

2022 WITSA Global Innovation and Tech Excellence Awards Nomination Form

The 2022 WITSA Global Innovation and Tech Excellence Awards (formerly known as *the Global ICT Excellence Awards*) will be presented to select individuals, academic institutions, corporations, NGOs or governments whose use and applications of digital technologies exhibit exceptional achievement within the following broad categories:

Private Sector/NGO	Public Sector
Digital Opportunity/Inclusion Award	Digital Opportunity/Inclusion Award
Smart Cities Award	Smart Cities Award
Sustainable Growth/Circular Economy Award	Sustainable Growth/Circular Economy Award
Innovative eHealth Solutions Award	Innovative eHealth Solutions Award
Public/Private Partnership Award	Public/Private Partnership Award
E-Education & Learning Award	E-Education & Learning Award
Emerging Digital Solutions Award	Startup Ecosystem Award

In addition, a *Chairman's Award* will be presented to a nominee selected from the entire pool of candidates from all award categories.

Candidates for these Awards are nominated by ICT experts from around the world who span over 80 countries/economies. The 2022 *WITSA Global ICT Excellence Awards* will take place in conjunction with the September 13-15, 2022 World Congress on IT in Penang, Malaysia (<https://wcit2022.com/>).

Emerging Digital Solutions Award

The Emerging Digital Solutions winner is selected for their proven and scalable innovative digital solutions capable of transforming the wellbeing, prosperity, connectivity or productivity of others around the world.

This award will take into consideration the successful application of ICT in such areas as humanitarianism, health, social awareness and justice, rule of law, sustainable growth, business and commerce, health care, education, as well as the effective delivery of public services and transparency.

The Emerging Digital Solutions program recognizes early-stage or veteran companies whose solutions are new, and scalable to other locations throughout the world. The Emerging Digital Solutions program is looking for solutions that can be presented to interested policy makers, investors, corporations and social stakeholders with the potential to boost its development and deployment, aiming to significantly impact individuals, groups and societies.

YOUR NOMINEES (limit three nominations per award category).
Please specify whether the nominee(s) are for the private or public sector category.

Private Sector: CreditScore (<https://creditscore.agroapps.gr/>)

REASONS FOR NOMINATION (NOTE: It is important that you make a detailed description of the nominee and why you think the nomination is justified. The absence of a detailed summary of qualifications as they *relate* to the above-mentioned award description will make it difficult for the awards committee to make an appropriate assessment of the candidate):

CreditScore: Unlocking Credit to Farmers

The last decade has seen increasing recognition by policymakers, capital providers, and finance practitioners of the vital role played by agricultural small- and medium-sized farmers, as well as of their key challenge: their limited access to finance and credit. In contrast to other businesses, farmers have to deal with a number of increasing **upfront costs** (production, operation, labor and infrastructure costs) that require excessive liquidity, while their **revenues, mainly come at the end of each growing season with a one-off payment**. Thus, access to timely, adequate and acceptable interest rates is vital, especially for smallholders and young farmers.

Although important effort and progress has been made in broadening and deepening the sector's approach, access to finance still remains largely a significant problem and most farmers find it **challenging to access credit**. That is largely because of two reasons.

Financial institutions:

- are still struggling to determine the most appropriate data and quantitative risk methodologies that would fit in the case of agriculture lending, or
- approach farmers as "typical SMEs", requiring long and detailed credit history, or substantial collaterals.

In both cases lending to farmers **is still considered too risky** for most financial institutions, since they have a **smaller margin to diversify the risk in their portfolios**. At the same time, financial institutions need to include into their calculations the endemic risk of agricultural activities. Those risks, not exclusively, include:

- production risk (climate, disease, pest, technological change, natural resource management),
- market risk (commodity price volatility, production factors price volatility, uncertainty in the supply chain) and
- regulatory risk (changing policies, subsidies, sanitary requirements);

altogether make agriculture lending a **high-risk business, resulting in a severely limited access to credit for farmers**.

As a result, there is currently an estimated credit gap of \$170 billion per year in smallholder agriculture finance; a gap that affects considerably farmers ability to sustain and grow their operations and improve their lives.

Why is it difficult for farmers to access credit?

Farmers usually have **minimum, or no realizable assets to pledge as collateral**, as well as **no credit history**, that are needed to secure credit approval from the financial institutions. In conjunction with the increasing climate crisis impacts (frequent and intense extreme weather events) constitute agriculture as a quite risky business.

Issuing a loan is a quite complicated and challenging process not only for farmers, but for financial institutions as well. Usually, banks review a loan application based on personal credit scores, asset to debt ratios, business revenue, cash flow, outstanding debt, etc; this is a quite

straightforward process for businesses. However, when banks evaluate an application loan for the agriculture sector, they need to take into account additional **risk factors that impact operational and financial performance**, such as farmland yield capacity, extreme meteorological phenomena that might affect the yield, as well as other threats due to climate change.

