

# Mobile Wallet Platform



Next generation mobile wallet solution



## Introduction to mWallet / Mobile Wallet

- Mobile Wallet Account is just like a Bank Account
- User's money lies with the Mobile Wallet Operator instead of Bank
- As secure as a Bank Account
- Legal and regulated by Reserve Bank of the country or some governing authority
- Allows various mobile financial services
- Can also be linked with user's bank and credit card companies
- All the transactions are validated, authenticated and authorized that make it very secure
- All the data resides on server. Communication between client and server is encrypted



Set of solutions, specially designed and developed for telcos, banks, financial institutions, merchants, transport companies, retailers, and distributors.

# Mobile Wallet Payment Solutions

## More than just a Wallet...

- Core mWallet Platform
- mWallet Enterprise Suite
- Expert Analytics
- Solution for transport companies
- Solution for retail chain stores

offers you excellent opportunity to leverage the evolving technology to make differentiation in the market.

# Key Products



## Core mWallet Platform

- Offers core fund transfer services.
- Targeted for banks, telcos and merchants
- Highly demanded solution



## mWallet Enterprise Suite

- Advance set of solutions to dominate the market
- Offers capability to achieve the full potential of mobile money services
- Offers opportunity to upgrade the system



## Expert Analytics

- Business Intelligence system to understand user behavior
- Collect feedback from users
- Representation of data in different type of graphs

# Overview of Ecosystem



## **Mobile Wallet Operator:**

A company or an organization running the mobile Wallet in the country

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## **Agents:**

Users working on behalf of Mobile Wallet Operator. Direct dealing with consumers/subscribers mainly for Cash Deposit and Withdraw.

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## **Consumers/Subscribers:**

End-users using mobile wallet for their day-to-day banking activities, like fund transfer, bill payment, merchant payment. They first get themselves registered in the system.

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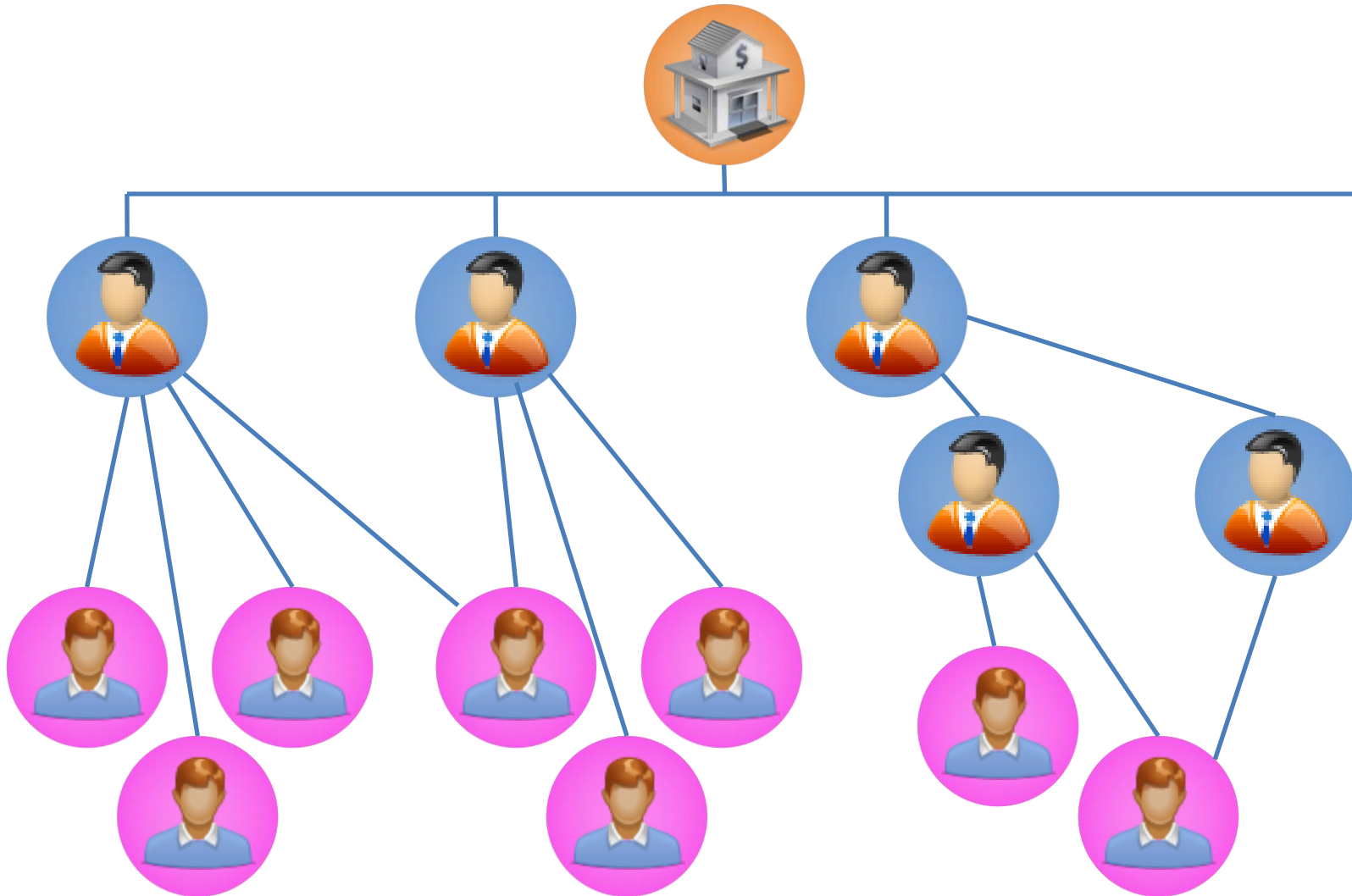


