) adalah Sistem Pengurusan Pengetahuan dalam talian bagi Jabatan Pertanian Negeri Pahang. Sistem ini boleh membimbing dan membantu pengguna terutama petani melalui perkongsian pengetahuan dan pengalaman. Petani atau pengguna sukar mengawal perosak dan penjagaan tanaman kelapa tanpa pengetahuan dan pengalaman. Petani dan pengguna tidak boleh berkongsi pengetahuan dan pengalaman mereka tanpa sistem Pengurusan Pengetahuan dalam talian ini. KMSOC Ini adalah sistem dalam talian boleh membantu pengguna untuk berkongsi pengalaman mereka antara satu sama lain. Maklumat-maklumat yang dikongsi oleh pengguna akan disimpan dalam *MySQL*. Untuk melengkapkan sistem ini dibina, *Waterfall Software Development Life Cycle (SDLC)* digunakan. Metodologi pembangunan sistem mempunyai lima frasa yang perancangan, analisis, reka bentuk, pelaksanaan dan penyelenggaraan. Sasaran pengguna sistem ini adalah petani, pembekal, pelanggan, pakar, kakitangan dan admin. Ini adalah kerana KMSOC boleh membiarkan petani kelapa berkongsi pengetahuan berdasarkan pengalaman mereka untuk pengguna yang menggunakan sistem ini. Pembekal boleh memperkenalkan produk kelapa mereka dalam Iklan Kelapa. Kesimpulannya, Ia akan membantu pengguna terutama petani yang akan mendapat pengetahuan dari orang lain.

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
ASP	Active Server Pages
EDR	Entity Relationship Diagram
IE	Internet Explorer
IIS	Internet Information Services
KMSOC	Knowledge Management System Of Coconut
OS	Operating System
PHP	PHP Hypertext Preprocessor
RDBMS	Relational Database Management System
SDD	Software Design Document
SDLC	Software Development Life Cycle
SRS	Software Requirement Specification

LIST OF APPENDICES**APPENDICES**

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| A | Gantt Chart |
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CHAPTER 1

INTRODUCTION

Purpose of this chapter introduce to reader about Knowledge Management System Of Coconut that will be develop. Parts of this chapter include introduction, problem statement, objective, scope, and thesis organization.

1.1 INTRODUCTION

Most of Agriculture website is information system (IS) such as infonet-biovision website. Information system (IS) only focuses on information input, information output, and customer (Guo.W.D. et al, 2008). Information input refers to information sources; information output uses information channel to customers (Guo.W.D. et al, 2008). Thus, users only can view information and cannot share their information to other. That is different between IS and Knowledge Management System (KMS). Knowledge Management System (KMS) is a system that focuses on creating, gathering, organizing and disseminating organization knowledge (Fernandez, 2000).

Knowledge Management System Of Coconut (KMSOC) is online system to share, preserve and use knowledge about coconut. KMSOC has KMS feature because it can facilitate individual knowledge sharing (Wei.C.P. et al, 2002) .This system is built for Jabatan Pertanian Negeri Pahang since most of the information from Jabatan Pertanian Pahang is only for viewing and user cannot share their coconut knowledge.

This system is built to help users especially farmers can share their knowledge or experiences by using this system. Farmers can give their comment in certain module such as planting process after login. Farmers can discuss each other after they login. Thus it can increase coconut farmers' knowledge. Farmers also can share their personal background to people in their own profile after login. Besides that, expert in coconut field can give their opinion based on their knowledge to farmers after they login in and approved by staff or admin of Jabatan pertanian Negeri pahang. It can help farmers especially farmer who do not has experience in coconut field.

Supplier can edit their profile after login. Supplier also can upload their product into coconut advertisement module to introduce their coconut product. For Customer and other users (farmers, experts, staffs, admin and suppliers), after they login, they can view products through coconut advertisement when they want buy coconut products. They also can read coconut information from each module in Coconut Knowledge Management like coconut profile, and disease. Inside this module have article and journal about coconut knowledge. As a result KMSOC is a system which can help users get information through sharing with each other.

1.2 PROBLEM STATEMENT

Internet fuctions include communication, document or file transfer, reading and posting to specific topic, and interactive browsing and searching(Hassan.M.S. et al., 2009).However, Jabatan Pertanian Negeri Pahang do not have Knowledge Management System for coconut. It will cause people who are interested in this coconut agriculture field hard to get any coconut knowledge from Jabatan Pertanian Negeri Pahang website. It also cause people disappointed if can not get coconut knowlege as what they want.

