BUSINESS SOLUTIONS AND SERVICES

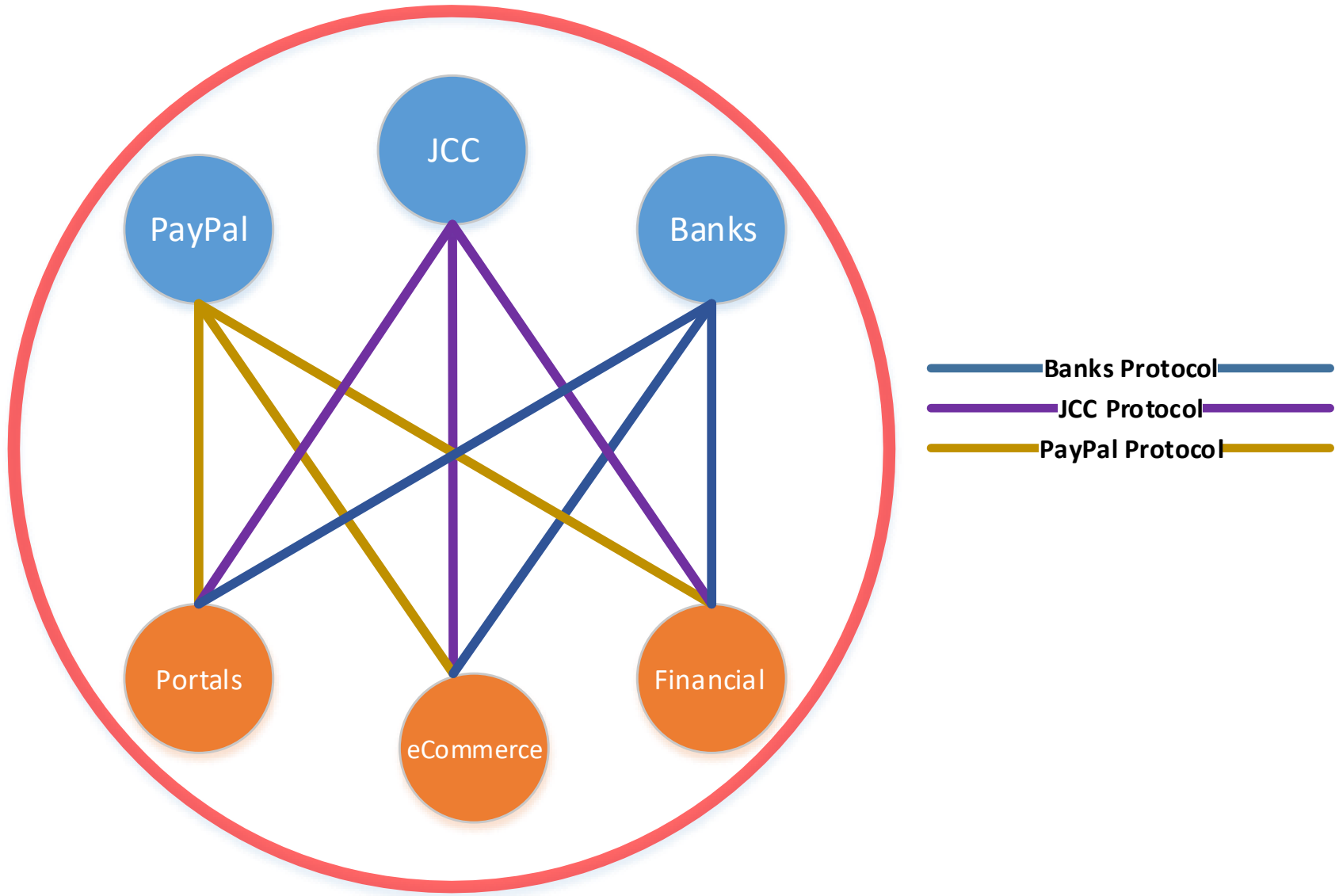# PAYMENT ENGINE

Logicom
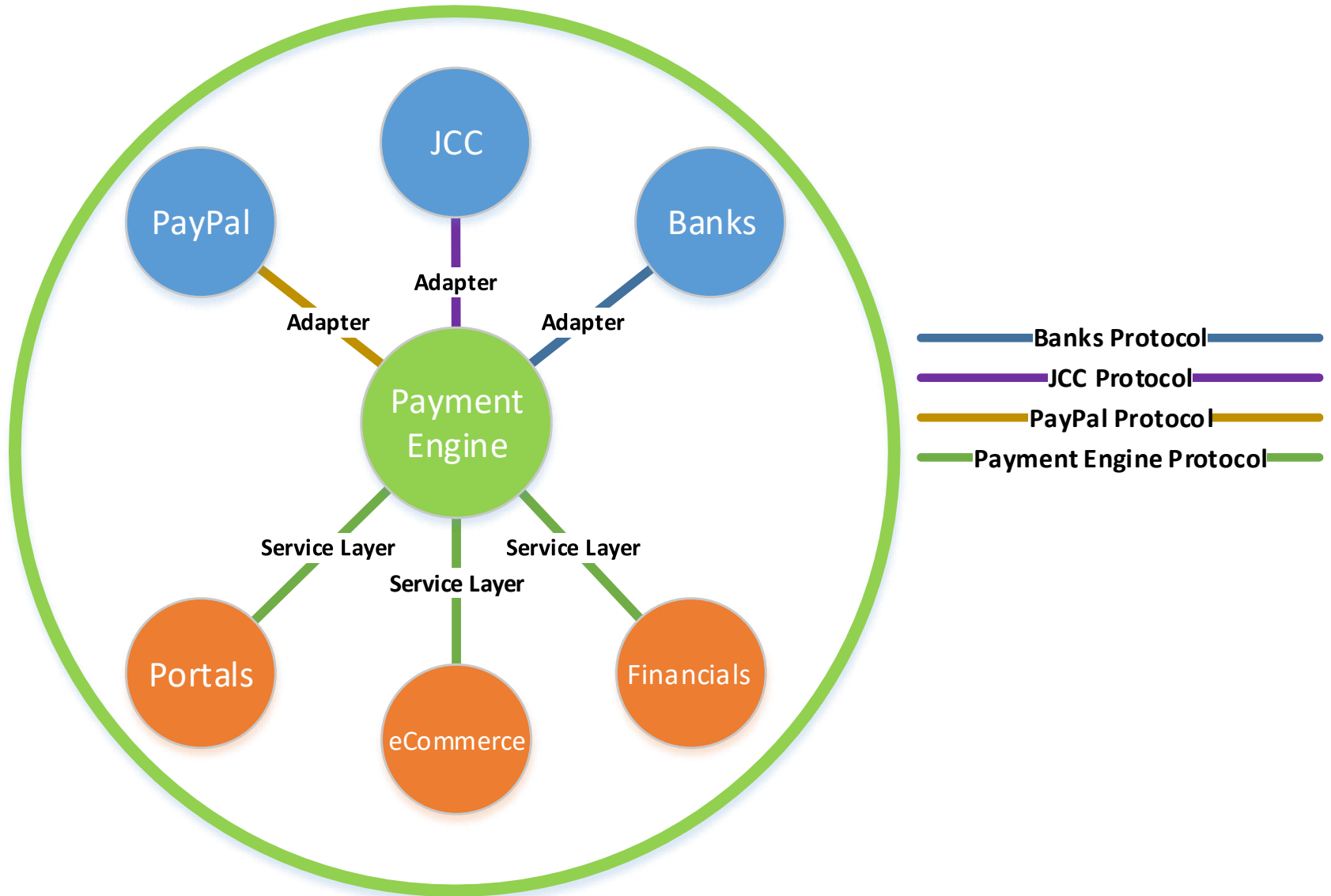Partners in your success

Payment Engine

- The Logicom Solutions Payment Engine enables an organization to facilitate electronic payments for their systems or services to external customers and partners, in a secure manner with minimal credit risk, effort and time frame.

Online Payments – The Problem

- Currently, a single universal industry standard protocol for internet electronic payments does not exist and each payment service provider is providing its own implementation.

- This creates a recurring development overhead and adds complexity for client applications (e.g. eCommerce sites) that want to provide multiple electronic payment methods.

- Each payment method implementation is different and must be:
  - Developed,
  - Tested
  - Configured

  by the client application.

- This problem means recurring
  - development costs, and
  - lengthier times to market.

