Evaluation results

ZVC (Zero Vulnerability Computing): A New Paradigm - 190198825

Final result of the Evaluation: GO

Details of the Evaluation

You can see below the answers given by the evaluators to each of the questions concerning the evaluation of the project

Final Decisions

Evaluator 1

GO

Evaluator 2

GO

Evaluator 3

GO

Evaluator 4

GO

Question 1: Breakthrough and market creating nature: Does the innovation have a high degree of novelty – compared to existing products, services and business models?

Evaluator 1

The proposal is offering a solution to minimize the vulnerabilities of the computers against the attacks of the hackers. The Cybersecurity industry is growing dramatically due to the enormously increased number of various devices and increased level of the sophisticated hacking methods. The innovation is approaching to this challenge in a radically different way by trying to minimize the availability of data resources which can be targeted by the hackers. The solution's internal and external integration capability to computers and other devices is opening up the entire cybersecurity market for the innovation. The innovation looks a radical approach to protect the vulnerable resources against the potential cyber attacks and has a potential to disrupt the cybersecurity industry and create new markets with its first mover nature.

Evaluator 2

Based on the fact that no data is safe unless offline, this innovation comes with an user-controlled ICOS (In-Computer Offline

Storage) and Supra OS (SOS) - another component obliterating the attack surface completely to achieve zero vulnerability; ZVC can be implemented internally or externally using MUDP chip via USB/SD ports without introducing any major structural changes to computer's motherboard or its housing. The novelty of this technology comes from the fact that SOS (Supra OS) and ICOS are totally different than cybersecurity approaches so far, basically proposing a new path breaking computer design wherein denying all permissions completely obliterates the attack surface eliminating the source of vulnerability itself, therefore we could say ZVC is rather a totally new solution.

Evaluator 3

The solution is targeting to solve an important problem in cybersecurity by an alternative approach they call ICOS (In-Computer Offline Storage), which focuses on built-in offline storage with the fact that offline data cannot be hacked. There are solutions that enable offline storage within a computer, but as a hardware wallet use case, there are a bunch of products on the market that secure the private key and wallet authentication data offline. So the proposed solution can be considered as a breakthrough in tackling cybersecurity issues, even if there are already partially similar products on the market.

Evaluator 4

The innovation is a different approach to an age-old problem of data protection. It is indeed novel and in a narrow space of new products.

Question 2: Timing: Is the timing right for this innovation in terms of market, user, societal or scientific of technological trends and developments?

Evaluator 1

The drastically increased cyber security challenges with more sophisticated character is putting a heavy pressure upon the market players to come up with new innovative solutions to tackle those challenges. The pace of the digital transformation is radically changing the business and daily life to open up almost every area and process to automation, data processing and data communication. This trend is being supported by an exponential increase in supply side of any kind of smart devices including computers, smart phones, tablets, IoT sensors and many others. The cyber attackers are also taking this opportunity of digital transformation in almost every industry and developing new methodologies to cause huge damage and economical loss by their increasing number of the attacks. As a response to the increasing cyber issues, the cybersecurity industry is growing enormously with new solutions and new players to meet this growing demand. The proposal's time to market strategy and especially the iterative approach by external and internal integration of the solution seems to be very right to achieve their targets.

Evaluator 2

The time is right when we have in mind that cybercrime is now at a level of 5.56 Trillion EUR threatening more than 4.5 billion connected devices. A patent granted in 2007 disclosed an Optical Disc Drive based thin client approach to circumvent OS and secure online transactions, however not commercially implementing as the supporting ICT infrastructure of that time was not enough developed, but now with the 5G, web 3.0 technologies and miniaturization of processors, it is quite possible to execute ZVC framework in a user friendly format. Cybercrime is a serious threat to economy worldwide, as a fact and the focus on this issue is more and more increased. Now 3 pending patents protect the novelty of ZVC technology.

Evaluator 3

Cyber security is getting more critical each day since the number of connected devices and third-party applications multiply recently. On the other hand the core technology of the proposed solution, blockchain technologies are getting widespread only during the last few years. Moreover, the number of cryptocurrency investors who are the initial target market is increasing rapidly. Putting all these together, it seems to be the right time for the proposing company to benefit from these innovations as they seem to have the relevant infrastructure, experience, and skills

Evaluator 4

The company justify their timing on the basis of the looming cybersecurity threat from quantum computing. While this may still be a while out from becoming commercial, this is not necessarily inhibiting as it is a gradual process of setting a new security standard.

Question 3: Team: Does the team have the capability and motivation to implement the innovation proposal and bring it to the market? Is there a plan to acquire any critical competencies which are currently missing?

Evaluator 1

The core team seems to be highly motivated and has the required capabilities and experience to tackle the challenges of the the project. It would be beneficial to identify the resource gap in future activities and prepare a hiring plan to get the new members on board. On the other hand, the team seems to be aware of the importance to build a partner ecosystem to get the benefit of the mobilizing the external resources, too. It seems that they've already established strategic partnerships with key players of the market in development, implementation and go to market phases for the sake of the project.

Evaluator 2

There is a team of 6 key members with expertise in relevant area of interest: engineering, blockchain and crypto development, crypto business, ICT/ cybersecurity IPs. Besides a collaboration of 3 years with their main partner Autonio Foundation Ltd helping them to get ZVC technology before an early adaptor community, they made also some prospects in exploiting ZVC powered hardware wallet with major players in the cryptocurrency space such as Polygon, Cardano, Crypto.com.

