

Trusted software delivery & consulting partner for startups

The Unicsoft team are caring and passionate technology professionals who bring startups to success. Our goal is to make your product technologically perfect to fit the market ASAP and bring business results.

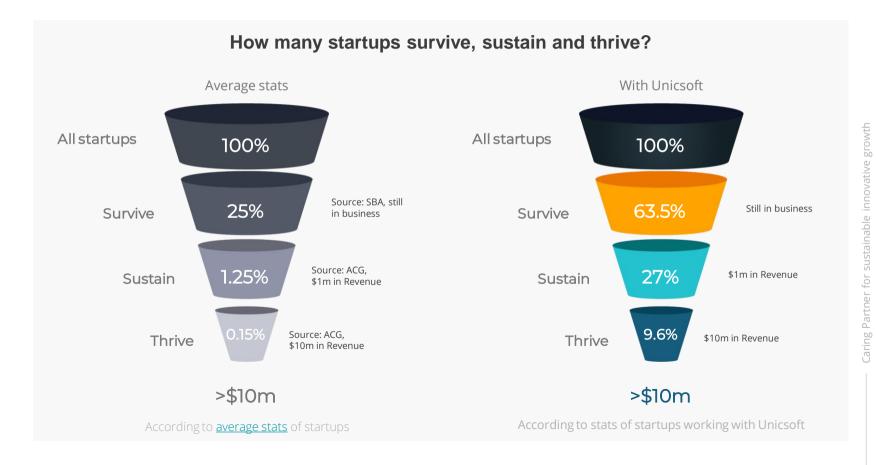
Since 2005 we have been the most reliable and trusted partner of SOSsitter, Intellinote, Kokoro, Soraa and other 50 startups.

Business Presentatio



Our mission is

to empower sustainable growth of innovative startups.





Discovery phase*

for sustainable startup growth.



Outsourcing to Ukraine can save up to 60% on overhead costs.

The kind of work which is done in the US, Singapore and the EU for a very high price, can be obtained at a much cheaper rate in Ukraine. Taking into account cost cutting on training, recruitment, workplace, events and operational costs this opportunity looks reasonable. According to the GSA report, 70% of companies use IT outsourcing.

We ensure **nothing is missed** and you've taken **the correct direction**.

During the discovery phase, we help to create a detailed release plan, Software requirements specification, well-designed Architecture and UX as well as correct technology stack. From the beginning these all help to avoid issues with product scalability.

Solo founders take 3.6x longer to grow the startup.

IT partner, such as Unicsoft, not only able to code, but able to recommend solutions and work with you to expand the business. On board we have a team of experienced scrum masters, business analysts, software developers, UI/UX designers, QAs.

^{*}Discovery - the initial stage of a software project which involves business analysis and requirement elicitation, technology stack choice, cost estimation, and project planning.



Unicsoft

Meet

Meet Unicsoft.

The core principles that drive our success.

√ Help businesses benefit from sustainable innovation.

Unicsoft is recognized as a top Blockchain and Artificial Intelligence company.

✓ Maximize value delivered within available time and budget using Agile methodology.

All Project Managers are certified Scrum Masters. We ensure project deliverables meet the acceptance criteria via Quality Assurance Testing.

√ Seasoned software developers only.

Core team engineers have excellent hard and soft skills and seniority level proved by commercial experience with enterprise-level applications. You gain access to Unicsoft 100 full-time developers and pool of 1,000 verified tech talents from Ukraine.

✓ Excellent client experience

Achieved via clear and timely communication, delivery on promises and extra mile attitude. It feels like we are next door.

√ We build trusted long term partnerships.

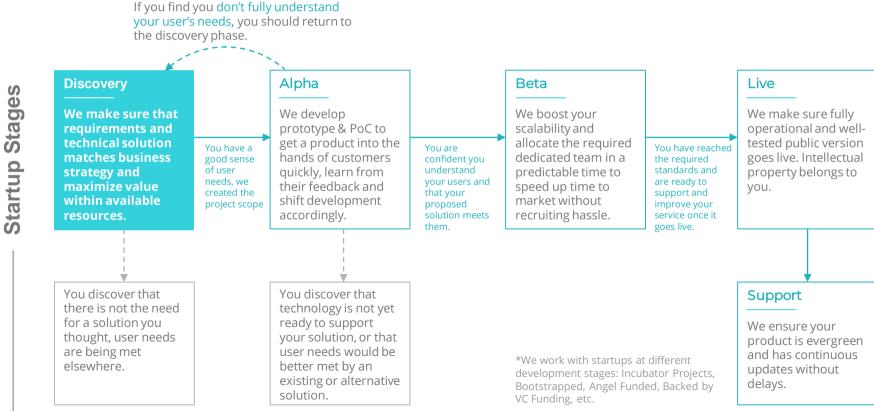
We are ready to go beyond transactional client-vendor relationships towards partnership relations and do the best we can to assist our clients to reach their goals.

