



REPOBLIKAN'I MADAGASIKARA
TSARA ANTOKA



Ministry of Economy and Finance Madagascar Central electronic guarantee register

Our cooperation with the ministry of finance and economy

The Ministry of Economy and Finance of Madagascar is interested in enabling investors, especially SMEs, to apply for **secured loans** to **drive economic development** in the country.

The project, set up for the **Ministry of Justice** of Madagascar, is financially supported by the IFC, part of the World Bank Group, to promote economic growth in Madagascar through **greater transparency** in the credit system.

Part of this initiative was the design, development and implementation of a **central e-guarantee registry**. This enables the Government of Madagascar to facilitate and improve **access to credit**, especially for small and medium-sized enterprises.

Industry:

E-Government

Service:

Software Design

Services:

Digital Process Transformation

Technologies:

Angular, Spring Boot, SQL Server, Tomcat, CentOS, Micro Service Architecture, Constellio

Methodology:

Scrum & DevOps

The Challenge

- Cultural differences led to **communication barriers** and a lack of understanding of local business practices, which hampered the success of the project.
- **Infrastructural realities** in Madagascar also posed a challenge, making it difficult for team members to collaborate effectively and coordinate their efforts.
- In addition, there are a number of **laws and regulations** in Madagascar that must be adhered to when implementing a project, which was somewhat difficult, especially for foreign companies.

Despite these challenges, the IT project was completed **on time, within budget** and to the satisfaction of all involved.

- simple
- intuitiv
- consistent

Our Contribution at a Glance:

- Project planning with agile methods
- Design of the processes and adaptation of the IT infrastructure of the online personal property security registry
- Implementation and testing (unit testing, system and integration tests, load/performance tests, tests for the resumption of operations, security tests, user acceptance testing)
- Migration and cleansing of existing data
- Development of the interface to the system of the Commercial Register for data exchange
- Training of the staff of the Ministry of Justice and other stakeholders

The implementation

The tasks to be performed under this mission were:

- **As-is analysis** of **existing processes** and **working methods**
- **Design, development, configuration** and **implementation** of a new **electronic warranty register**
- **Supply, installation** and **configuration** of the guarantee register hardware at primary and secondary sites
- **Data migration** from old data stock into newly designed data model
- **Analysis** and **interpretation of the laws**, creation and implementation of the rules in the processes
- **Strengthening institutions** and **building knowledge** among registry staff through trainings
- Prepare and submit a **proposal** for the **staffing and management** of the technical operation of the Registry.
- **Development** and provision of **user manuals** and **user guides**
- **Support for all stakeholders** integrating the online service and the API channel
- **Knowledge building**, skills transfer and support for operational and IT staff

Customer Benefits:

Improving the credit infrastructure

Simplified lending, especially to SMEs

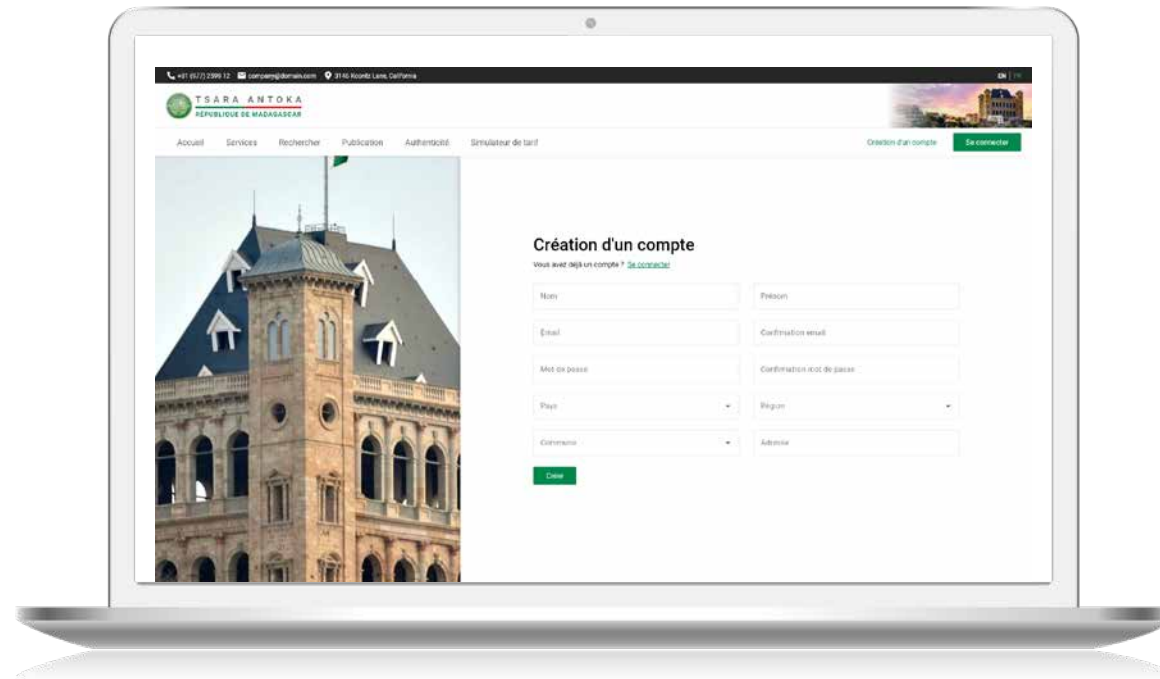
Growth of the Madegassian economy

Banks and microfinance institutions can register guarantee applications themselves

Online creation of official guarantee certificates with QR code

Opening up existing markets and creating new ones

The implementation



Create an account: A clear presentation simplifies the handling of the application.