The CreditScore solution

CreditScore is a solution that fills this critical data gap which prevents financial institutions from lending to creditworthy smallholder farmers. The solution provides the appropriate information to financial institutions, and the methodology, to better assess the future earnings and estimate the credit risk of potential borrowers. CreditScore, achieves financial inclusion, reduces the asymmetry of information among parties, while supporting a sense of **trust and transparency** between financial institutions and agri-borrowers, all in all paving the way for more accessible credit to farmers.

How CreditScore works

CreditScore combines the use of **remote sensing data, weather forecasting, climate projections, crop growth models and market data and forms a comprehensive profile for each farmer**, irrespective of the size of their farm. This profile is developed on the basis of the historical and current crop yields, short and long-term climate risks and weather hazards, affecting final crop performance. CreditScore delivers accurate projections of future farmers/borrowers profitability, while managing to capture fully the climate variability and provide unbiased estimates of future yields and agricultural income.

Particularly, through CreditScore, financial institutions have at their disposal a medium and a long-term yield forecast, as well as a yield forecast based on the near future climate (2031 - 2051). CreditScore generates **a custom score for each farmer** and helps banks to **better understand and assess each farmer's creditworthiness**.

Furthermore, on the basis of each farmers cultivation plan, **CreditScore calculates a greening score for each farmer**. Financial institutions that wish to structure a more environmentally-aware lending portfolio, can use this score in order to provide incentives (e.g. reduced or subsidized interest rate) to farmers that apply more environmental friendly practices. The greening score is being calculated on the basis of the cultivated crops and their rotation, carbon emissions arising from farming applications, such as fertilizers, crop protection, irrigation, and fuel combustion from agricultural machinery.

Establishing a win-win situation

CreditScore benefits both financial institutions and farmers. On the one hand, financial institutions are expected to have a clear estimation of the future returns and yields of their borrowers' farms, as well as the risks they run during the current and the future seasons. The result of using CreditScore is the creation of more and more personalized financial products, at levels that will be acceptable to both the institutions and the farmers. Depending on the expected future conditions, financial institutions will be able to create more flexible loans, so as **to ensure that farmers will continue to repay them** in difficult times, as well as integrate more favorable interest rates, when farmers are having a smaller environmental footprint.

On the other hand, farmers, will be able to **deal with liquidity problems** by receiving personalized financial products with additional flexibility which they will be able to repay. At the same time, they will be able to access the information provided by CreditScore and have an assessment of their future returns and make any corrective moves in their farm.

CreditScore: A scalable solution

CreditScore is a cloud-based, **fully scalable solution**, able to transform the wellbeing, prosperity, and growth of **every farmer and farm business around the world**. CreditScore is aligned with the concept of 3Vs (data volume, data velocity and data variety) and as long as data is available, the solution can be scaled up and deliver services for financial institutions in every country and for every crop.

CreditScore provides financial institutions with an agriculturally relevant and data-driven toolset to assess risk and develop loans that fit the needs of smallholder farmers, unlocking millions of previously risk-averse capital, while indirectly improving the livelihoods of entire communities, thereby alleviating previous inequalities.

AgroApps Position

In a dynamic and fast-paced environment, the development of new products and the upscaling of existing ones, is a crucial factor in the long-run growth of our company. Over the past few years, we have managed to assemble a group of key-professionals, experts in their fields, and run in parallel several significant research and new products development activities.

Within 7 years of establishment, AgroApps has delivered a portfolio of products serving a diverse set of customers in four core markets:

- i. the Smart Agriculture market;
- ii. the Weather and Climate Information services market;
- iii. the Agriculture Insurance market;
- iv. the e-gov applications market;

Through the delivery of our products/services, we have managed to gain the trust of a first pool of customers, within but also outside Greece; while at the same time, we are exploiting new technologies and continuously innovate in order to upscale and extend our current portfolio.

Navigating the future of Agricultural Credit

CreditScore, is following the paradigm of previous product developments of AgroApps where, either through EU funded projects, private grants, or competitions, we continuously work, focus and commit on delivering innovative products with the outmost value to our collaborators and customers.

UpToDate, CreditScore is under operational trial by 1 financial institution in Greece, and we are in the final stages of discussion with 3 more EU-based institutions to initiate the operational pilots during the 2nd semester of 2022.

SUPPORTING INFORMATION: Please send any supporting information to the address above, including information from candidate (i.e. excerpt from program description, web site print-out, press release, etc.)

NOMINEE CONTACT INFORMATION (for award follow up and coordination)

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