



# **SOA**

## **(Service Oriented Architecture)**

## Anggota Kelompok 3

01

**Deni Hidayat**  
E1E120026

02

**Farid Rahman Laode**  
E1E120028

03

**Miftahul Jannah Salam**  
E1E120033

04

**Muh. Akbar As'ad Ishak**  
E1E120035

## Anggota Kelompok 3

05

**Muhammad Fikri Haikal B**  
E1E120040

06

**Muhammad Ishak Jaelani**  
E1E120042

07

**Raya Srikandi**  
E1E120046

08

**Sarman Chisara**  
E1E120050

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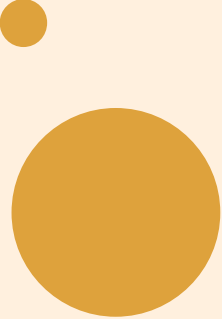
08

The background features a light beige color with large, abstract, curved shapes in a slightly darker beige tone. There are three gold-colored circles: one thin circle around the number '01', one solid circle to its right, and another solid circle further to the right, aligned with the title.

**01**

# **Pengertian SOA**

# Apa Itu SOA (Service Oriented Architecture)?

Two decorative orange circles of different sizes are positioned to the left of the text block.

“Metode pengembangan perangkat lunak yang menggunakan komponen perangkat lunak yang disebut dengan layanan untuk membuat aplikasi bisnis.”

The background features a light beige color with large, abstract, curved shapes in a slightly darker beige tone. There are two solid orange circles: one is positioned to the right of the '02' text, and the other is further to the right, near the 'Manfaat SOA' text.

**02**

# **Manfaat SOA**



# Manfaat SOA

Waktu masuk pasar yang lebih cepat

01

Pemeliharaan yang efisien

02

Kemampuan adaptasi yang lebih baik

03

The background features abstract, organic shapes in shades of light orange and beige. A thin gold circle is positioned in the upper left, containing the number '03'. Two solid gold circles are placed to the right of the '03' and below the main title. The overall design is clean and modern.

**03**

# **Karakteristik SOA**

# Karakteristik

**Logical view**

**Message orientation**

**Description  
Orientation**

**Network  
Orientation**



# Karakteristik


**Platform neutrality**

**Service Interface**

**Service  
implementation**

**Service Business  
Oriented**



The background features abstract, organic shapes in shades of light beige and tan. A thin gold circle is positioned in the upper left, partially enclosing the number '04'. Two solid gold circles are also present: one to the right of the '04' and another further to the right, near the center of the slide.

**04**

# **Prinsip SOA**

# Prinsip



**Interoperability**



**Abstraction**



**Loose  
Coupling**



**Reusability**

# Prinsip



**Composability**




**Autonomy**



**Optimization**



**Encapsulation**

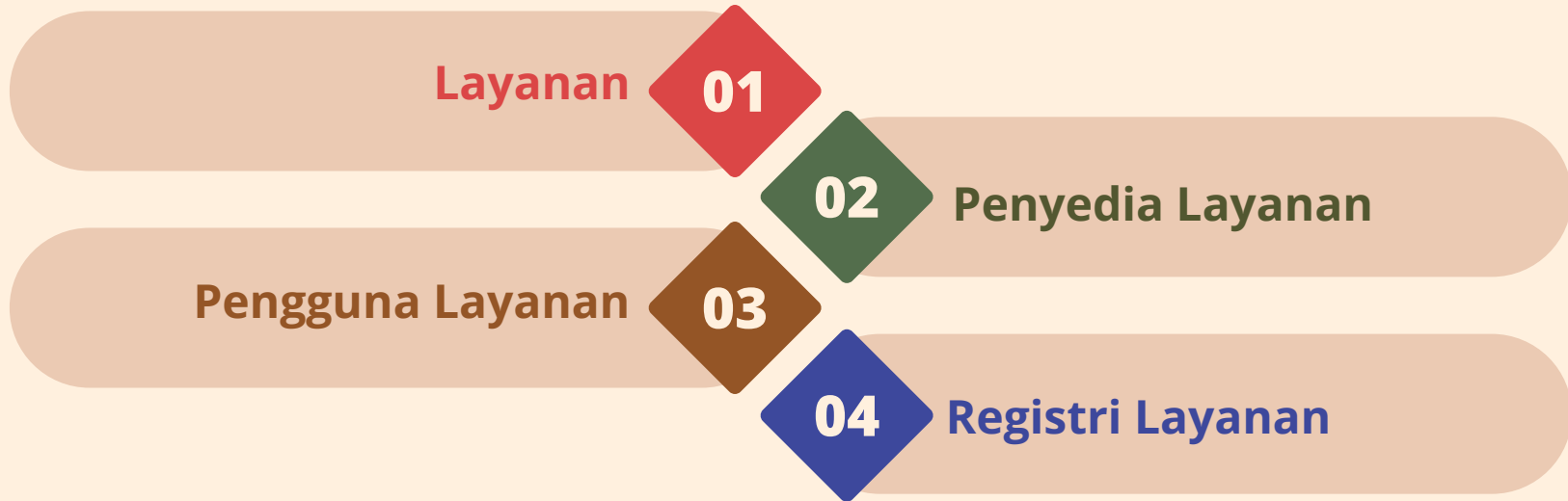
The background features a light beige color with large, abstract, curved shapes in a darker beige tone. There are two solid orange circles: one is positioned to the right of the '05' text, and the other is further to the right, near the 'SOA' text.