✓ Culture that cultivates circle of care between company employees and client.

People love Unicsoft because we care about professional growth of every talent: competency-based performance review system, career planning and mentorship program. Therefore every client receives personal approach and care from each Unicsoft team member.



Your partner for a lifetime.





Grow with Unicsoft.

We're ready to launch your startup.



- ✓ The agile and effective team, professionally manage changing requirements.
- ✓ With us, startups grow to a profitable business or get acquired by a large global enterprise.

Year of foundation

2005

Team of developers

100+

Delivered projects

200+

Customer retention rate

75%

Team location

Kiev

Legal entity

London

Our average partnership duration 4 years



Where are we located?

Ukraine is one of the top 20 global outsourcing destinations.



Top IT Talent

60k IT graduates annually.

#4 International Math Olympiad rank.

#8 quality of developers in the world.



Close & Comfortable

2-3 hour flight from London, Amsterdam, Berlin.

15 hours flight from Singapore.

Singapore time is **5 hours** ahead of Kiev.



IT Ecosystem

Ukraine is recognized by A.T. Kearney as one of the **top 20** global outsourcing destinations in 2019.

\$290 million was invested in Ukrainian startup development.





It's simple to work with us.

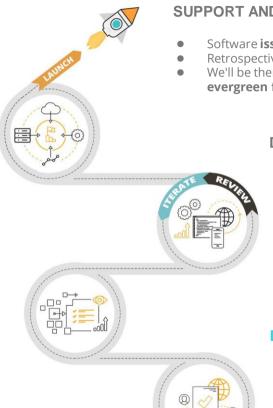
Our processes.

PRODUCTION DEPLOYMENT

- User acceptance testing
- Detailed deployment plan: deployment steps, risks, mitigation actions, procedure of roll out
- Pilot launch with limited access for users according to deployment plan
- Stabilization period after deployment with high availability of the team
- **Secure handover** of environment ownership to the customer

PLANNING

- Super detailed proposal and budget plan. Start without prepayment
- Product delivery roadmap supporting your business plan
- Flexible and responsive agreement negotiation



SUPPORT AND MAINTENANCE

- Software **issue resolution** at light speed
- Retrospective analysis with product evolution planning
- We'll be there to support and keep your product evergreen forever

DEVELOPMENT PROCESS

- Scale up or down at any time
- Weekly report for 360' view over budget and results
- Dedicated PM and AM
- You are involved in all chats and task management tools
- Immediate issue notification and proactive resolution

DISCOVERY

- Unique workshop best practice adjusted according to your product idea
- Senior Tech Leads Consulting with minimum investments
- We say "No" where it is required your startup's success is our #1 priority



Back-end development

Node.js PHP Python Java

Front-end development

React.js Angular.js

Mobile development

React native Native iOS, Swift Native Android, Kotlin

Big Data

PySpark,Cassandra Hadoop stack (HDFS, MapReduce, Hive, Pig, Spark, Kafka, Solr/Lucene) ElasticSearch, BigQuery

IoT

Software Layer

DevOps

AWS, DigitalOcean, Terraform, Jenkins

AI & Machine Learning

R XGBoost Keras, Theano, Torch, LightGBM Tensorflow, Caffe NLP Toolkit

Pandas YOLO deep learning

Numpy networks

CNN, RNN VGG deep learning

Athena networks

Blockchain

Bitcoin, Ethereum, Hyperledger Fabric



Our clients.

Proven record of startups working with Unicsoft success.

Intellinote

Our cooperation with <u>Intellinote</u>, the U.S. startup launched in 2013. Intellinote raised a total of \$4.8M in 2013 and 2014. In 2016 Intellinote was acquired by BroadSoft, which on October 23, 2017, was acquired by <u>Cisco</u> for \$1.9B.