## **Merchants:**

Users who sell goods/services and accept payment through mobile wallet from the consumers/subscribers

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# Overview of the Ecosystem

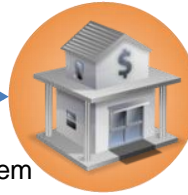


# Mobile Wallet Creation



## Mobile Wallet creation for Agent

1. Agent submits filled-in Registration Form to the Mobile Wallet Operator to participate in the ecosystem
2. Mobile Wallet Operator physically verifies the detail and financial aspects of the Agents
3. Mobile Wallet Operator registers the Agent in the System and open his mWallet account
4. Agent gets SMS on his mobile no for his mWallet creation and access details
5. Agent deposits money with Mobile Wallet Operator and start using it.



## Operating the Wallet

1. Wallet ID is Agent's mobile no
2. Agents dials 3 digits short code, like \*111# on his mobile no to access the mWallet features
3. Each access is authorized by his Transaction PIN



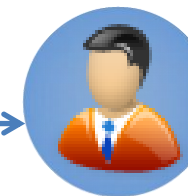
## Mobile Wallet creation for Subscriber

1. Subscriber visits authorized Agent's office/Operator's office, submits the filled-in Registration Form and Identity Proof
2. Details are verified and mWallet account is opened in the System
3. Subscriber gets SMS on his mobile no for his mWallet creation and access details
4. **Subscriber can deposit money with the Agent to load funds into his mWallet**



## Operating the Wallet

1. Wallet ID is Subscriber's mobile no
2. Subscriber dials 3 digits short code, like \*111# on his mobile no to access the mWallet features
3. Each access is authorized by his Transaction PIN





## About Fund Transfer

Mobile Wallet Fund Transfer is a service for mobile phone users to send and receive funds, all you need is mobile number of the subscriber you wish to send funds to. Recipient if is registered subscriber receives the funds instantly, else if unregistered he has to just go to Agent/ATM.

Mobile Wallet Fund Transfer solution has been designed for a secure Mobile Financial Services.

This platform can be integrated into existing mobile network and banking infrastructures, allowing mobile operators/banks and financial institutions to provide capabilities to the same network subscribers and different network subscribers through channel agents.



# Fund Transfer: Inside Ecosystem



# Fund Transfer: Outside Ecosystem



**Payee will get SMS** “You have received and Amount of USD 400 from <subscriber name>,  
Transaction ID is: YR104523. Please go to your nearest mobile wallet agent and collect the money.”

# Fund Withdrawal: Agent Network

## Registered Subscriber: Fund Withdraw

1. Agent dials \*111# on his mobile
2. Agents chooses Cash Out from the USSD menu
3. Agent enters his Transaction PIN
4. Agent enters Subscriber's Wallet ID
5. Agent enters Amount to be withdrawn
6. Subscriber gets One Time Transaction PIN (OTP) on his mobile
7. Subscriber enters OTP on Agent's mobile
8. Transaction completes
9. Agent and Subscriber get SMS for transaction detail.

