Clickatell

USSD Solution

What is USSD?

Clickatell, the world's leading mobile messaging company, now provides an innovative range of multi-channel mobile Unstructured Supplementary Service Data (USSD) services. USSD is a GSM standard that enables high speed interactive communication between customers and applications across GSM networks.

USSD has become widely accepted as the ideal channel for services such as mobile banking and mobile commerce and provides a channel through which new business opportunities can be created. Clickatell's integrated products and services provide for an end-to-end turnkey solution in support of your business strategy for mobile services across multiple channels. Clickatell's proven rollout methodology helps partners achieve successful deployment with extremely rapid time to market.

Types of USSD available

Clickatell offers customers two types of USSD services: mobile-initiated ("pull") and network-initiated ("push").

1. Mobile-Initiated USSD (also known as "pull"): Enables the customer to dial a number (e.g. *100#) to initiate a session via the handset. This information could also be displayed as a menu that the user can respond to and interact with.

2. Network-Initiated USSD (also known as "push" or "mobile-terminating"): The session to the handset is started by the application. Similarly to mobile-initiated, this information could be a menu that the user can respond to and interact with.

The different types of USSD services are offered for all types of service codes including dedicated and shared service codes, as well as standard, reversed and premium billed. Please contact expertadvice@clickatell.com for more information on what type of service would best fit your need.

```
*120#
    ├── 1. Services
    ├── 2. SIM Swap ──── 1. My Number
    │                    2. My Balance
    ├── 3. Entertainment ──── 1. News
    │                         2. Sport
    │                         3. Gossip
    │                         4. Politics
    ├── 4. Airtime Transfer ── Enter Voucher Number ── Enter Amount ── Do Transfer
    └── 5. Airtime Top-Up ──── Enter Target Number
```

Key benefits of USSD

Some of the reasons for USSD's increasing appeal compared to that of other bearer channels are:

*   Reach and interact with your customers via a low cost, low touch and high reach service channel
*   Available on 99% of GSM handsets which means the service is completely independent of the mobile device
*   Create real-time instant connections during USSD sessions allowing information exchange through a bidirectional dialogue
*   Supports messages of up to 182 characters in length compared to the 160 characters supported by SMS
*   Supports a high volume of transactions and throughput
*   Secure as no information is entered and stored on the handset
*   No integration required on handset or SIM
*   Seamless integration with enterprise applications which allows for multiple applications to be connected via the same gateway

Our USSD Offering:

Clickatell's USSD gateway can be integrated with Chat Flow, our workflow-building platform, enabling non-technical staff to design the rich self-service experiences and transactional activities your customers crave and demand. With Chat Flow, you can visually create, edit, and manage your customer communications and business process workflows across multiple channels (e.g. SMS, USSD, WhatsApp). Furthermore, with our Transactional APIs, enterprises can enable their customers to purchase prepaid top-ups, electricity, and even church donations.

- Consumer mobile-initiated or client mobile-initiated USSD offering
- Hosted solution significantly reducing the capital requirements and the need for in-house mobile technical skills
- Attractive volume-based per session tapered pricing
- Single point of contact for billing, technical and operational areas
- A single secure access point across all networks (selected countries) and services

- Quality of service across the USSD value chain through active monitoring of USSD systems and carrier/client connections
- An enterprise-grade experience through a fully managed USSD connectivity service and enterprise level support
- Reporting and analytics
- Ability to blacklist mobile numbers if not already blacklisted by the network operator
- Service code management
- Access to a subject matter expert

> USSD has become widely accepted as the ideal channel for services such as **mobile banking** and **mobile commerce**

What can USSD do?

SELF-SERVICE
- Mobile self-service
- Service registration
- Service queries
- Verification of product authenticity
- Reservations
- Help

ACQUISITION
- Customer acquisition and sign-up for services
- Campaign management
- Sponsored menu item/advertisement

FINANCIAL SERVICES
- Balance enquiry
- Mini statement
- Payments and transfers
- Remittance
- Pay beneficiary (customer and/or client-defined)
- Money transfer
- Change pin
- Prepaid top-up
- Peer-to-peer payments
- Bill payments

INFORMATION SERVICES
- News, weather, sport updates, stock market, etc.
- Trivia quizzing