SOSsitter

Our more than four years of cooperation with <u>SOSsitter</u> was a success. They scaled the product and grew to a profitable business. They also won the StartupCanada Social Enterprise Award in 2017.







Partender

Unicsoft provided developers for iOS, Android and web <u>applications</u> for bar inventory management. Today it's a running business with **clients like Hilton**, **Marriott**, **and Gerber Group**.







Adellica

Developed by Unicsoft developers, a native iOS and Android application for radio control by our client Adellica has raised_£4 million investment.

£4 million investment







WANDA

Predicting and preventing adverse events with Al



Client: Screamingbox Platform: Web, Mobile

Technology: Python, Django **Delivery:** 475 development hours

Link: Wanda

Release: December 2018

Wanda is an integrated cloud-based platform embedded with active Al linking doctors, clinicians, patients, and caregivers into a proactive care team to stop adverse events before they happen.

The machine learning algorithm is used to identify 90% adverse events 7 days before they manifest, keeping high-risk patients safer. All the predictions of the Machine Learning model are based on patient history and baseline risk, supervised engagement, health trackers, symptom surveys, health trajectory, prediction, and risk analytics.

The doctor receives an alert about the risk by the system. It gives an opportunity to improve patient care plan adherence and to prevent adverse events related to patients health. The users of the platform can communicate via video, IVR, text messages, app options.

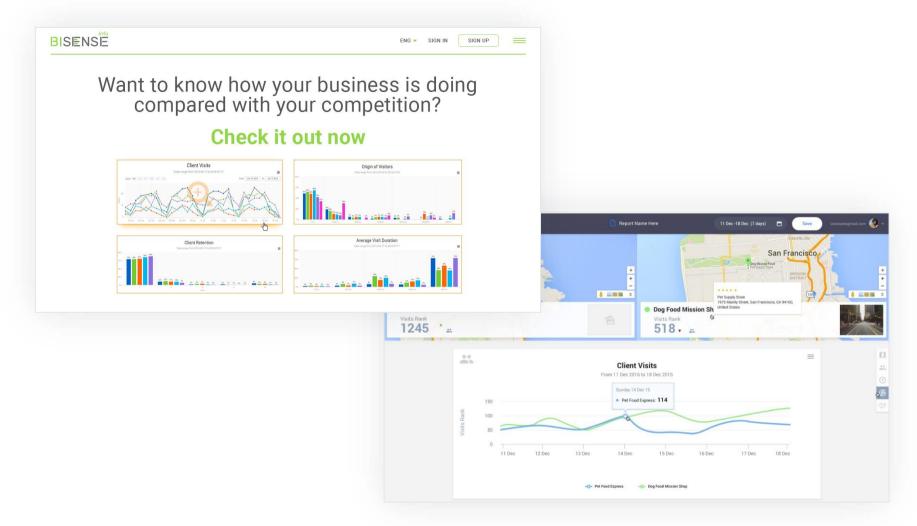
Unicsoft provided Senior Python/Django developer in order to strengthen Wanda team of ML Engineers and Data Scientists. Unicsoft expert was responsible for improving the back -end structure as well as adding newly trained models into the existing platform.

Unicsoft boosted Wanda team with tech experts who can solve complicated tasks. We helped Wanda to attract top expertise faster and solve the challenging task, improve the product to succeed in the market.