**05**

# **Komponen SOA**



# Komponen utama SOA

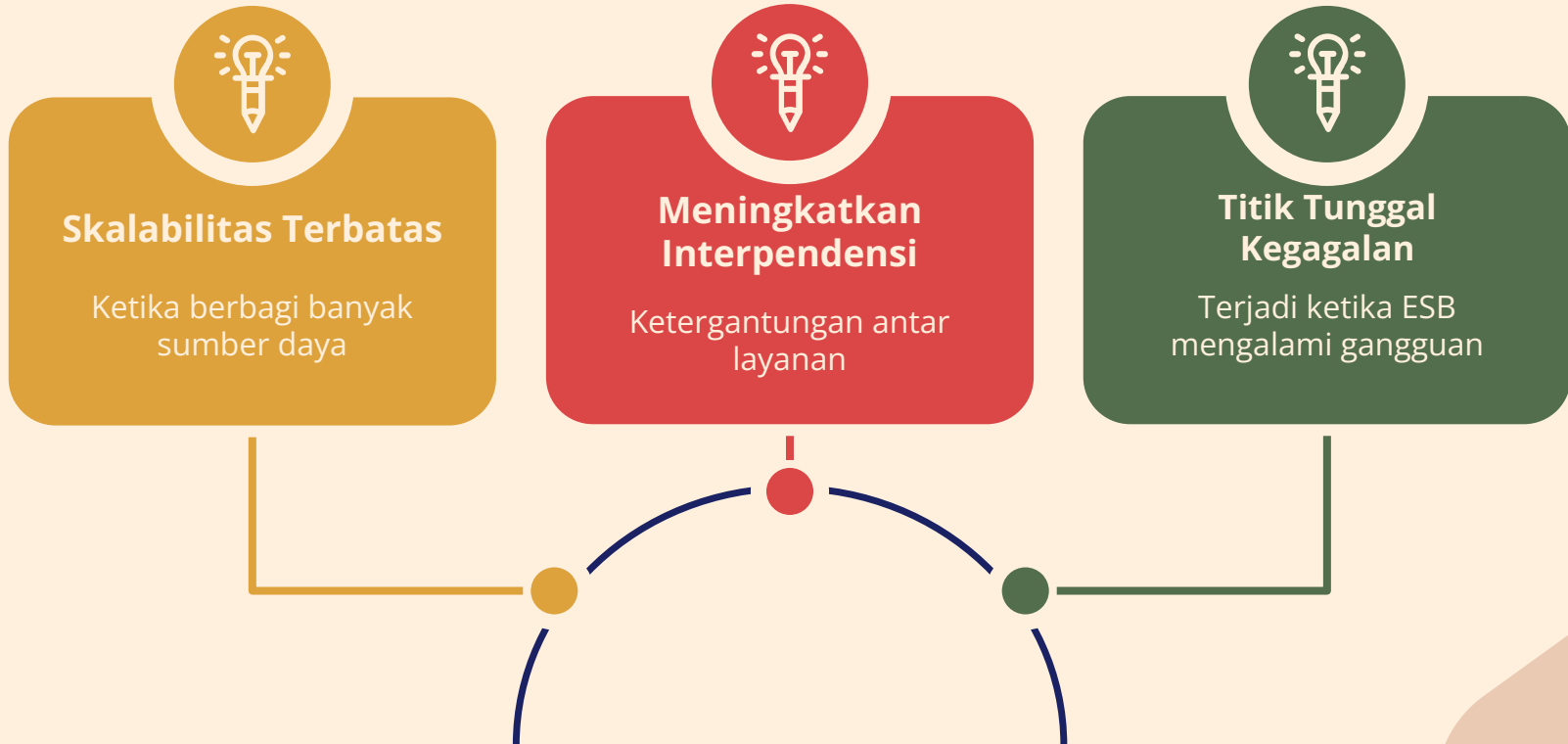


The background features a light beige color with large, abstract, curved shapes in a slightly darker beige tone. There are two gold-colored circles: one is a thin outline circle on the left, and the other is a solid circle on the right.