In addition, new farmers who do not have experience they will facing problem to plant coconut tree. They do not know what the step should take before plant coconut. They also do not know how to handle to plan coconut like what factors will affect coconut develop. Thus, it will cause them relying to their neighbour, family ,and fellow

farmers in agriculture information (Shaffril.H.A.M. et al., 2009). Besides that, based on Hassan.M.S (2010), most of the Malaysian public receive information via television and the least is internet in year of 2007/2008.

For people such as experience farmers would like to share their knowledge with other farmers also difficult. The chance for discussion any coconut knowledge are lost. If people do not have knowlege in this field especially farmer ,they can not produce higher qualities and quantities coconut.

As a result,this will affect the coconut business and have high competance with other country and cause coconut imported from other country like Thailand to full fill user requirement. Since population of people increase every year and people who are interested join in this coconut field is less. Thus it is difficult to find people who are experience in this coconut field.

Thus, this project should be carry on to solve this problem.This is because it has knowledge sharing and discussion like the Dexcel discussion group that are really good because cost is low and the potential benefits of collective information sharing are high (Sligo.F.X.el al, 2007).For helping farmer require advisors (Girard.N.et al,1999), with this system, farmer will get guide of this coconut field. It also help coconut sector be medium for poverty eradication to overcome and enhance the community socio-economic level (Shaffril.H.A.M.et al., 2011).

1.3 OBJECTIVE

Knowledge Management System Of Coconut as online Management Information System.Thus It can be used by many users after register throught this system. The objectives of this system are the following:

- i. To increase farmers knowledge and their experiences based on the knowledge shared in KMS of Coconut .
- ii. To assist supplier introduce coconut products to users.

- iii. To assist staff from agriculture depart to help farmers, customers and suppliers in coconut industry.
- iv. To assist expert help farmers especially less experience farmers.

1.4 SCOPE

This Knowledge Management System Of Coconut (KMSOC) include 4 scopes that show in below:

a) **System Functionality**

In this Knowledge Management System Of Coconut(KMSOC) have 21 functional requirements. That are Login and Users Registration, Coconut Profile, Planting Process, Disease, Pest, Fertilize, Factor, Pesticide, Parasite Breeding, Users Information, Coconut advertisement, Image Gallery, Vision And Mission Management , User Directory, Contact Us, Objective Of KMSOC Management, Announcement/News Management, Home Image Managements, Expert Approval and KMSOC Rules/Guides, Staff Registration. These modules shown are in **Figure 1.1**.

i. **Login and Users Registration**

User need login first before go to home page of Knowledge Management System Of Coconut. For user who do not have account, they need to create new account first.

ii. **Coconut Profile**

This module is about coconut types and features.

iii. **Planting Process**

This module explains the process planting coconut.

iv. **Disease**

User will know diseases of coconut from this module.

v. **Pest**

User will know pests of coconut from this module

- vi. Fertilize**
This module is explain anything about fertilizer..
- vii. Factor**
This module will show factor that affect coconut grow.
- viii. Pesticide**
User will know the any information related pesticide
- ix. Parasite Breeding**
User will know step to breed parasite's of pest.
- x. User Information**
This module show user information. They can edit their own profile and change password inside this module.
- xi. Coconut Advertisement**
User will know information of coconut products before they want to buy.
Supplier can upload image of their product in this module.
- xii. Image Gallery**
User and expert approved can upload any picture in jpg, gif or png format that related coconut activity.
- xiii. Vision And Mission Management**
Staff can add vision and mission of Jabatan pertanian Negeri Pahang.
- xiv. User Directory**
User know other user information like mobile number.
- xv. Contact Us**
User will know Jabatan Pertanian Pahang contact information. Staff can updated the latest information.
- xvi. Objective Of KMSOC Management**
User will know the objective of this Knowledge Management System Of coconut and staff or admin can add objective of KMSOC
- xvii. Expert Approval**
This module for staff or admin to approve expert in this Knowledge Management System Of Coconut after they register.

xviii. Announcement/ News Management

This modules for staff or admin to post any news or announcement which display in home page after login.

xix. Home Image Management

This modules for staff or admin to post any image which showed in home page before login.

xx. KMSOC Rules/Guides

Staff can add any rules or guideline inside this module, so that user will use this system in proper way.

xxi. Staff Registration

Admin can register staff information in KMSOC system.