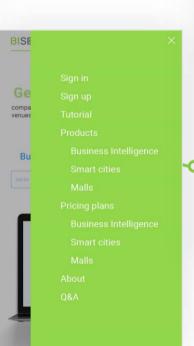
BISENSE

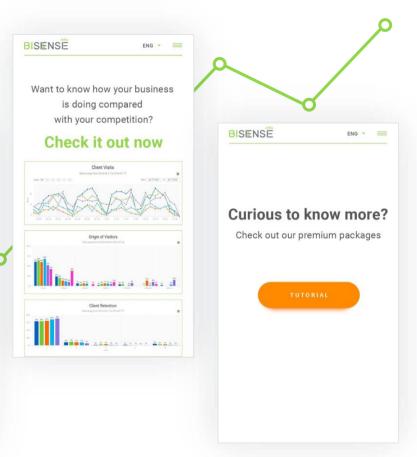
Analytic platform





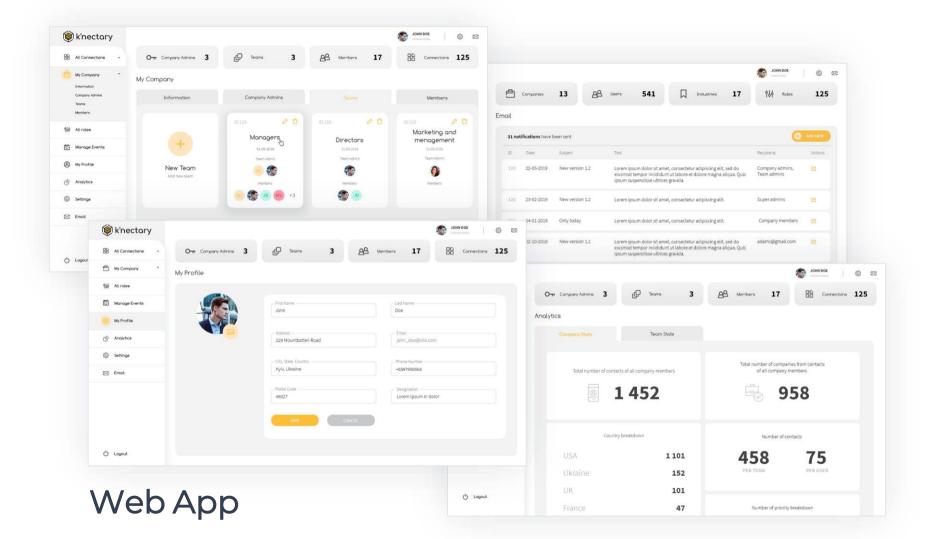








Caring Partner for sustainable innovative growth





HEDGEDBITCOIN

Investment platform with prediction of cryptocurrency price trends

+10 Hedged Bitcoin Dashboard 10 Jun 2019 USD ▼ BTC

Client: Ternary Intelligence

Platform: Web, Mobile (iOS, Android)

Technology: Node.js, React.js, React Native, AWS, Rest API

Delivery: 3171 development hours **Link:** https://hedgedbitcoin.com/

Ternary Intelligence is a California-based company that is engaged in computational finance and detecting instability in financial markets. They came to us with the need to develop an automated investment platform, HedgedBitcoin.com, related to cryptocurrency exchange.

The client had mathematics algorithms and prediction models of cryptocurrency price trends to mitigate the risks of unexpected currency behavior.

The Unicsoft team was in charge of:

- Integration of the created algorithm with the Coinbase-like platform.
- Web portal and mobile (iOS and Android) application development.

Due to extremely tight deadlines for the client's marketing campaign, we suggested hybrid mobile development, which additionally allowed us to reduce the project budget by 30% on app development.

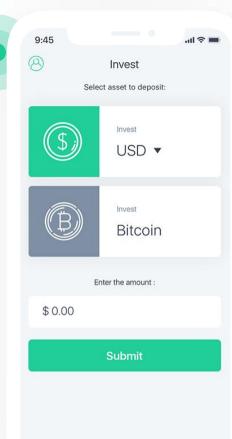
When the user invests money into the application, the algorithm performs automatic investment decisions based on the currency behavior predictions.

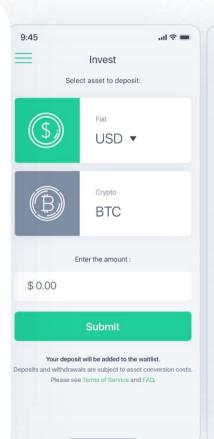
This is a great solution for households from third world countries that have limited access to investment instruments and pension funds to save and multiply their earnings. At the moment, more than 10,000 users have been recorded on the developed platform.