Point-to-Point Integration Architecture

Online Payments - Payment Engine Solution

Hub and Spoke Integration Architecture

Payment Engine Middle-ware

PayPal

JCC

Banks

Payment Service Providers

Adapter

Adapter

Adapter

PSP Adapters

Service Layer

Payment Engine Middleware

Clients

Mobile Devices

Portals

eCommerce Web Sites

Financial Backends

Payment Engine - Functionality
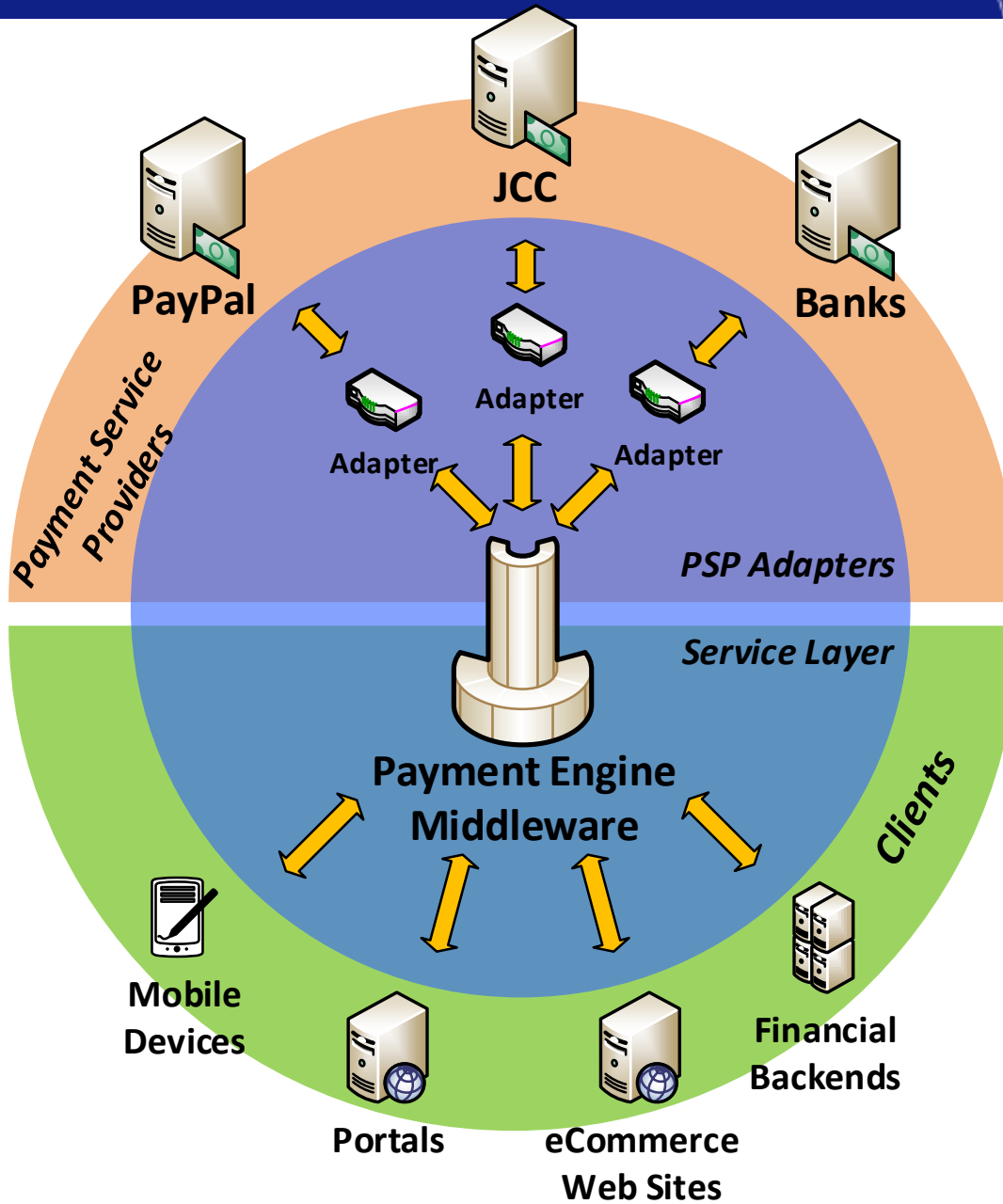
- **Asynchronous** Online Payment

- **Synchronous** Online Payment

- **Batch** Payments

- Continuous **Reconciliation**

- Real Time **Fraud Reduction** Rules and Reporting

- Processing of payments through the administration interface (MOTO)

- Standard Integration Protocol for Clients (XML Web Services for cross-platform compatibility)

- Multi-Currency enabled

- Multiplexing Engine

Payment Engine – Logical Design

Client Applications
(eCommerce, Portals etc)

Customer

Payment Engine - Service Layer

Transaction API

Fraud Rule Engine

Query API

Reporting

Multiplexing Engine

Client C1	→ eService E1	→ Payment Method (PayPal)	→ USD
Client C2	→ eService E2	→ Payment Method (JCC)	→ EUR
Client C3	→ eService E3	→ Payment Method (B)	→ GBP