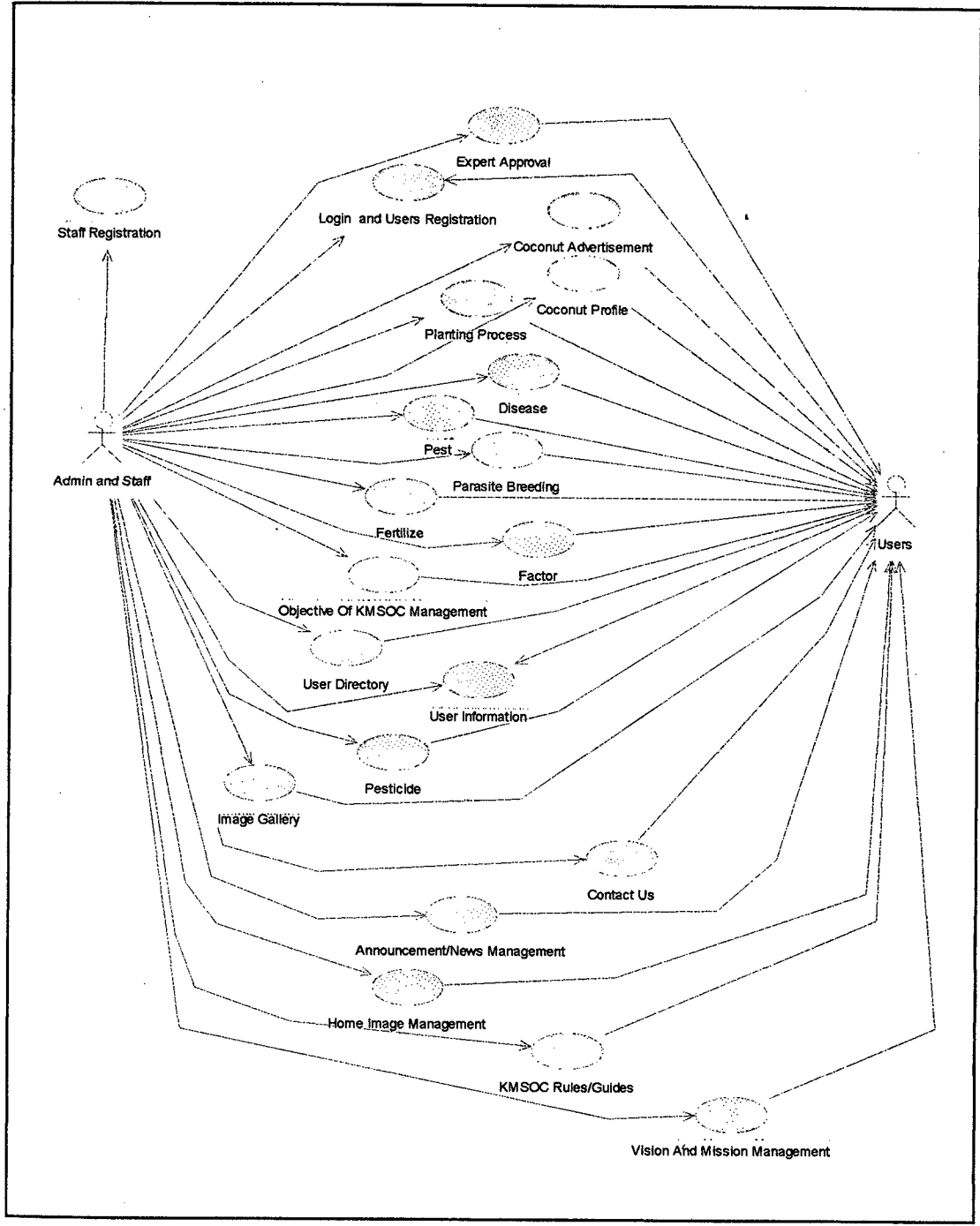


Figure 1.1 : 21 modules

b) Target User

There are 6 target users in this system. They are Farmer, Supplier, Customer, Staff, Expert and Admin.

i. Farmer

Farmer can share their knowledge and experiences each other to users to increase their knowledge of coconut. Besides that, they can give opinion in comments and share article inside modules of pesticide, coconut profile, planting process, disease, pest, fertilize, parasite breeding, factor.

ii. Supplier

Supplier can introduce their coconut product to users through coconut advertisement module.

iii. Customer

Customer can visit coconut product page in coconut advertisement which introduced by relevant supplier.

iv. Staff

Staff can add and delete information from agriculture depart to help users. Staff can manage all modules to users except modules of staff registration, user information, login and user registration.

v. Expert

Expert can share their knowledge to users and leave opinion in comment part of modules after get approval from staff or admin. They also can share article inside modules of pesticide, coconut profile, planting process, disease, pest, fertilize, parasite breeding, factor after get approval from staff or admin.

vi. Admin

Admin is one of the staff but admin can register new staff whereas other staff cannot.

c) Software

Php language and MySQL database will be used. Mozilla Firefox as a browser to display this system. Aptana Studio 3 will be used to develop this system by coding.

d) Hardware

A laptop or personal computer is needed to connect internet to access this system.