



2BIT

KEY PART TO YOUR SUCCESS

Software Development & Consultancy

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(1) A bit, about 2BIT



DEFERO 2BIT d.o.o. (aka “**2BIT**”), was founded in 2011 by group of **IT enthusiasts** after working in a **multinational telco company** (A1). Before joining A1, they studied IT at the Faculty of Electrical Engineering and Computing (**FER**) in Zagreb. FER is known as one of the **best IT universities in Croatia** and the region, “producing” highly skilled IT professionals and is one of the many sources to find new employees, ideas and inspiration.



Today, more than a decade later, 2BIT is still there, working as an **established player** in the field of **individual software development and maintenance**, having deep roots and ties in the **telco industry**, working with clients in Europe and the US.



In 2022 we decided to **reinvent ourselves**, reaching out for new products, clients and partners to build even bigger things, while keeping strong ties to the telco industry, that helped us grow and mature. To achieve this goal, we build **new relationships**, we **invest** our “**coding power**” into strategic partnerships and we **share our knowledge**, with the ultimate goal, to **build long lasting software solutions for a better future**. Our foundation pillars, quality, efficiency and passion, never changed. It’s time now, to share it with a broader audience:

You!

(2) 2BIT capabilities

Services

- Custom Software Development
- Mobile App / Web development
- System Integration
- Application management
- Integration of 3rd party SW
- Maintenance and support
- Quality Assurance
- Migration
- Managed Services
- Consultancy

Industries/Sectors

- Telecom
- Banking, Finance and Insurance
- Energy
- Health
- Marketing
- Start-Ups
- ESG | Sustainability

Service Lines / Solutions

- Billing Systems
- Business Process Management
- Customer Experience Management
- Order Management
- Service Provisioning
- Order Processing & Provisioning Tools
- Mediation

The following *five examples* will give you a glimpse into the *projects* we managed. We skipped a lot of projects and details to keep the overview short & informative. For more information slide to our contact page and *request a 1:1 meeting.*

(3) Use cases from 2BIT (1|5)



*[Cooperation: Telco USA]**

We worked in a project environment that was **highly challenging and critical** from a set-up perspective. Working for a big US telecom company, that operates in different US time zones, while we worked from Europe was only one part of the task. The other part was the importance of the **cost cutting program** that was linked to this **billing system change**. After replacing another vendor on the fly, we came into the game to "save the project." This highly demanding project included some **system-critical steps**, including data cleansing, migration of customer and service data to the new system, implementing new features, on a system. Every downtime would end up in a **cash burn** for the client. Luckily, the project was successful in replacing the old system, migrate the data, and set up the new one.



[Way Of Work]

Different time zones, fully remote, fully agile set-up and C-level reporting.



[Tech Stack]

Java, SQL, PL/SQL, C, Python, Perl, Angular, Spring Boot

(3) Use cases from 2BIT (2|5)



[Start-Up: VIRDIS]*

VIRDIS is a start-up that aims to work on two main topics: (1) *sustainability* and (2) *data autonomy*. VIRDIS is a software solution for mobile phones that *eliminates paper receipts* in any form. Instead of collecting stacks of paper receipts, the receipts go straight to your mobile device or cloud after you complete your purchases. On top of that, VIRDIS *receipts contain much more information* that you, as a client, can collect and analyze. We built the whole solution *from scratch*, starting with the classical proof of concept, creating the prototype, setting up the MVP, conducting field testing and now implementing new features. We built a product that has the potential to *shake up the old way of paying* and *handling receipts*.



[Way Of Work]

Agile, in house developed from the scratch



[Tech Stack]

JavaScript, Java, Spring Boot, .NET, AI (ComputerVision, OCR Deep Learning, Big Data)

(3) Use cases from 2BIT (3|5)



[Cooperation: Telecommunication Europe]*

This project is one of our *longest-lasting business relationships*, which has been running for more than 8 years and has undergone *three contract extensions*. The project scope includes *supporting, maintaining, and developing a billing software*. The environment is quite challenging from a technological and architectural point of view, which demands an *extremely short time to market reaction*. On top of that, we face some very *strict Service Level Agreements* with sensitive penalties if we do not fulfill our obligations. To ensure that the project progresses smoothly, we have established a deep understanding of the system and, even more importantly, a *well-coordinated core team* that operates seamlessly with the client. On top of that we managed to *significantly increase the level of knowledge* on the client side.