**06**

# **Keterbatasan SOA**

# Keterbatasan SOA





**07**

**KELEBIHAN**



# Kelebihan SOA



1

**Service  
Reusability**



2

**Easy  
Maintain  
ability**



3

**Greater  
Reliability**



4

**Location  
Independence**

# Kelebihan SOA



5

**Improved  
Scalability and  
Availability**



6

**Improved  
Software  
Quality**



7

**Platform  
Independence**



8

**Increased  
Productivity**



**08**

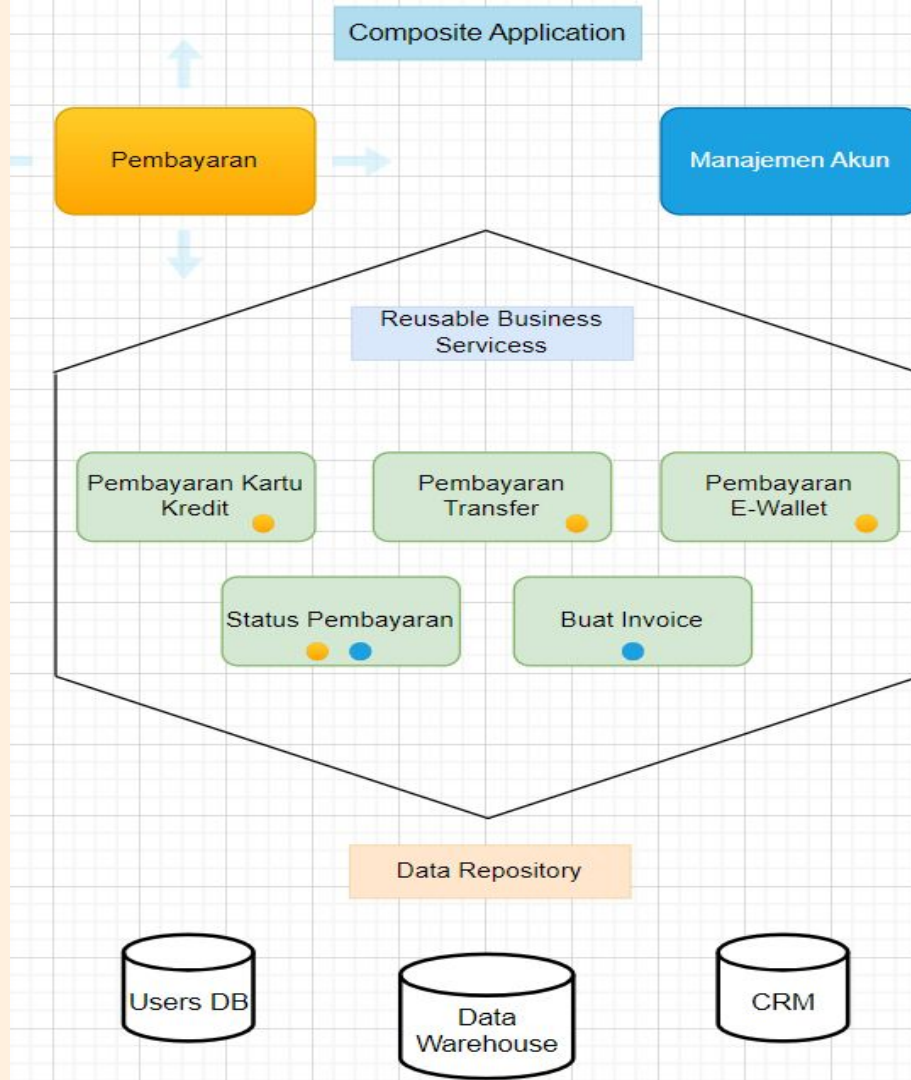
**Contoh SOA**



Contoh:

**“Payment Gateway”**







# Thanks!

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# Arsitektur Pipes and Filter

Kelompok 3

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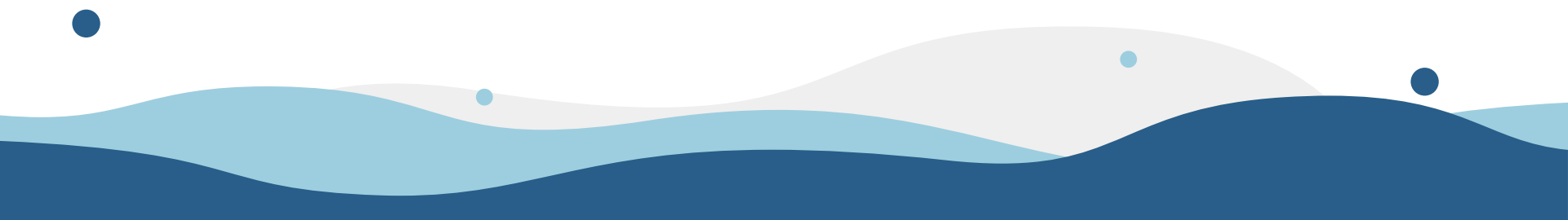
**Sarman  
Chisara**

