

## Identity Verification is essential to the future of the online marketplace.

The exponential growth of the Digital Economy has created many challenges for businesses in validating and protecting their users' private information. These and other impediments such as establishing trust in the online marketplace and verifying users are costing business multiple billions annually and impacting consumer confidence.

The threat of personal information: name, address, password, credit card details, etc. being regularly stolen for fraudulent use and monetary theft is constant and causing significant issues for all stakeholders of the digital economy. Consumer's credit cards can be used without their permission leading to their identity being exploited to create new accounts with online merchants for criminal activity.

Verizon Enterprise reported 53k+ security incidents, in its 2018 Data Breach investigations Report. Non-compliance with EU GDPR carries penalties of up to €20m or 4% of global revenue and this takes no account of the costs to business of the breach itself. Sedicii's unique ZKP technology helps organisations to comply with strict AML and Data Protection legislation as no data is exposed during the authentication process.

### Sedicii ZKP Verification

- ✓ Maximum Reliability
- ✓ Full Automation
- ✓ No Data exposure
- ✓ Fully GDPR/AML Compliant

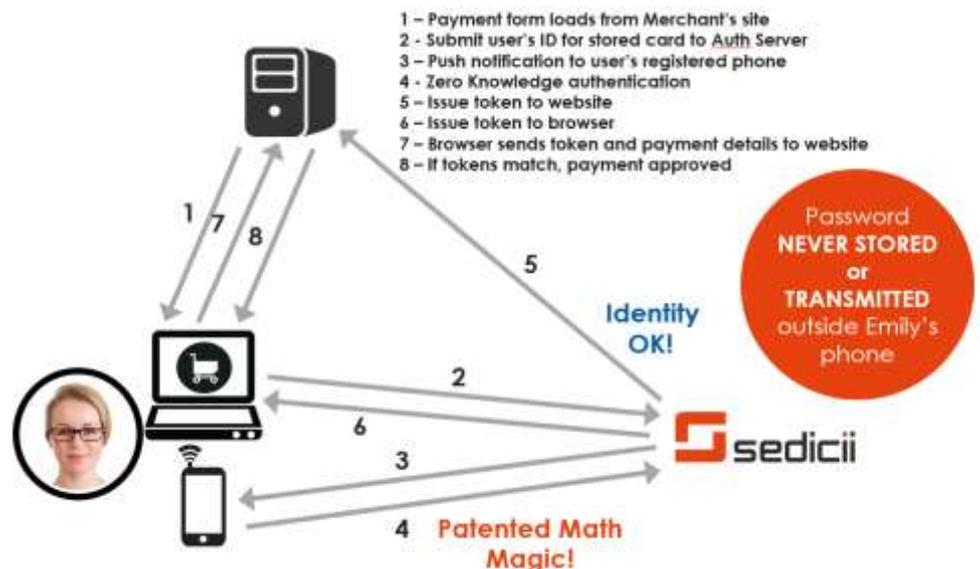
## The Problem:

Today when a person uses their credit card to purchase something on the internet via a website or app, there is no efficient and convenient way for the merchant to confirm that the card being used is being used by its authorised owner.

Additionally, there is no way for the card owner to be notified of a transaction happening on their credit card that may have been initiated by a person other than them. The current methods offered by the card schemes, Verified by Visa and Mastercard 3D Secure are almost universally disliked as the customer experience is very poor. Sedicii has developed a smartphone-based service that will address this problem.

## The Solution:

Sedicii has developed a two factor, strong authentication solution that increases security but not at the expense of convenience. In addition to the user having a password, the user's mobile phone is used as the second factor. The ID's embedded in the phone, IMEI (handset ID) and the IMSI (Subscriber ID or SIM) are combined with the unique password that only the customer knows to generate a unique signature for the user/handset combination. Using the power of the Sedicii Zero Knowledge Proof Verification engine (ZVE), the user can be authenticated without this signature being exposed or exchanged.



Payment Authorisation for CNP payments via Smartphone

## See Sedicii in action...

A Sedicii demonstration can be arranged to experience the benefits of Sedicii Zero Knowledge Proof Verification in action.

**To find about more or to set up a live demonstration, call or contact us using the details below.**

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The purpose of the service is twofold (i) to inform the card owner when a credit card transaction is being performed with their credit card at a Sedicii enabled merchant website or app and (ii) to provide the merchant with a non-repudiable method for a person to authorise a CNP (card not present) transaction.

## The Value:

With the increase in stolen credit cards, there has been a massive increase in CNP fraud on the internet.

Using the Sedicii Mobile Authenticator for credit card authorisation will:

- a) bind the card owner to the credit card in a highly secure manner that will support non-repudiation of transactions.
- b) allow a card owner to be contacted immediately at the point of sale, when their card is being used, in order to request a final authorisation. If authorisation is not received the transaction can be delayed or voided.
- c) avoid fraudulent CNP transactions and the financial losses that follow from them.
- d) avoid chargebacks and fines from the card schemes for breaches of the rules.

## Commercial Considerations:

Sedicii can be deployed in an 'on premise' configuration where the client enterprise will manage and maintain the service entirely independently. In the 'on premise' configuration, it is sold on licensed basis depending on the number of users and applications.

Or, it can be provided in a cloud configuration where the same service may be shared by a number of organisations or services. In this configuration, the service is delivered on a transaction basis and managed entirely by Sedicii on behalf of the client enterprises.

Sedicii proves that a customer is not being impersonated, quickly, securely and reliably, **WITHOUT** any underlying sensitive personal information having to change hands. The user's identity attributes **NEVER** leave the device, browser or server. This reduces the burden of responsibility on the merchant whilst protecting the consumer. All sides win.