[Way Of Work]

On site and remote work and managing stake holders, on the client site (technically and business).



[Tech Stack]

Java, SQL/PLSQL, C, C++, Spring, Spring Security, Spring Webflow, jBPM, C#, .NET,

(3) Use cases from 2BIT (4|5)



*[Mid Size Company: Candidates Recommender Engine]**

We developed a *candidate recommender engine* for our client. They needed a faster way to *filter, match and sort job applicants' CVs* to increase their hiring and response rates. To achieve this goal, we used recurrent neural networks to extract specific information from both the CV parsing engine and the project parsing engine. Our solution *utilizes matching algorithms and AI models* to solve a multi-criteria optimization problem and recommend the best projects and jobs for the applicants, and vice versa. It's worth mentioning that our solution is part of a bigger system, and we had to *ensure that it works well* both as a *standalone* solution and in *conjunction* with the main system.



[Way Of Work]

Agile, cross functional teams lead by the client to keep ownership inhouse.



[Tech Stack]

Python, Django, Scikit-Learn, TensorFlow, Keras

*Due to space and complexity reasons, we'll name only the most common technologies or very specific technologies and tools we used. Feel free to approach us to give you more insights.

(3) Use cases from 2BIT (5|5)



*[Multinational Cooperation: Telecommunication Europe]**

Our client is a **multinational corporation** that asked us to **develop/extend a billing and provisioning software solution** to be used in their eight subsidiaries across Europe. We operated in a multi-interface environment, **integrating** and **connecting numerous systems and network elements**. Another aspect of this system development was to train and prepare the client's employees for the **knowledge transfer**. This is one of the more challenging tasks as it requires taking into account the varying levels of knowledge and maturity of the "OpCo" employees while operating in a fast-paced time-to-market environment.



[Way Of Work]

Multinational teams, remote and onsite, agile, waterfall, multi functional teams.



[Tech Stack]

Java, Tcl, TIBCO BW, PL/SQL, SQL
Interfaces: JSON REST, SOAP, CORBA, SFTP, FTP.

(4) 2BIT people

Software Development Areas

- Business Analysis
- Project Management
- Architectural Design
- UI Design
- Development
- Quality Assurance
- Documentation
- Support and Training
- Machine Learning
- Data Mining
- Big Data

Database Technologies

- MS SQL Server
- Oracle
- MySQL
- PostgreSQL
- MongoDB
- SQLite
- Apache Hbase
- BigTable

Programming Languages/Platforms/Technologies/Frameworks

- C#
- C/C++
- Java
- Spring Boot
- Spring Security
- Tcl
- TIBCO
- Go (Golang)
- .NET
- Python
- Django
- Flask
- Celery
- Redis
- JavaScript
- Node.js
- express.js
- ReactJS
- Redux
- Angular
- Java Liferay Open Source Portal
- APL
- Selenium
- Jenkins
- Docker
- Kubernetes
- NumPy

Operating System

- Android
- iOS
- Red Hat Linux
- Ubuntu Linux
- Microsoft Windows
- Mac OS

Managed Services Expertise

- Billing
- Rating
- Mediation
- Order Management
- Provisioning
- System Integration

- AWS
- Microsoft Azure
- Google Cloud Platform
- Cloud Foundry
- TensorFlow
- PyTorch
- Keras
- Scikit-Learn
- Pandas
- Hadoop
- MapReduce
- Spark
- Storm
- Lucene
- Cassandra
- Kafka

(5) How 2BIT achieves your goals



Going the extra mile



Focus on the bigger picture



Taking the initiative



Push the boundaries



Focus on finding the solution



Never-quit mindset



Fast movin' and adaptable



Deliver on time

(6) The bigger picture 2BIT



After all the reading, it's *time for some action*. If you're looking for a highly dedicated *software and business partner* that can work on important back-end tasks or provide beautiful front-end solutions, with a "*yes, we can*" *mentality*, we should talk.



Software, web, and app development is not always an easy decision. Let us help you build solutions for a better future with *excellence, knowledge, and innovation*.



We're open to *discussing ideas with you, checking feasibility*, and talking about "coding power partnerships" to *change the world* with great and useful products.

(7) 2BIT contacts

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