E1E120050

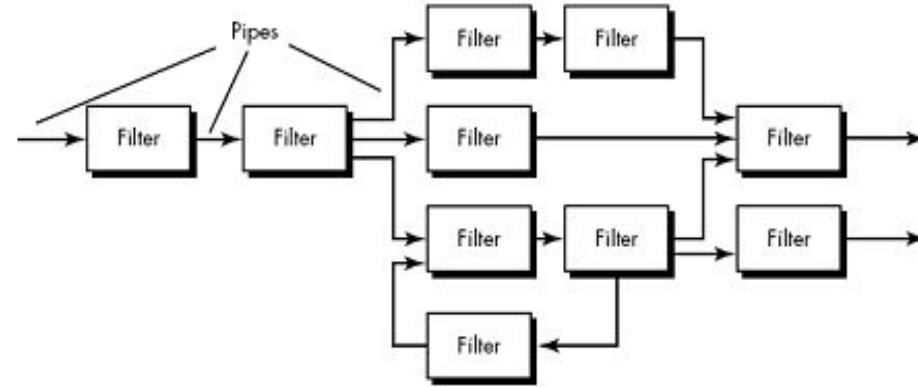


# Pengertian

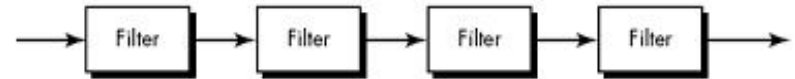
Pengolahan data diatur dalam suatu sistem sehingga setiap komponen pemrosesan (*filter*) bersifat diskrit dan melakukan satu jenis transformasi data



Metode Pipes and Filters adalah salah satu metode dalam arsitektur perangkat lunak yang menggambarkan bagaimana data diproses melalui serangkaian filter yang terhubung oleh pipa. Dalam metode ini, setiap filter adalah modul perangkat lunak yang memiliki satu tugas tertentu, dan data yang diproses diwakili sebagai aliran data (stream) yang mengalir dari filter satu ke filter berikutnya melalui pipa.



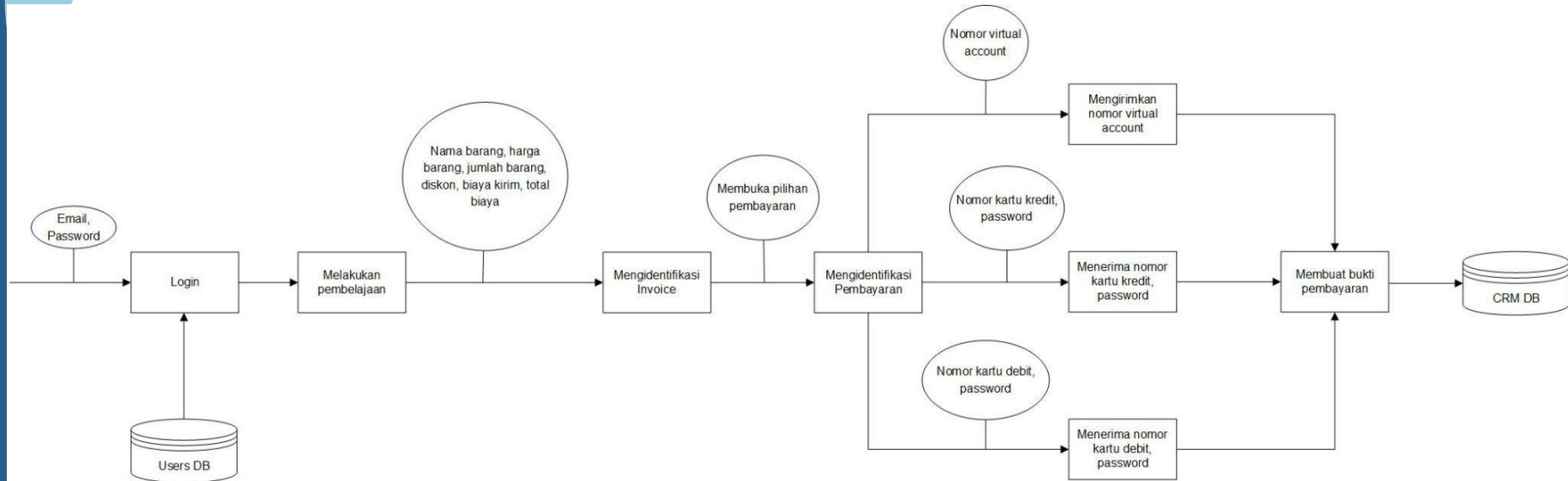
(a) Pipes and filters



(b) Batch sequential



# Payment Gateway





# Thanks

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