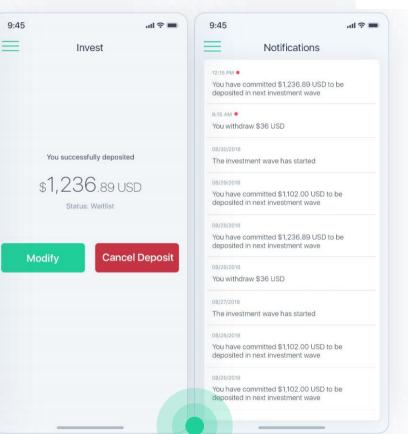


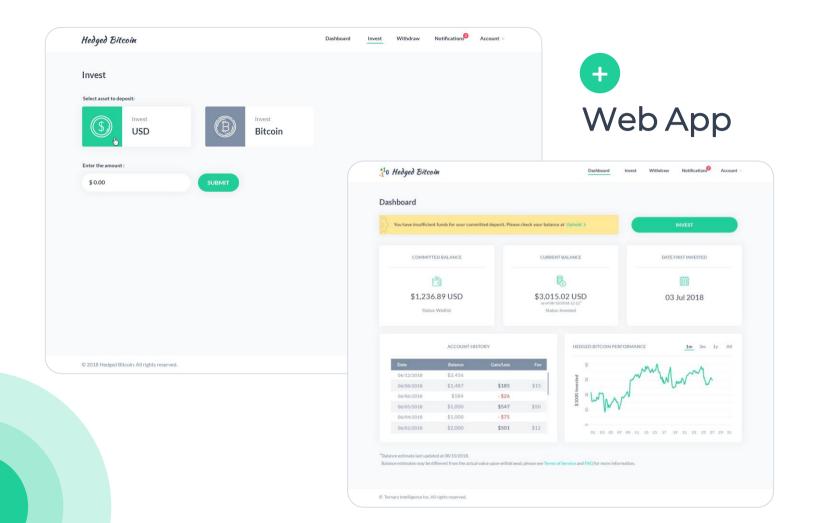
UI/UX for Hedged Bitcoin App











sustainable innovative growth



EXCEPTION PREDICTION TOOL for Supply Chain

Challenge

Modern global supply chains are becoming vast and increasingly dynamic ecosystems. Supply chain optimization becomes the goal for almost all companies to gain competitive advantages on the market.

The client is a leading provider of supply chain consulting, software and fourth-party logistics services. Aiming to bring more business value to their clients, they strive to optimize logistics execution, using Machine Learning for automation of exception prediction and data processing from different suppliers and thus facilitating the process of decision making. There is a strategic R&D department inside the client's company, which works with Unicsoft on improving their current solution by making it more efficient, accurate and sophisticated in terms of predicting errors in logistics.

Our clients' R&D department works on the Proof of Concepts. And Unicsoft helps to transform PoCs with the potential of developing into a solution as a feature of the existing product. It helps to improve the product via optimizing of logistics operations.





Solution

As the time to market was of the highest priority we have established very tight customer-Unicsoft cooperation with biweekly sync-ups and direct communication between technical teams to complete the project on agreed delivery date.

We have deeply reworked the Machine Learning model for logistics incidents prediction and supplier-related incidents. The tool takes the input from the past for training and then trained model is used to predict exceptions next week. It focuses on forecasting a group of exceptions. The tool predicts if the consignor provides a higher or lower volume than advised or the consignor fails to ship at all. The tool is used every Thursday and does a prediction for the upcoming week. It was programmed in R.

Result and Future Plans

Unicsoft team considerably improved the machine learning model as well as other components of the solution and as a result, the client received:

- Higher precision for the forecasts (80%).
- The user interface that was recreated from scratch to make the tool easier to use with a modern interface
- Opportunity to generate reports in a number of formats and with needed periodicity.

Being satisfied with the project success the client asked us to complement the solution with analysis and prediction of the carrier-related incidents (last mile delivery) in the nearest future. Also, Unicsoft team will be responsible for the research and development of the product's other concepts regarding the precision for the supply chain forecasts.



Supply Chain

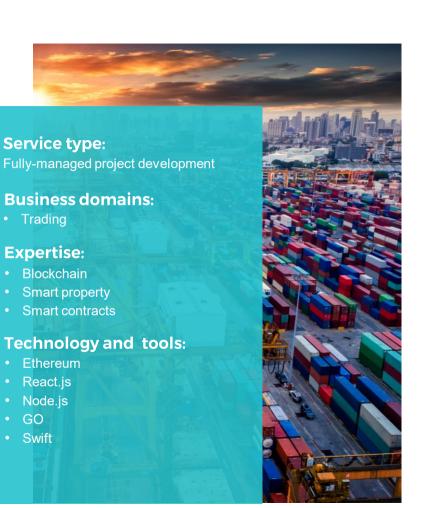
SUPPLY CHAIN TRANSPARENCY for gold mining industry