The project was implemented in **four phases**. The principles of the **project management method PRINCE2** („Projects IN Controlled Environments“) were combined with those of **agile software development** such as Scrum and DevOps.

Phase 1: Project start

For the project plan, we created one with a **general overview** of the project with a clearly defined business case.

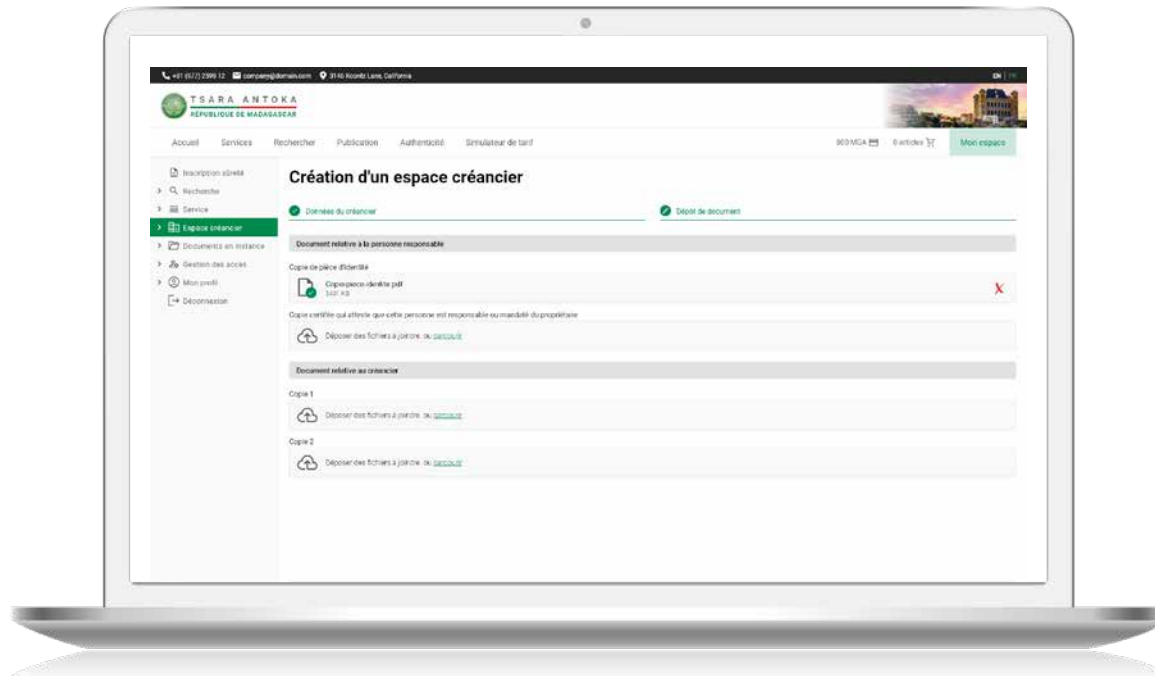
Phase 2: Project initiation

A detailed project plan provided a **specific overview** of the time, costs, quality, scope, risk and benefits of the application.

Phase 3: Project implementation

A **preliminary release plan** with all sprint cycles structured the implementation. After each sprint, there was an acceptance of the product that had been completed by then.

The implementation



Clear structure: Pages are clearly structured and laid out and provide a quick overview of the individual components of the application.

Lessons learned retrospectives at the end of each sprint ensured that the **quality and efficiency of project delivery** could be improved with each sprint. At the same time, there was reporting to ensure that the developed applications continued to meet the required criteria.

In parallel with the development, our project manager carried out **controlling** to ensure that problems were solved quickly and initiated **corrective measures** if necessary.

Phase 4: Project completion

After all product specifications were implemented, **acceptance tests** guaranteed that the application would work smoothly. This included user acceptance, integration, security, performance and scalability tests.

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A big congratulations for this huge achievement, and a great way to close of 2022. Thanks for your collaboration, perseverance and solution-oriented mindset. Looking forward to the next phase of the project in 2023.

F. Elaine MacEachern

Sr. Financial Sector Specialist, IFC

- fast
- precise
- solution-oriented

The completion of the project also included the **creation of a training concept** and the **execution** of trainings for users, administrators and technical staff. Only when it could be ensured that all those involved were able to put the acquired knowledge into practice did the final step begin: the go-live.

Part of the **go-live** was the **provisioning, installation** and **configuration** of the client's system and databases and other third-party software, as well as the installation of the target solution, which included setting up user accounts and configuring access and **data migration**.



You want to know more about our solution
and services?

We are looking forward to meeting you!

Florian Schnappinger
Head of Sales