Let's pose the following questions;

Are you tired of getting bogus orders coming in through your web site..?

Are these bogus orders starting to cost you <u>real</u> money..?

Are you constantly having to correct information people put into your web forms..?

Do people, maybe competitors or malicious users, enter false information on your web site..?

Have you ever wanted to try and call someone when you only have their email address..?

Are you sure the phone number they gave you actually belongs to them..?

Do you live in the hope that every email address you collected on your web site was real..?

# <u>FACT #1</u>

## Every user on the Internet wants, as far as is possible, to remain anonymous.

Corporations go to great lengths to gather information on users, either by collecting browser data or, requesting users to submit, often personal, information in online forms. Problem is that you can never be certain the user gave you the correct information in the form unless they're bursting to do business with you and their identification is crucial to the transaction.

# <u>FACT #2</u>

#### Almost everybody has multiple email addresses.

Depending on the importance of the transaction, people will often use a secondary address to register on a web site to avoid being identified or spammed. If they feel that their privacy could be compromised by providing their regular email address, they are likely to withold it.

# <u>FACT #3</u>

#### Entry of phone numbers, especially mobile numbers, on a web site form is full of pitfalls.

There are so many ways a user can enter a phone number; with or without std codes, brackets, spaces, dots and plus signs. Programmers work hard to create edit checks and algorithms to try to get to a useable phone number that can be called or sent txts directly from your CRM system.

However, as with an email address, you cannot be certain that the number is real or belongs to the person who entered it on the web site. Even if you txt them a password you cannot be sure the number belongs to them either. There are sites around the world that provide generic mobile numbers that post passwords up on the web for all to see, while you thought it was sent to the user's mobile.

# <u>FACT #4</u>

#### There's something special about a mobile number; It's absolutely unique Worldwide!

That's right, a mobile number in full international format is totally unique and tells you the country and mobile operator. No other device in the entire World shares this number.

Furthermore, with the advent of number portability and reluctance of users to change numbers for fear of being out of touch with friends, individuals can reasonably be identified by their unique mobile number.

# **Overview - What is it ?**

Smartword<sup>®</sup>Key enables the positive identification of a user/customer through their mobile phone number.

A genuine user/customer will normally divulge their regular mobile number to an enterprise providing Goods & Services, given that it is a trusted organisation and delivers the benefits they want.

From the Goods & Services provider's point of view, a major issue is providing a foolproof interface that captures user/customer information correctly, in this case mobile phone numbers, while eliminating user input mistakes and preventing the deliberate input of false information.

A Smartword®Key 100% GUARANTEES that the correct mobile number is returned to your application!

# How does it work?

User sends a Smartword<sup>®</sup> to Msgwrx (+6421674979), which responds with a unique Smartword<sup>®</sup>Key.

The Smartword<sup>®</sup>Key is then entered into the enterprise's web application, which validates it on the Msgwrx cloud verification service and is returned the correct mobile number in international format.



The enterprise's web application then continues to process the user's request or rejects it accordingly.

## **Technical Information**

To use Smartword<sup>®</sup>Key, a customer must be registered on the Msgwrx system with at least one type \*ONEKEY ("one-time" password key) Smartword<sup>®</sup> configured.

A basic Smartword®Key is 6 Alphanumeric characters, valid for 1 hour and can be used once only.

Maximum length is 128 characters (minimum 4), while validity can be extended to 90 days.

An 8 character Smartword<sup>®</sup>Key has a possible 2,821,109,907,456 character combinations.

The Customer is provided with a 34 character Customer Access Key for use with the verification API.

Verification occurs when a valid Smartword<sup>®</sup>, Customer Access Key and Smartword<sup>®</sup>Key is submitted.

Upon successful verification, the full international format mobile number of the requesting mobile device is returned to the customer's application and a notification message is sent to the customer administrator.

Customers are charged for transaction activity on their account as follows;

1x Outbound txt with Smartword<sup>®</sup>Key to requesting mobile. 1x Outbound txt to customer when successful Smartword<sup>®</sup>Key validation occurs

## Sample HTML File

To facilitate manual testing, the contents of a sample HTML file is shown below.

```
<html>
<head>
<meta http-equiv="Content-Language" content="en-nz">
<meta http-equiv="Content-Type" content="text/html; charset=windows-1252">
<title>VERIFY SMARTWORD KEY</title>
</head>
<body>
<form action="https://msgwrx.azurewebsites.net/TOKEN Verify.aspx" method="POST">
*** VERIFY SMARTWORD KEY ***<BR><BR>
Request Smartword : <input type="text" name="idRequestCode" value="" size="24" /><BR>
\langle BR \rangle
Request Access Key : <input type="text" name="idRequestKey" value="" size="64" /><BR>
\langle BR \rangle
Smartword Key : <input type="text" name="idDeviceKey" value="" size="16" maxlength="64" /> (any
case)<BR>
\langle BR \rangle
<input type="submit" value="submit" /><INPUT TYPE="RESET" VALUE="Undo" />
</form>
POST to http://www.msgwrx.com/TOKEN Verify.aspx
</body>
</html>
```

## Web Application API

URL:	https://msgwrx.azurewebsites.net/TOKEN_Verify.aspx		
METHOD:	POST		
PAIRS:	name="idRequestCode"	value=	Smartword used in original request
	name="idRequestKey"	value=	Unique access key allocated to customer
	name="idDeviceKey"	value=	Smartword <sup>®</sup> Key to validate

The customer should integrate the call to the Smartword<sup>®</sup>Key API into their web application, passing the above name/value pairs. The idRequestCode and idRequestKey should not be revealed on any part of the website and should only be passed as parameters when the API is called.

An XML document is returned to the calling application with the following API Return Codes;

ERROR	Xml return Code	Meaning
2000	Passed	No POST data retrieved
2001	Invalid Smartword	Could not find active customer/smartword/access key
2002	Invalid Device Key	Length of input code idRequestCode incorrect
2003	Invalid Txt Code	Could not find active idRequestCode/ idDeviceKey
2004	Expired Txt Code	Found valid customer/key but it date is too old
2005	Invalid Device Address	Mobile number on customer/key record is invalid
1000	OK	Successful verification that returns mobile number

Samples of XML returned

Result of a successful verification, moble number is returned with 1000 result code;

```
<pap>
<push-response push-id="REC47C19A94D6D0E1551B8L0">
<address address-value="SHOP">64293042168</address>
<response-result code="1000"/>
</push-response>
</pap>
```

Result of an unsuccessful verification due to expiry of code sent to user:

<pap> <push-response> <response-result desc="Expired Txt Verification Code" code="2004"/> </push-response> </pap>

Other unsuccessful verifications are in the same format and contain the error codes listed.