Challenge

In gold mining industry in USA regulatory compliance is a serious issue and is subject to multiple environmental and labor regulations. Financial institutions have to conduct a "background check" on every gold bar they are offered as, for example, a credit collateral, however, there is no secure and convenient way to conduct such investigations and make sure that:

- the gold comes from certified gold mine.
- the gold mine was certified at the time the gold was mined.
- all the refineries and other supply chain participants have required certifications

Such long-standing problems in the industry motivated openminded entrepreneurs to found a disruptive startup with an idea to solve the aforementioned problems once and for all. The goal was to create a supply chain transparency platform capable of tracking each piece of gold electronically and in a secure manner. At the time there already were similar successful cases in other industries, for example, jewellery and medical implant tracking, which were Blockchain based solutions, which gave us insight regarding the technical solution in this case.





Supply Chain

Solution

The basic technical complexity was that existing platforms track the origin of one product, for example an implant. With gold, it is more difficult - the mine produces large ingots of unrefined gold, further refineries clean it and one unrefined gold ingot produces several bars of a smaller size of high-grade gold, then other institutions can melt these slivers into smaller ones, so the original "product" is crushed into components and it is necessary to track the way of each component back to that big ingot from which it went. Thus, the ready solutions were inapplicable in this case.

The problem was solved by applying the QR code to each ingot and to the derivatives of ingots and creating a custom system for registering all operations of the type in blockage (ingot A was turned into ingots B, C, D by X LTD, ingot A itself no longer exists) and all displacements (ingot B is moved from companies X to company Y with the help of transport company Z).

The system is realized with the help of Ethereum, and the logic of operations with ingots is programmed in the form of smart contracts.

Result and Future Plans

At the moment the system is in the MVP stage. After having received first feedback from future users, we have added features that not only solve the task of regulating the gold market, but also automate the work between suppliers and recipients of gold. So the future product will solve 2 tasks:

- · Primary: tracking the origin of gold
- New: automation of document circulation between gold mines, refineries and other participants of this market.

The MVP was approved by the National Mining Association and (most likely) will receive investments from this organization.



Factoring Solution

FACTORING SOLUTION with Blockchain technology

Challenge

Invoice factoring is a financial transaction whereby a business sells its accounts receivable to a factoring company to free up their cash: usually to secure working capital to meet expenses, cover payroll or expand their sales. During last two years this market emerged and shifted towards Blockchain technology to improve security, speed, and reliability of the services. European fast developing company specialized in online retail of goods for children reached out to us with a request to create a factoring platform for their supply chain. Since classic factoring business is prone to high operations costs and slow factoring requests processing, the "classic" was not aligned with company's agile and innovative culture. The solution was to apply Blockchain, which offered an automated low-overhead way of securing the transactions and enabling the use of smart-contracts technology. Main intention lay in gaining a competitive advantage due to development of a solution with use of a top-notch technology leading to the highest security and reliability.





Solution

As a result of business analysis project team came up with the high level technical solution which included combination of Ethereum and Parity allowing getting benefits of both modern and lightweight Proof-of-Authority mechanism and SmartContracts.

Back-end of the tool had two main nodes - first one was kind of admin-panel, and the second one was public. Admin-node was intended to provide a synchronization of all invoices that were stored in the tokens using internal API. Internal API, in its turn, reached to the Smart-Contract module enabling use of abovementioned technology. Public node let users get any requested information regarding the tokens. Initial infrastructure was deployed using AWS because of reliability and resilience of that service. The development team consisted of one front-end developer, one back-end developer, and one designer. Overall timeframe amounted to eight months.

Result and Future Plans

After successful delivery of the platform it received positive feedbacks due to its automated and easy to manage nature. Factoring solution initially meant as an internal product was transformed into B2B offering to other similar businesses and constituted a new line of business within the customer's organization.



ARTIFICIAL INTELLIGENCE for cryptocurrency price prediction

Challenge

Crypto industry reached the peak of its popularity last year. There was a need to create useful tools for crypto analysis.

The client came to us with the startup idea to develop an AI model for analyzing the cryptocurrency market. As he has already built an algorithm for cryptocurrency auto-trading, he decided to add cryptocurrency price prediction feature to it as well.

