

# Farm Management Information System at Lembang Agri Gapoktan

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# Introduction

- **Lembang Agri Gapoktan** is organisations for farmers in Bandung Barat.
- Issue:
  - No data collection was done on farmers who joined Gapoktan. So, **the farmers with 207 members do not know each other who is a member of Gapoktan.**
  - No records for **procuring raw materials** such as seeds, fertilisers, compost, and others that support the planting process.
  - Difficulties when making **monthly reports** on harvest yields.
  - In the sales process to consumers, there has not been a proof of handover or memorandum as **proof of transaction.**
- Solution:
  - Needs collecting data for farmer members in Lembang Agri Gapoktan.
  - Needs digital recording media for procuring raw materials.
  - Needs feature to generate reports easier.
  - Needs of digital handover receipt as proof of transaction.

# Methods

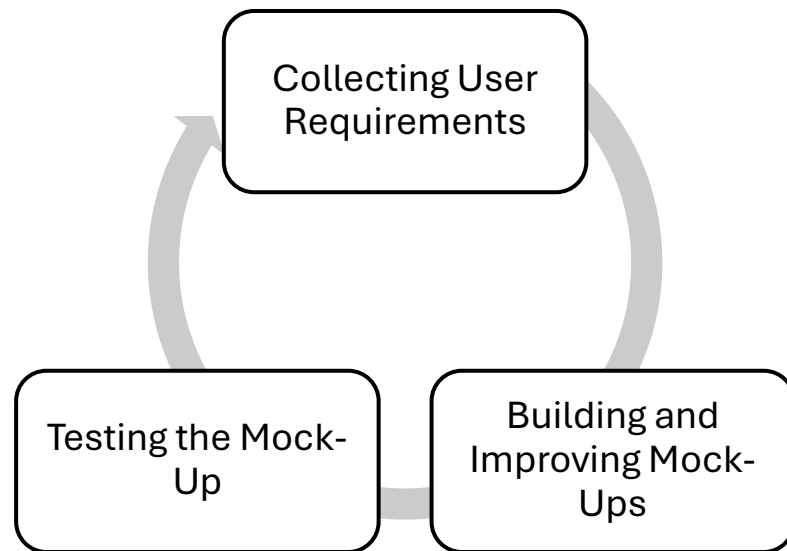


Figure 1. Prototype Method

1. Collection Data by **observation** (in Cikidang Village, which has a population of 6,953 people and an area of 1,297.4 hectares) and **interview** (Chairman, Secretary on par with the Treasurer, as well as Saprodi, P4S, Marketing, LKM-A, and partnerships).
2. Mock-up the information system starts by designing five components of the information system, namely, **data** and **procedures**, **brainware**, **hardware**, **software**, and **network**.
3. Testing the mock-up.

