

# New Product Innovation Leadership Award

Secure Authentication  
EUROPE



## Background and Company Performance

### Industry Challenges

The Information Age ushered in a world of opportunity, but the accessibility of information in greater capacities and speeds is a double edged sword. With that opportunity, comes accelerated risk. Cybercrime continues to increase and with persistent reminders in the news. Further complicating this, the inevitable migration to less secure mobile devices from traditional security-equipped desktop continues to exacerbate this growing security dilemma. Paired with the growing popularity of mobile online banking, this has caused mobile device targeted attacks to increase. While there is no stopping the growth of the mobility market and bring your own device (BYOD) trends, user authentication spoofs are showing no sign of slowing. Professional users rely on being mobile, but can this be done without endangering corporate networks? As the capabilities of mobile devices continue to expand and become vaults of personally identifiable information (PII), cyber criminals continue to target them. Frost & Sullivan 2013 Market Insight, "The Future of Mobile Authentication," shows 8% of exploited vulnerabilities in 2012 were in mobile platforms. This statistic is anticipated to further grow over time, and security sensitive tasks like mobile online commerce are at risk. User authentication must be improved significantly. Currently, too many companies still only rely on password authentication and burdensome hardware solutions, such as one-time-password (OTP) tokens. Password authentication is easily exploitable and burdensome to maintain for the user. It uses "something the user knows" factor to identify the user, and this is no longer an acceptable authentication method for sensitive tasks like online banking.

Hardware OTP tokens are secure, but are expensive and yet another physical item the user must carry around. The authentication process must be simple and practical, not force the user into changing their behaviour. User authentication methods must also combine multiple authentication layers to ensure that only the intended user is granted the ability to authorize mobile online commerce transactions.

Combining knowledge-based factors with a something the user has (e.g., a hardware OTP token) helps, but is yet another inconvenience burden to the user. There needs to be a solution that provides various other authentication factors that are less invasive, such as: risk-based authentication, device fingerprinting, out-of-band (OOB) verifications, and proximity factors. Thankfully there is a European company who has discovered the key to addressing this daunting challenge. Keypasco AB's Vakten software is capable of combining all of these features. With its Vakten software, Keypasco has the ability to disrupt the secure authentication market, and support the growing need for secure mobility.

## Visionary Innovation and Product Excellence

### Unmet Needs

It seems every month a large company reports that its users' private information has been compromised by cyber criminals. 2013 was a rough year for IT professionals and users alike. That year alone, companies as prominent as Adobe and Target Corporation fell victim to cyber criminals. While Adobe suffered a password breach, point of sale terminals at Target were injected with malicious code to steal customers' bank card information. Users are asked to change their passwords, only to be exploited again. Relying on passwords is a careless practice, and depending on tokens can be inconvenient for the user. Frost & Sullivan's recognizes that the mobile authentication industry needs a solution that does not hinder productivity, is thorough, and is effortless to both maintain and implement. Rather than accepting this as the new norm, KeyPASCO's multiple authentication factors take it a step further in mobile security that require very little effort of the user.

KeyPASCO uses features such as a fingerprinting factor that can be used to determine if a correct device is being used (multiple platforms incl. smartphone mobile devices), as well as a geo-location feature to see where the request was made. If it is within the normal pattern for the user, the transaction is authorized and if the behaviour is uncommon for the user, it then uses risk-based factors to determine if the request is fraudulent. Combining those factors together create a more authentic solution for sensitive tasks such as mobile banking.

### Use of Mega Trends

Cyber criminals will continue to focus more of their attacks on mobile devices, and users who wish to take full advantage of the mobility trend must do so securely. Authentication factors must use more sophisticated methods, such as OOB verification and risk-based authentication. Both are authentication methods which are more difficult to trick, and combining them with even more factors will finally tip the battle for cyber security in the good guys' favour.

Frost & Sullivan finds that users are recognizing the benefits of mobility. KeyPASCO understands the growth potential in the mobility market and addresses the security vulnerability with its software. While mobility is all about providing what is easiest for the user, KeyPASCO continues this logic with a nonintrusive mobile software application. The company has seized the opportunity to secure over 4.6 million users.

Frost & Sullivan defines mega trends as persistent global developments which disrupt society, the economy, and shape the future. Addressing these trends is critical for sustained growth. The ability to address this growing mega trend of migration towards mobility and increase in mobile device attacks will position the providers of such solutions in a key spot to dominate this emerging market. A true pioneer of the 21<sup>st</sup> century for mobile security, KeyPASCO has embraced the mega trends that challenge its industry.

## Match to Needs

An example of Keypasco's ability to quickly and thoroughly address security gaps within the emerging mobile online banking arena is the XiaWeiFeng security service. This solution developed for the Chinese market addresses the recent explosive popularity of Alipay, a payment processing service, which has grown in popularity recently just as Wechat, a instant messaging platform. Within the first two days of its launch, over 5 million Wechat users merged their bank accounts to the mobile application to conduct over 20 million transactions during the Chinese New Year, with many more expected to follow. Considering the emerging threat of authentication spoofing, a security solution was needed if this market was to progress successfully.