The solution combines natural language processing, sentiment analysis, and machine learning algorithms (LSTM) to predict prices for cryptocurrency. It crunches huge amounts of data and tells you which cryptocurrencies to invest in and attempts to maximize your returns.

The product brings value to:

- Private traders who want to receive hints from the system of artificial intelligence and a forecast on the trend of cryptocurrency prices;
- Professional companies that need to evaluate a comprehensive forecast for the whole real-time cryptocurrency market, portfolio management, investments, risk management, etc.

Service type: Dedicated data science team **Business domains:** Cryptocurrency Auto Trading Artificial Intelligence in Finance and Investment **Expertise:** Machine Learning NLP Sentiment analysis AI Long short-term memory (LSTM) recurrent neural networks **Technology and tools:** Jupyter Notebook Python Sklearn TensorFlow (Keras)



Solution

Unicsoft dedicated team was in charge of developing a Cryptocurrency price prediction solution based on LSTM models and sentiment analysis of Crypto forums and channels. The model provides the prediction of 4 type of price: 'Open', 'High', 'Low', 'Close' for every Cryptocurrency individually.

The processes of price prediction model is recomputed constantly by Al Engine, potentially in a constant update loop. The model works in real time.

The model accepts any number of input parameters (the network architecture allows you to add many technical market characteristics of a selected cryptocurrency), and gives a forecast at specified prices ('Open', 'High', 'Low', or 'Closed') at the output. The architecture also provides a simple way to add new parameters to the line of the forecast in the future: for example, the forecast of the Volume of funds for this cryptocurrency or another indicator. No significant code changes will be required: flexible parameters are already embedded in the solution.

At present, the models work with a time step of one day, and make forecasts for 7 days ahead (forecast interval is adjustable); however, the solution can be applied to hourly input data and the forecast horizon set in hours.

The solution was deployed in Python, Jupyter Notebook deployed for demo purposes. All documentation and the code was delivered to the customer on time and according to the initial requirements.

Result and Future Plans

The team created the fully ready working solution for Cryptocurrency price prediction within two weeks

The main challenges were:

- Research and selection of the optimal model architecture for Cryptocurrency price prediction within this solution.
- Improving prediction quality, optimizing time and resources for model training and real-time prediction. In the result the client received a model with 73% - 90% accuracy of prediction.

Also, we provided the client with the demonstration materials about this solution. It's allowed the client to demonstrate the capabilities of this solution both to specialists in Al and to investment market traders as well as to those interested in investing in this project. So the Client has an opportunity to attract new users and investors to his Al based product.



Prediction

PREDICTION of a bill-voting outcome

Challenge

As long as Data Science technology stranding along the market it is covering more and more domains where it can be applied. Applying Data Science to the domain where not only behavioral analysis but decision pattern matters and affects the political and social outcome became soughtafter. One of the most renowned FU&USA publishers reached out to us with an intention to build a new value-added service for their subscribers focused on prediction of a bill-voting outcome in US congress. Such service was offering an innovative, impartial and accurate approach to political analytics, as opposite to classic "expert" approach used by other players on the publishing market.

Service type:

Fully managed project development

Business domains:

- Media
- Social

Expertise:

- Behavioral analytics
- Predictive analytics

Technology and tools:

- Python
- SQL
- noSQI
- R
- mlLib
- Spark





Prediction

Solution

The journey began with deep analysis of the problem and available data to solve it. The main challenge was that in order to get high accuracy the machine learning model had to gather attributes of a bill and voting habits of senators from multiple non-congruent sources. Added complexity was the fact that both "bill" and "voter" are complex entities and specific voter decision regarding specific bill depends on multiple attributes and their combinations, therefore requiring advanced approaches for prediction.

Initial development team consisted of two data scientists and one DevOps. First, we built an API-like connector for grabbing and processing the data. A lot of work was dedicated to clean up existing data - all success of the model hinged on apposite data cleansing and enriching. Moreover, considering potential growth of external sources, current data processing module must have easily expendable architecture for rapid scale up once we have new source on the board.

Next step was dedicated to getting a full understanding of the data thus we ran a set of models to get descriptive statistics and full comprehension of the given data. Having the latter completed, we did the PCA (Principal Component Analysis) to understand the weights and how the key features do affect the outcome. After the all of abovementioned, we devised a plan of model testing - starting from 10 "competitors" we boiled a list down to the four key models and amalgamated them into an ensemble.