## Non-Registered Subscriber: Fund Withdraw

1. Agent dials \*111# on his mobile
2. Agents chooses **On-The-Fly Cash Out** from the USSD menu
3. Agent enters his Transaction PIN
4. Agent enters Transaction ID given by non-registered user
5. System displays Transaction Amount
6. Agent Confirms to pay transaction amount
7. Transaction completes
8. Agent and user get SMS for transaction detail.

***As per the processes setup by the Operator Agent can ask the user to produce his identification proof at the time of collecting cash.***

# Fund Withdrawal: ATM

## Step 1: Mobile Wallet linking – One time process



### Mobile Wallet Linking

1. Subscriber logs on to Mobile Wallet system
2. Subscriber links his mWallet with Bank Account



Mobile Wallet online System

### Real-time/batch integration

1. Mobile Wallet will send mWallet and account details to the Bank
2. Bank will send status request



Bank server

## Step 2: Withdraw Money



### Money withdraw from mWallet

1. Subscriber inserts his Bank debit card
2. Subscriber enter card PIN
3. Subscriber chooses Withdraw
4. User gets two options:
  1. Bank Account
  2. **mWallet**
5. Subscriber chooses **mWallet**
6. Subscriber enters Amount
7. Subscriber enters mWallet PIN (optional)
8. Subscriber collects cash from the ATM



Mobile Wallet Server



### mWallet Authentication

1. Bank sends mWallet ID, Amount and Transaction PIN, ATM machine ID to Mobile Wallet system
2. Mobile Wallet validates the user, PIN and funds availability in the user mWallet Account
3. Mobile Wallet returns success/fail response back to ATM
4. **In case of success, Mobile Wallet will credit the amount into Bank Account inside the Mobile Wallet system for settlement purpose**

# Mobile Wallet Product Portfolio



*Different customized & turnkey solution modules that boost operators' revenue with superior system performance...*

- Fund Transfer
- Bill Payments
- Mobile TopUp
- Bank Integration
- Money Orders
- NFC Bus/Train Ticketing
- Pay Parking
- School Fee
- Retail Shopping
- Internet Data Plan
- Merchant Payments
- Promotion and Loyalty
- Merchant Deals
- Subordinate Wallet
- Survey/Polling

All the Solution modules can also accommodate customization & enhancement for future requirement

## Fund Transfer

- Allows a user to transfer eMoney to another mWallet user
- Allows both banked and unbanked consumers to perform various financial activities
- Both the mobile operators and financial institutions have a new transaction-based revenue opportunity.



## Bill Payments

- Offers a hassle free and a secure way to make instant payment for utility bills
- Allows users to register with multiple bill payment companies
- Both registered and non-registered users can pay for utility bills



## Mobile TopUp

- Offers operators reduced airtime distribution costs
- Offers mobile wallet users a personalized air time top up mechanism
- Allows users to recharge prepaid mobile phone account anytime, anywhere



## Merchant Payments

- Provides a real-time acceptance of payments made via mobile phone for both in-store and online
- Open APIs to support integration with the existing POS systems
- Instant transaction rollback feature
- Provides NFC capabilities for fast and secure transactions



## Promotion And Loyalty

- Empowers providers to utilize buyer and seller interactions through various promotion and loyalty events
- Allows define targeted promotional campaign
- Offers real-time transaction-based customer analytics to evaluate and track a campaign's effectiveness



## Merchant Deals

- Set up virtual store fronts to promote and launch their own deals.
- Offers merchants a kind of advertising and real-time daily deals service for various products.
- Allows both registered and non-registered users to access deals



## NFC Bus / Train Ticketing

- Offers instant digital ticketing service via NFC Card or NFC mobile phone
- Allows both commuters as well as transport authorities to maintain records of digital tickets
- Facilitates instant notification system for ticket purchase through SMS



## NFC Retail Shopping

- Offers cashless and quick transactions
- Allows authorization to multiple users and complete control of account
- Offers convenience to customers with a simple tap



actions

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## NFC Pay Parking

- Provides cashless and mobile form of vehicle parking services
- Allows the parking providers to set time based, entry based and shift based parking rates and renewal reminders
- Reduces a large sum of vehicle parking operating costs
- The system can be accessed by USSD/NFC





## Internet Data Plan

- Allows different telcos to setup their data plans in the system and offers a user choose the best plan according to his needs
- Provide a detailed view of multiple plans with pricing, bandwidth, validity, etc.
- User can buy the plan for himself or his friends/relatives