# Result and Discussion

## Data and Procedure, Brainware

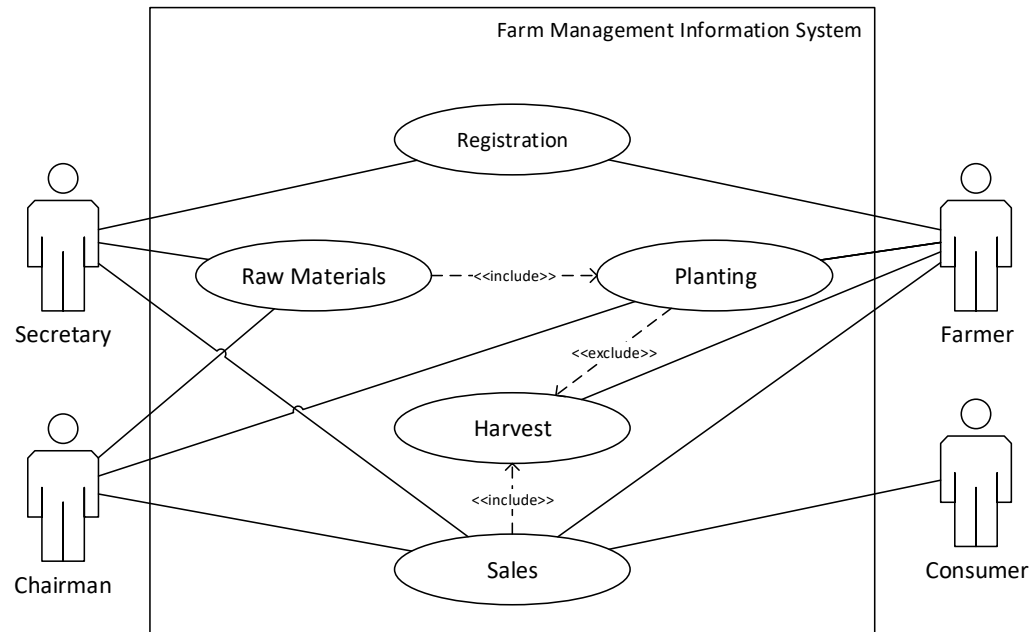


Figure 2. Use Case Diagram of Farm Management Information System

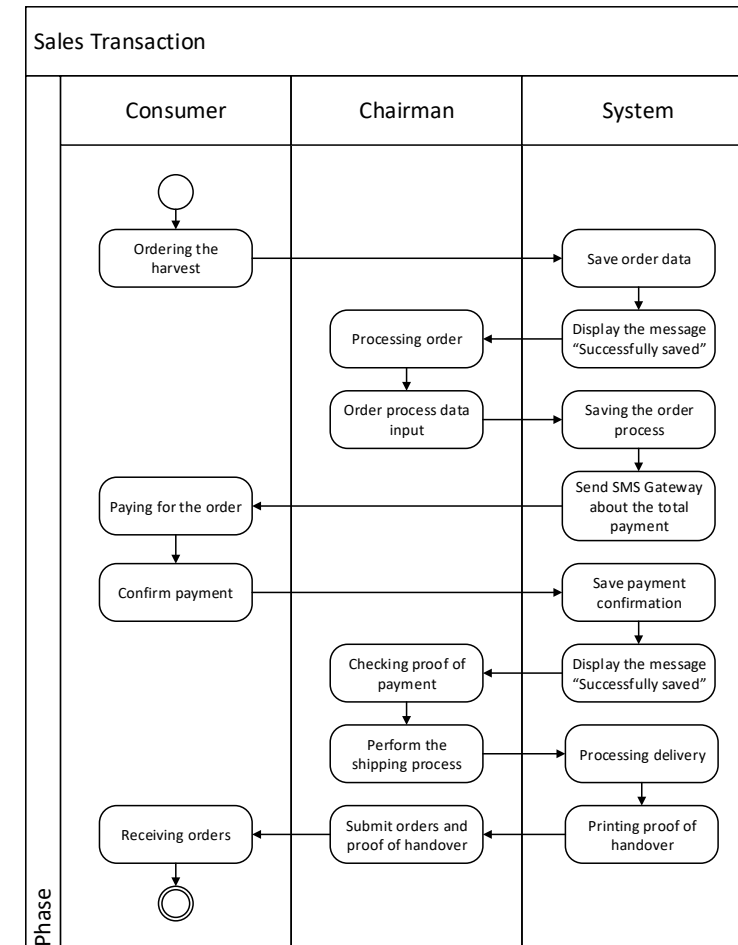


Figure 3. Activity Diagram of Sales Transaction

# Result and Discussion

## Hardware, Network

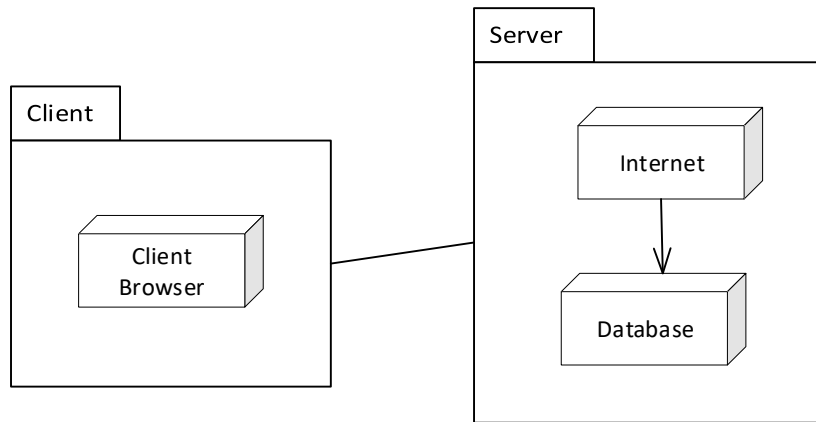


Figure 4. Deployment Notation

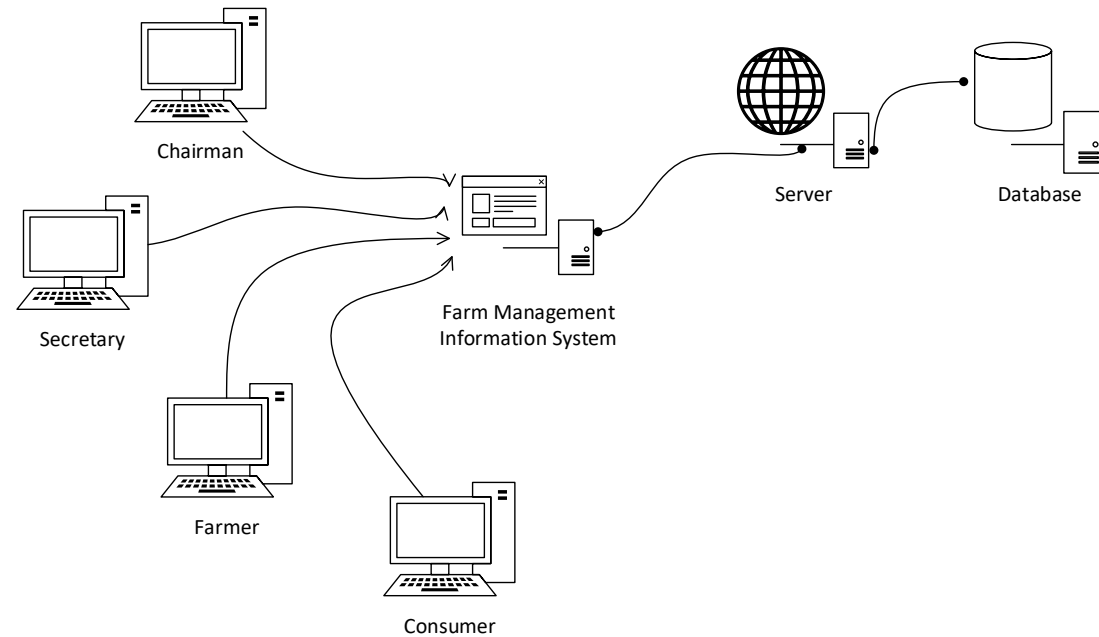


Figure 5. Computer Networks

# Result and Discussion

## Software

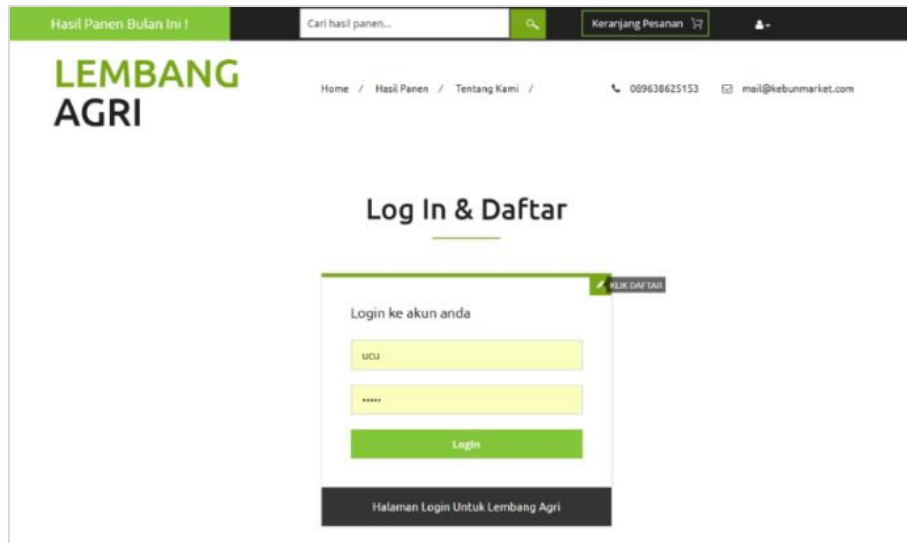


Figure 6. Login Page

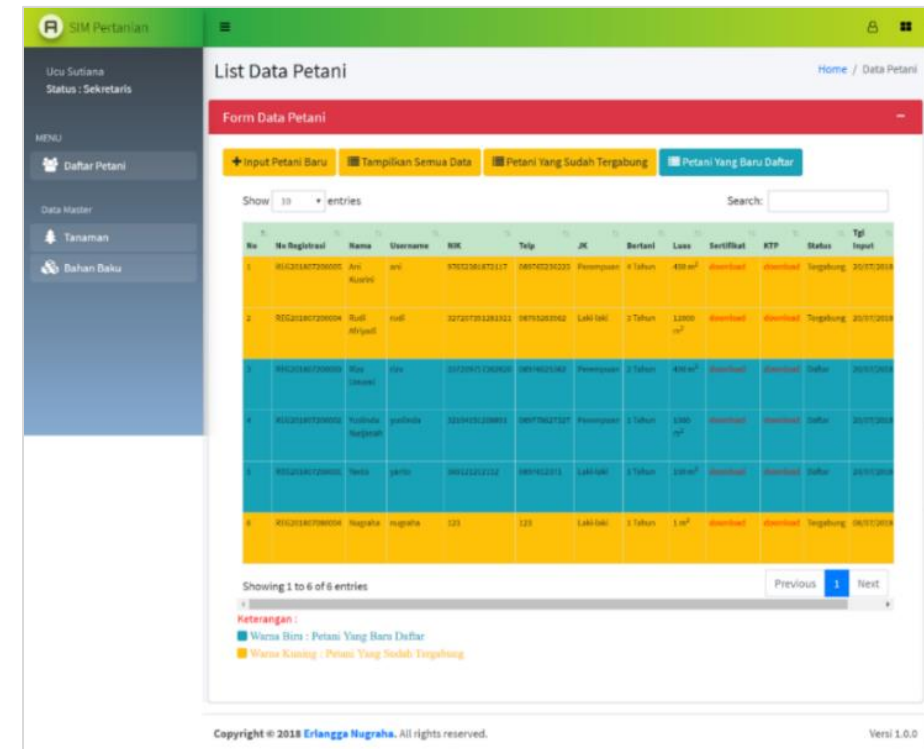


Figure 7. Farmer List Page

# Result and Discussion

## Software

**Prosedur Pemesanan**

**Pesan Sayuran**  
Pesan sayuran dengan cara memilih hasil panen lalu tunggu konfirmasi dari kami untuk tahap selanjutnya.