The XiaWeiFeng security solution that was developed in China combines Keypasco's device fingerprinting, geo-location, and the risk intelligence software. XiaWeiFeng has features such as a one-key-lock function that allows the user to disable a bank account and/or card while either online or offline. This gives the mobile user more power over protecting their bank accounts in the event of a suspected cyber-attack. The XiaWeiFeng is just one venture that showcases Keypasco's ability to address emerging market challenges, and it plans to actively seek and develop similar solutions for any future challenges. Frost & Sullivan notes that the company's software can be embedded and is highly configurable for the user's existing software. Keypasco develops solutions that are powerful and difficult for the cyber adversary, yet easy for the user to understand, configure, and implement.

## Product Value

The Keypasco solution offers a practical solution with ease of use being its strongest value. Combined with the Vakten desktop software, the computer can use the paired Bluetooth connection as a proximity factor. Both the phone and desktop must be within range of each other for the transaction to be successful. While quite not as effective as a traditional OTP token, it is drastically cheaper and provides protection for both mobile devices and computers at the same time.

In addition to both computer and mobile application solutions, Keypasco offers integrated authentication for major web browser, such as: Apple Safari, Google Chrome, Mozilla Fire Fox, and Microsoft Internet Explorer. Users are able to have similar functionality of desktop installed Vakten software without having to install the desktop client, while still enjoying the extra layer of protection from OOB authentication if paired with a phone with the Vakten application.

As Keypasco continues to expand its product philosophy into other financial transaction solutions, users of this company's software will be able to conduct business with confidence across their platform of choice. Keypasco's desktop and mobile software solutions provide a competitive cost to performance ratio.

## Positioning

Keypasco spent three years developing a strictly software-based solution from the beginning. This allowed them to focus on a balance between power and practicality to

integrate a variety of powerful software-based authentication factors that work better with real world user behaviour. This places the company in a unique position to provide one of the easiest to implement secure authentication solutions that addresses the growing mobility trend. Keypasco's focus on practical solutions provides users with a solution that is readily available to address unique challenges similar to the XiaWeiFeng venture.

Keypasco does not rest on its laurels, and is already planning to implement a solution similar to XiaWeiFeng within the European market. The management team at Keypasco is comprised of passionate visionaries who strive for constant improvement and to be on the frontline of the software-based secure authentication market.

## **Design**

The goal of Keypasco is to provide a solution that is non-interfering, easy to implement, and more advanced than its competitors. Without the burden of hardware dependence, Keypasco's Vakten software is developed to both combat the consistent increase in mobile device attacks while motivating the mega trends of mobility.

Placing data on cloud servers is often believed to be a security risk, yet Keypasco does store its user metadata on cloud servers. However, the company had the forethought to not include any user PII on the cloud, as doing so would expose users in the unlikely event that hackers are able to gain access to the Keypasco database. Though hardware authentication solutions are reasonably thought to be more secure, after considering the more involved requirements of hardware-based security, users may be willing to take their chances for a secure authentication solution that will be utilized by its users. Keypasco's solution is simple and does not interfere with user behaviour.

Frost & Sullivan's research reveals that Keypasco's software-based secure authentication solution is made for realistic business leaders who understand these growing security risks, everyday user behaviour, and the advantages and growing demand for mobility. Three years of focused software-based solution development ensured that Keypasco would address these industry challenges in a solution that is much less troublesome to implement than hardware-based solutions.

## **Conclusion**

It is time for mobile users to embrace the growing trends of mobility. Frost & Sullivan's independent analysis of the Secure Authentication market clearly shows that Keypasco is a game changer by developing a realistic solution that mitigates authentication spoofing while remaining practical to the user. Keypasco offers a software-based user authentication tool that provides a genius non-invasive solution that is capable of addressing the challenges that hold back the progression of mobile migration, at a value that places it in an optimal position to pioneer more innovative ventures in the mobility market. In recognition of the company's developmental efforts, Frost & Sullivan is proud to bestow the 2014 New Product Innovation Leadership Award in Secure Authentication to Keypasco AB.

# New Product Innovation Leadership

Ultimately, growth in any organization depends upon continually introducing new products to the market, and commercializing those products to the greatest extent possible. For these dual goals to occur, a company must be best-in-class in three key areas: (1) take into account what your competitors are, and are not, doing; (2) meet customer demand with a comprehensive, value-driven product or service portfolio; and (3) establish a brand that resonates deeply with customers and stands apart from other providers. To achieve best-practice levels in brand, demand, and positioning is a rare and significant accomplishment, and that is why Frost & Sullivan celebrates it with the New Product Innovation Leadership Award. Recipients of this award represent the top ten percent of their industry: the other ninety percent just can't keep up.

## Key Benchmarking Criteria

For the New Product Innovation Leadership Award, Frost & Sullivan evaluated the total client experience and strategy implementation excellence according to the criteria detailed below.

### Visionary Innovation

- Criterion 1: Unmet Needs
- Criterion 2: Use of Mega Trends
- Criterion 3: Pioneering Best Practices
- Criterion 4: Blue Ocean Strategy
- Criterion 5: Aspirational Ideals

### Product Excellence

- Criterion 1: Match to Needs
- Criterion 2: Reliability and Quality
- Criterion 3: Product/Service Value
- Criterion 4: Positioning
- Criterion 5: Design

## The Intersection between 360-Degree Research and Best Practices Awards

### Research Methodology

Frost & Sullivan’s 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow



understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

## About Frost & Sullivan

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