## USSD Survey

- Allows merchants to conduct quick, live and in real-time, and session based not transaction based survey and poll
- Enables enhance customer interaction, drive service usage and increase revenue
- Offers merchants to set up USSD surveys via portal, allowing both registered as well anonymous user to participate in the survey
- No requirement of Internet and works on 99% of the worlds mobile phones



## Subordinate Wallet

- This unique offering allows merchants or agents to authorize their subordinates to use a single wallet.
- Also allows merchants to manage and monitor subordinate wallet account
- Instant SMS notifications and alerts keep the real owner of the mWallet updated about every transactions made by their subordinates



## School Fee

- Offers school and education establishments to provide mobile phone based school fee payment system
- Allows schools to receive payments directly to bank account of the school, reducing cost and time involved in managing cash counter
- Also allows agents or channel users to register with the system



# Key Features

- Excellent built-in Core mWallet platform
- Supports Multi-language and multi-currency
- Accessible through different platforms like USSD, NFC, Web, POS machines and Smartphones and as well as features phones
- Secure, scalable and robust platform and guarantees 99.9% availability
- 24x7x365 days assurance protection against thefts and frauds
- Decision Support System for top management to make better decisions
- Fully customizable and flexible KYC for all types of users
- Highly configurable commission structure for all the services
- Open APIs for Banks, Telcos, Merchants, Utilities Companies for integration



## Business Benefits

- Accelerate revenue growth
- Flexible integration
- Cost-effective deployment
- Improved customer engagement
- New revenue opportunity
- Increase in ARPU
- Secure and seamless user experience
- Instant Banking services
- Increased customer base



## Platform: Smartphone

### Features:

- ✓ Defining exciting platform for mobile wallet
- ✓ Secure, fast and reliable
- ✓ Independent of any telco operator
- ✓ Option of NFC Payments
- ✓ Reduces fraud possibilities through instant SMS notifications
- ✓ Enhances consumers engagement and shopping experience



## Platform: NFC

### Features:

- ✓ Fast and easy payment services
- ✓ Provides flexibility and movability through contactless mobile payments
- ✓ All the transactions are validated on server
- ✓ Reduces fraud possibilities through instant SMS notifications
- ✓ Offers extensive use of various marketing tools



System access through USSD (Unstructured Supplementary Service Data), without Internet Connection

## Platform: USSD

### Features:

- ✓ Almost 99% of the worlds' phone have this feature in-built
- ✓ No dependency on Internet
- ✓ Secure, fast and reliable
- ✓ Reduces fraud possibilities through instant SMS notifications
- ✓ No cost to the end user
- ✓ Easy to use: menu driven flow
- ✓ Most popular access medium across the whole Africa