**Invoice Pembayaran**  
Kami akan membuatkan invoice pesanan anda lalu mengirimkan invoice beserta jumlah yang harus dibayar.

**Proses Kirim**  
Setelah melakukan pembayaran kami akan mengirimkan pesanan anda.

**Hasil Panen**

**Jagung**  
Rp 30.000/Kg  
Stok : 20 Kg  
Hasil Panen Dari Petani : Ani Kusri  
[Tambahkan Ke Keranjang](#)

**Tomat**  
Rp 8.000/Kg  
Stok : 75 Kg  
Hasil Panen Dari Petani : Nugraha  
[Tambahkan Ke Keranjang](#)

**Buncis**  
Rp 19.000/Kg  
Stok : 120 Kg  
Hasil Panen Dari Petani : Nugraha  
[Tambahkan Ke Keranjang](#)

Figure 8. Harvest Data Page

**Lembang Agri**  
Kampung Pengkolan, Desa Cikidang RT 02 RW 08  
Lembang Kabupaten Bandung Barat.  
Telp : 089638625153

**Laporan Hasil Panen Pada Agustus 2018**

No	Id Panen	Id Penanaman	Petani	Tanaman	Jumlah Panen	Tgl Panen
1	HP201808050001	PN201808050001	Nugraha	Kangkung	1000 Kg	05/08/2018
2	HP201808090001	PN201808090001	Rudi Afriyadi	Pak Choy Hijau	10000 Kg	09/08/2018
3	HP201808090002	PN201808090002	Rudi Afriyadi	Daun Bawang	1200 Kg	09/08/2018

Tanggal cetak : 14/08/2018

Ketua Lembang Agri

Dodih, ST

Figure 9. Harvest Report

# Result and Discussion

## Software

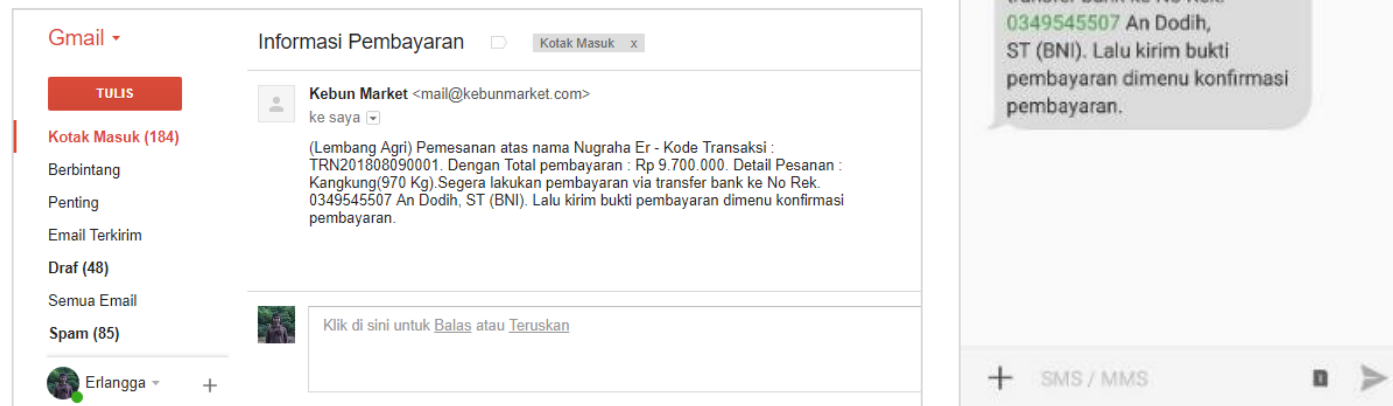


Figure 10. Payment Information to Consumers via SMS and email



# Conclusion

The farm management information system at Lembang Agri Gapoktan makes it easier for users to manage data on farmers who are members of Lembang Agri Gapoktan, manage the procurement of raw materials such as seeds, fertilizers, compost, and others that support the planting process, and create reports on the procurement of raw materials, planting, harvests, and sales.

Thank You!