Evaluator 3

The management and the R&D team seem to be experienced and have an understanding of both market and research activities. So I am confident that the objectives of the proposal are consistent with the expected results. Also, the management team seems to be experienced in creating suitable conditions to develop such innovation and is aware of their capabilities. Moreover, the management team also seems to have the necessary experience to successfully develop and commercialize the project. So it can be concluded that the team is experienced and has an understanding of relevant technical/scientific skills as well as market understanding.

Evaluator 4

The team in its current form seems to be a little short on business skills like finance, although technical competencies are covered. As they have experience bringing products to market and projects to fruition this is not a concern.

Question 4: Scale-up potential: Does the innovation have scale up potential, including the potential to develop new markets and impact on the growth of the company? Are the associated financial needs well assessed and realistic?

Evaluator 1

It seems that the increasing maturity of the new technologies including 5G, miniaturization of the processors, quantum computing, Blockchain and others have been main drivers to support the development of the solution. They've already built the strategic alliances with key market players to ensure a successful market entry and growth.The readiness of both the demand side and supply side are already creating a very promising window of the opportunity for the innovation to be offered to the market. The proposed solution has a very high scale up potential, when considering their unique selling points,

breakthrough innovation and iterative go to market approach. The required financing looks to be reflecting the needs of the remaining work packages and activities. The amounts and grand total requested need to be reviewed for the consistency check.

Evaluator 2

Based on the figures related to market- TAM (total addressable market) of 38 Bio EUR, SAM (served addressable market) of 1.3 Bio EUR, share of market (SOM) of 130 Mio EUR, the ColdVault's Share of SAM priced at 40 eur a piece, which would be a lower price compared to competition (40-160 eur for single function hard wallet or authenticator while ColdVault does both and more for only 40 eur a piece), they have in mind a projection to achieve 10% share of 1.30 Bio EUR hardware wallet market and this projection was done in a conservative scenario assuming there will be no post EIC -grant growth funding.

Evaluator 3

As the company's core platform is the proposed solution there is 100% alignment with the company strategies. So the company's activity is entirely focused on the proposed innovation. As a result, the financial expectations all depend on the solution proposed. There is a challenging analysis. If successful it is an obvious scale-up for the company. The overall strategy of the company and the commitment of the team behind are fully aligned. The need for commercial and management experience, including an understanding of the financial and organizational requirements for commercial exploitation and scaling up, is demonstrated in the proposal. So again if successful the proposed solution will generate a scale for the cybersecurity market not only in the EU but in general.

Evaluator 4

The proposed product has the potential to achieve global scale, as it addresses a global problem and requires little or no customisation/localisation.

Question 5: Broader impact: Will the innovation, if successfully commercialised achieve broader societal, economic, environmental or climate impacts?

Evaluator 1

The cybersecurity issues and growing number of the attacks are causing more and more very high damages to the systems, processes and daily life, thanks to the digital transformation which enabled the automation and data processing in almost every industry and market. The amount of the loss and economic damage has been reached to a quiet high level and created a very high pressure for the companies, governments and other organizations to take the measures and find new ways to tackle the challenge. The proposal's innovative approach to this challenge has a very high potential to be successful and support all of those initiatives to protect the economies, societies and citizens against this growing threat of cyber problems.

Evaluator 2

It is obvious that cybercrime is costing now a lot , about 5.56 Trillion EUR the global economy and over 4.5 billion connected devices remain at risk, so we could say there is a significant societal and economic impact globally. Cyber criminals target connected devices for stealing stored data. Currently the computers have no mechanism to keep such data offline and as long as the device is connected, the data becomes vulnerable.

Evaluator 3

Cybercrime is a €5.56 Trillion scourge that threatens more than 4.5 billion connected devices. If successful the proposed solution will definitely have an economic impact. Also, the solution will help the cryptocurrency investoır base to get more disseminated. Other than this edge the proposed solution has very limited matters regarding broader social, environmental, gender, and climate impacts.

Evaluator 4

The concern around cybersecurity is if the increasing cost of security mitigates an equivalent cost of harm. This cannot be proven. The proposed product does not offer a price range, But they do make a very convincing argument.

Conclusion & additional comments

Evaluator 1

The proposed solution has a potential to be a first mover with a disruptive approach in this competitive market segment and need to be supported in dealing with the protection of the innovation against the potential financing risks and very early risky acquisitions.

Evaluator 2

The positive recommendation to GO further with this project is explained by the significant economic and societal impact as well the danger of cybercrime plus the huge costs of cybercrime at the level of world economy. In this context ColdVault would become the an In-Computer Offline Cold Storage with Zero Attack Surface, having an affordable price per piece (40 eur) compared to alternative solutions, covering both functions hard wallet and authenticator. There are 3 pending patents protecting the novelty of ZVC technology. It seems also that ZVC received a letter of intent from a descentralized autonomous organization to pre-order ZVC powered hardware wallet in case ZVC technology succeeds in EIC funding to mass produce the product.

Evaluator 3

The innovation has the potential to increase growth and is aligned with the overall strategy of the company. Innovation seems to be critical for strengthening the competitiveness and growth of the company and it is clear that there will be a demand for innovation. The team seems to be experienced. The proposal consists of a feasibility study as well as risk and opportunities analysis. Also, there is a competitive comparison table as well as a business model presentation. Taking all these into account the overall items seems to be coherent. When we put together the experience of the management team, current market needs etc the project can be a candidate for a success story. Congrats to the team.

Evaluator 4

There are two issues to consider further. One is that the proposal in its current form is somewhat repetitive. While it does not inhibit it from making its point, this can be improved. The second is an incentives problem. No firm has a financial incentive to make cybersecurity perfect or they will engineer themselves out of a job. The proposal needs to address why this is not the case.