My transactions

Transaction date	Transaction reference	Service type	Second party	Amount	Dr. Amount	Cr. Amount	Balance	Commission	Service fee	Status
26/4/2013 10:11	1245ICFFAUSD	Cash In	7300181235	6.00	4.94		626.66	1.06		Transaction approved
26/4/2013 20:52	JQ2JOLR9USD	Cash Out	9811882448	10.00		10.00	621.60	0.00		Transaction approved
26/4/2013 20:24	8762ZG59AUSD	Cash In	9811882448	10.00	8.90		621.60	1.10		Transaction approved
26/4/2013 16:08	99330EWCUSD	Cash Out	9811882448	10.00		10.00	630.50	0.00		Transaction approved
26/4/2013 14:58	1CLJ614JUSD	Cash Out	9811882448	19.00		19.00	620.50	0.00		Transaction approved
22/4/2013 21:44	3R8C2GR8KUSD	Cash In	9811882448	10.00	8.90		601.50	1.10		Transaction approved
22/4/2013 17:25	1W8N05N4KUSD	Cash In	9811882448	10.00	8.90		610.40	1.10		Transaction approved
22/4/2013 15:00	4K24R4W4USD	Cash Out	9811882448	10.00		10.00	619.30	0.00		Transaction approved
17/04/2013 23:36	Y008R8J3AUSD	Cash In	9811882448	10.00	8.90		608.30	1.10		Transaction approved
16/4/2013 21:51	1H0G9Y55AUSD	Cash In	8642458310	111.00	106.88		618.20	2.11		Transaction approved
16/4/2013 21:51	VN8E3E3HUSD	Cash In	9811882448	1985233.00	1985233.00		727.09			Failed
16/4/2013 21:50	VN0E80G3AUSD	Cash In	9811882448	10.00	8.90		727.09	1.10		Transaction approved
16/4/2013 21:11	W0R83H8RUSD	Cash In	8642458310	85577.99	85577.99		735.99			Failed
16/4/2013 21:11	7A31887JUSD	Cash In	8642458310	85577.99	85577.99		735.99			Failed
16/4/2013 21:10	8FKZ0K8RUSD	Cash In	8642458310	143.86	141.42		735.99	2.44		Transaction approved
16/4/2013 21:08	8D4H1F8RUSD	Cash In	9811882448	123.00	120.77		617.41	2.23		Transaction approved
15/4/2013 18:48	ZWPYV0VHUSD	Cash In	9811882448	10.00	8.90		596.18	1.10		Transaction approved
15/4/2013 17:05	7N0RUL5USD	Cash In	9811882448	10.00	8.90		1007.08	1.10		Transaction approved
15/4/2013 15:51	UT88W9AUSD	Cash Out	9811882448	10.00		10.00	1015.98	0.00		Transaction approved
15/4/2013 15:51	ZUP88R4KUSD	Cash In	9811882448	10.00	8.90		1005.98	1.10		Transaction approved
15/4/2013 15:50	54F8MUP2USD	Cash Out	9811882448	10.00		10.00	1014.88	0.00		Transaction initiated
15/4/2013 15:40	3R888E2AUSD	Cash In	9811882448	10.00	8.90		1014.88	1.10		Transaction approved
15/4/2013 13:34	K4M8RCJUSD	Cash In	9811882448	10.00	8.90		1023.78	1.10		Transaction approved
15/4/2013 12:52	17GGJK4AUSD	Cash Out	9811882448	10.96		10.96	1032.68	0.00		Transaction approved
15/4/2013 12:50	M88HC8AUSD	Cash In	9811882448	10.32	9.22		1021.72	1.10		Transaction approved

# Platform: Web

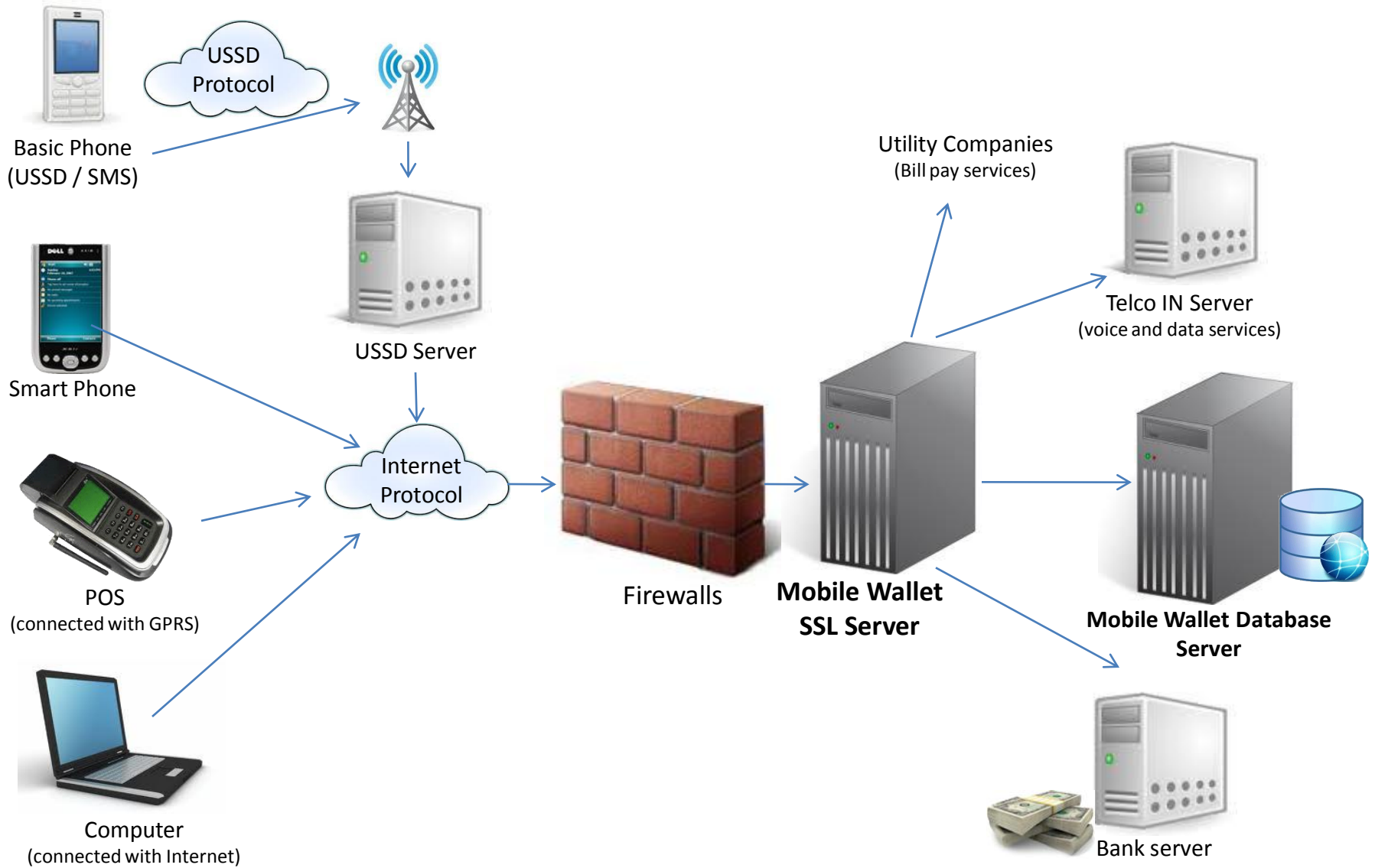
## Features:

- ✓ Independent of any telco operator
- ✓ Using existing infrastructure and knowledge



- ✓ Empower users to maximize the web payment practice
- ✓ Fast access to detailed and comprehensive information
- ✓ Facilitating billers and merchants to manage their accounts online
- ✓ Encouraging consumers and merchants for mobile wallet payment adoption
- ✓ Covers a big mass of consumers at no extra cost
- ✓ Secure, fast and reliable

# Solution Architecture





# Data Security Measurements

- All the sensitive data is kept encrypted using SHA algorithm and can't be decrypted
- IP address/ IMEI number authentication with the integrated systems and external devices
- Users could be forced to change their password and PIN after every few days
- Regular security audit for the whole system.
- Each access to the system is authorized, authenticated and logged. Every user has role based access to access the system.
- No Data is stored on user's device and use of cookies are completely avoided.
- Utilize anti-virus software and firewalls.
- Use of strongest industry standard SSL certificates.
- Continuous monitoring of logs and mechanism for blocking access to suspected users



# GBG ATMSafe Protection Assurance

- Mobile Wallet is the ONLY mobile banking software development company to offering the *ATMSafe* protection assurance as part of its package.
- *ATMSafe* is the only fraud protection program available world-wide.
- Provides safety and security for various financial platforms: mobile cash transactions, ATM transactions and remittance transactions.
- *ATMSafe's* value-added benefit program meets the standards set by regulators on card issuers.
- Mobile Wallet assists its customer to attract new business and promote customer loyalty.



# Why Mobile Wallet?

The most important question?

## Commitment to Quality:

Follow the industry standards to deliver the best-in-class software solutions that are reliable, scalable, secure, and result-driven

## Flexible Pricing Models:

- Revenue sharing model:
- Transaction based model: } Just pay us only for setup and integration cost to get started
- Fixed price model: Budget feasibility, competitive rate and uncompromising quality

## Low cost of start-up:

- Live demo of the whole system before signing the contract
- Cloud based hosting, so no hardware and software cost
- Open Source Technologies: Platform independent of any OS, any database, any application server

## After sales support:

- Experienced, dedicated and trusted support services for smooth operations
- 99.9% uptime guarantee and 24x7 phone and online support
- Ease & Control over cost of custom development



# Business Models



All our solutions (Core mWallet Platform, mWallet Enterprise Suite, Xpert Analytics) are **fully customizable and ready to go to market.**

Offers options to either have it **installed in-house or run as a hosted service**

We offer licensing, system integration, hosting, maintenance, and support in three different commercial models to suit your both requirement and budget:

## Licensing:

- One time licensing fee
- Annual support & maintenance

## SaaS:

- Minimal setup costs
- Fee on each transactions
- Annual support & maintenance

## White Label/ Reseller:

- Sign up/Set up fee
- Annual support & maintenance



**Interested in deploying a  
mobile wallet services for your  
business?**

**Contact Us  
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Email:argyti.maria@gmail.com**