Reconciliation Module

Syncronization Module

Payment Service Provider Plugin Adapters

PayPal | JCC | Banks

PayPal | **JCC** | **Banks**

PE - Web Enabled Administration

Clients Administration Portal

System Administration Portal

Help Desk Portal

Reporting Portal

- Cross Platform XML/SOAP Services

- Pluggable Architecture

- Multi-layered architecture

- Scalable architecture

- Service Orientation

- Modularity

- PSP Location transparency

- Multi-Level Security

- SMS / Email Notifications

- Hub and Spoke Architecture
  - Fosters reuse
  - Reduces the number of interfaces

Payment Engine – On Premise Installation Topology
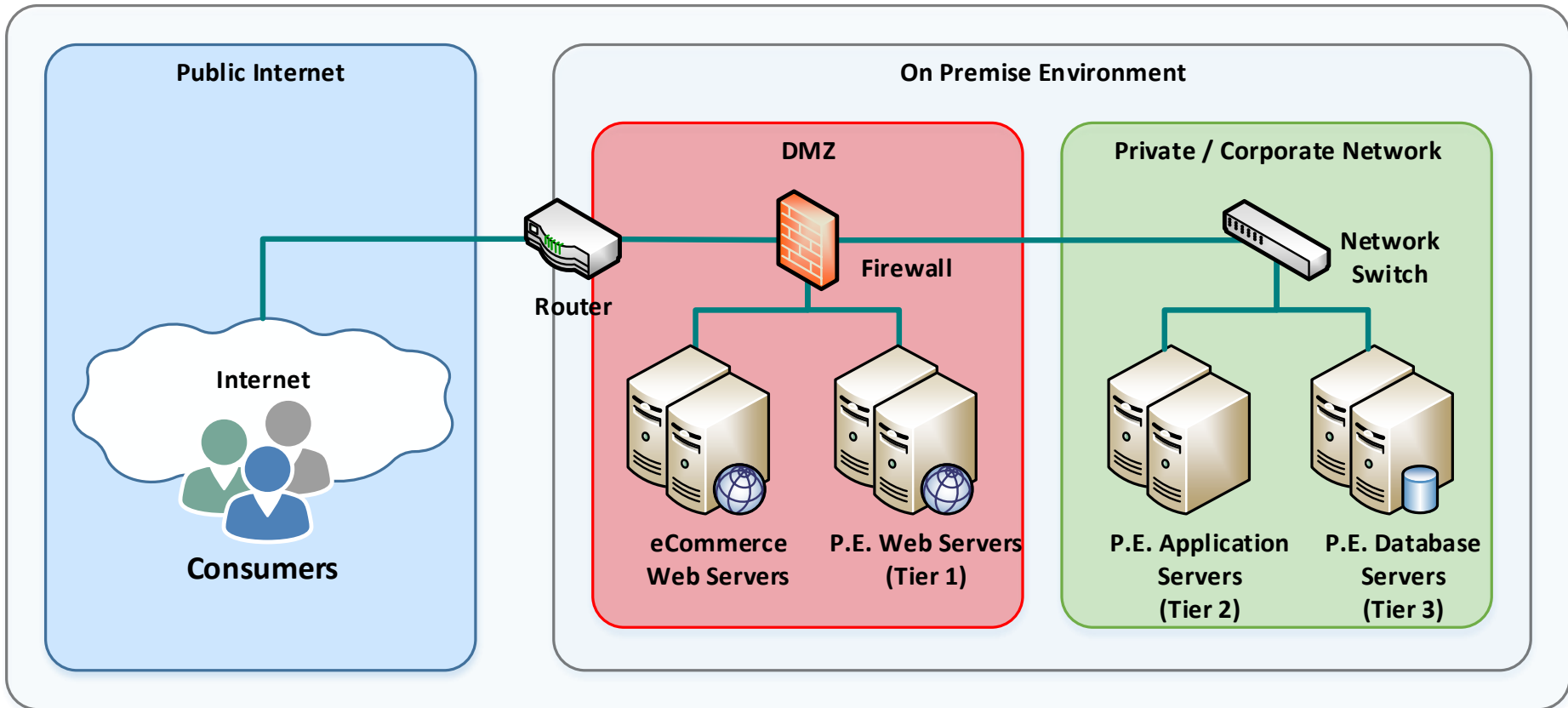
- **Technologies**
  - Microsoft .NET Framework 4.5
  - Windows Communication Foundation 4.5
  - Microsoft ASP.NET 4.5

- **Server Products**
  - Microsoft Windows Server 2012 R2
  - Microsoft SQL Server 2014
  - Microsoft Windows IIS Server

Solving
complex problems
is easy with ...