VOTING AND SURVEYS
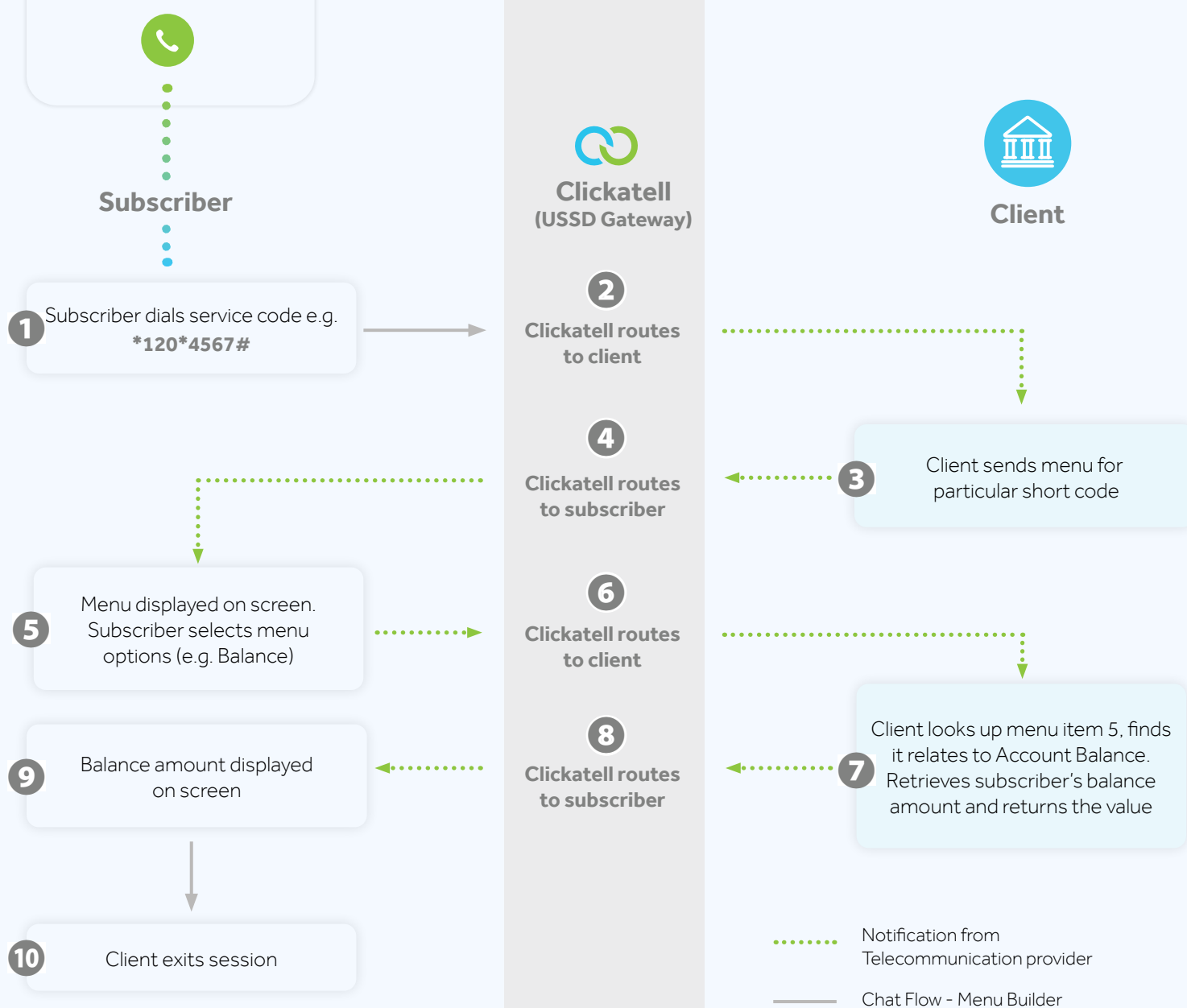- Voting contests and polling
- Customer surveys

*120*4567#

Add Number

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
*	0 +	#

How does the Clickatell USSD aggregation solution work?

Clickatell acts as an aggregator and provides enterprise clients with API access to Clickatell's managed USSD gateway. Enterprise clients can in turn offer USSD-based services to their clients. Clickatell is responsible for managing the connection to all mobile network operators. A USSD session through Clickatell's gateway works as follows:

Subscriber

Clickatell (USSD Gateway)

Client

1 Subscriber dials service code e.g. *120*4567#

2 Clickatell routes to client

3 Client sends menu for particular short code

4 Clickatell routes to subscriber

5 Menu displayed on screen. Subscriber selects menu options (e.g. Balance)

6 Clickatell routes to client

7 Client looks up menu item 5, finds it relates to Account Balance. Retrieves subscriber's balance amount and returns the value

8 Clickatell routes to subscriber

9 Balance amount displayed on screen

10 Client exits session

········ Notification from Telecommunication provider

——— Chat Flow - Menu Builder

Clickatell