Result and Future Plans

Long story short - the model had an accuracy of 84% proving the business case. Such successful proof of concept initiated series of new initiatives and value-added services based on the data existing in the organization and utilizing the power of data science and machine learning to gain unique insights from it. This solution became a capstone for a versatile solution allowing users splice&merge datasets and predicting not only bill-voting outcome but a precursors leading to the decision of even factors, affecting behavioral pattern of a particular congress member.



Fraud Detection

FRAUD DETECTION

in gaming industry

Challenge

Online gaming industry remains one of the most profitable domain of online businesses. However, alongside with huge demand, the huge fraud risk grows from year to year, causing not only a financial damage but far more dire consequences due to obtaining of hacked personal data. Having strong fraud protection is the key perk regardless how sophisticated and well-versed your game is. A well-known online game producer that launched the line of browser games faced a need to maximize monetization of one of his games through a thorough analysis of gamers' data (purchases, activities, etc.) as well as need to make internal game security stronger due to up-to-the-minute detection of fraud and cheating activities. Despite having an analytics team, a vast majority of data was processed manually and data literally was not bringing any added or business value. So, the key intention was to build two analytical modules that supposed to work separately, but in the same environment and ecosystem; yet another intention lay in extensive advisory services provided by Unicsoft about the auditing current one and later, in setting up suitable and flexible DWH/ETL solution.

Service type:

Dedicated data science team

Business domains:

- Gaming
- e-Commerce

Expertise:

- DWH
- Big Data Processing
- Machine Learning
- Al
- · Fraud detection & prevention

Technology and tools:

- Apache Spark
- Hadoop
- Hive
- Python
- mllib
- Random Forests





Fraud Detection

Solution

As a result of Business Analysis stage, Unicsoft identified following deliverables as required to fulfil set business goals:

- Gaming analytics: given a historical data for entire game users and after its preprocessing (cleansing, enrichment, etc.) a cluster of active users has been defined. Then, key features of gaming behavior and in-game purchase occurrences were carefully analysis with the purpose to tune up gaming AI: main thing was to keep balance between game difficulty for keeping gamer involved and adding several "hard spots" which might be passed easily if particular in-game purchase made.
- Anti-fraud module: analysis of suspicious activities occurred during gameplay or internal currency purchase: detecting fake cards and adding them into database; detection and consequently prediction of cheating activities in game process (multiple accounts, fake teams, etc.)
- DWH/ETL auditing and improvement: regardless of having plenty of various datasets, all of them were stored in old and rather unstable SQL-type solution, so need of rapid access arose eventually; after thorough analysis of requirements, Clients' data was successfully transferred to BigData solution that consisted of Hadoop + Hive alongside with analytics modules plugged onto.

Result and Future Plans

Unicsoft set up a team comprised of senior-level data scientists, data warehouse specialists and business analysts with specialty in BigData field; further, a support team for model tuning and maintenance was set up as well.

The breakeven was reached after 12 months due to both modules: whilst almost right off the bat anti-fraud module gave a hand by dealing with cheaters, analytics module gradually helped in AI improvement and launching of particular in-game purchase sets dedicated to most promising groups of users eventually leading to significant increase in profits. Consequently, it led both of us to mutually beneficial cooperation.



Testimonials

Their relentless attention to detail, meticulous quality control, and clear communication about the project set them apart from other agencies.



Michael Forte
President, Forte Web Properties, Inc.

They are a fast growing company because they serve their clients well. They really analyzed and tried to understand the business use of the tool I wanted to develop.



Imran Rehman Owner, KOKORO

Their transparency and work ethic translates to regular updates and quality work. Customers can expect a good value and early progress due to heavy initial investment.



Dmitry Dain Founder and CTO, Virgil Security, Inc.

Unicsoft quickly supplied talented developers and thoroughly documented the project. The team was knowledgeable, communicative, and committed.



Andreas Sandin CEO, Hackyard Internet AB

More testimonials



Industry recognition

shows that we're moving in the right direction



















Get In Touch

Have a great idea?

Unicsoft can deliver your digital needs.













Julia Liubevych CBDO









Evgenii Mariyko Head of Fully Managed Project Delivery









Glib Konotop Business Development Manager







WWW.UNICSOFT.COM