

PORTOFLIO

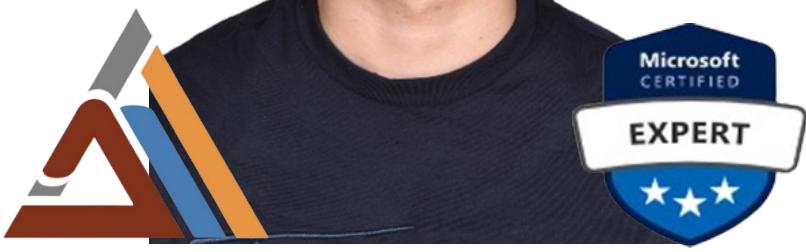
M'hassni Mohamed



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Introduction



GIS and Cloud engineer
graduated from EHTP

Microsoft Certified Azure
Solutions Architect Expert

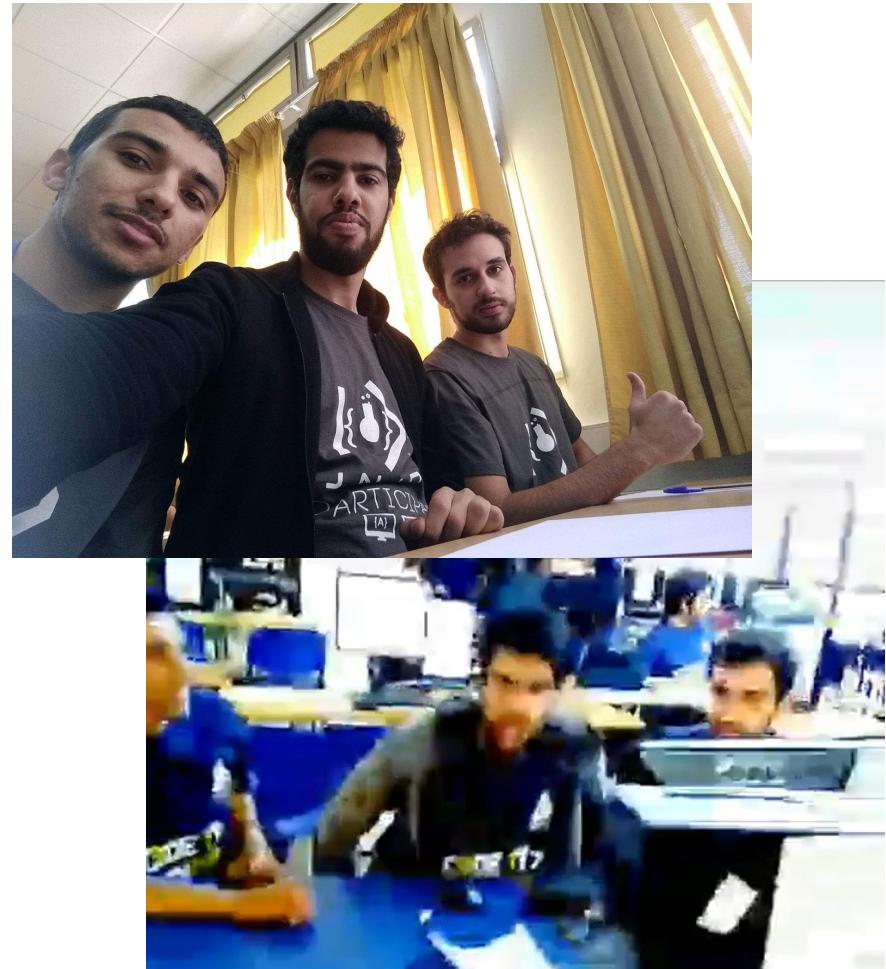
Who am I?

M'hassni Mohamed's passion for automation is evident in his work helping companies improve their **service quality** and **profitability** by **automating** their business processes. With varied experience in systems architecture, geomatics, digital marketing, and many other areas, M'hassni brings a unique perspective to every project he undertakes

A Family Business Success Story

Early Involvement and Passion

- First topography experience at age 12
- Started learning programming languages (C, C++, JavaScript, vba, ...) at 13
- Attended a highly selective preparatory program (Math, Physics, Computer Science)
- Participated in various code problem-solving competitions to challenge myself

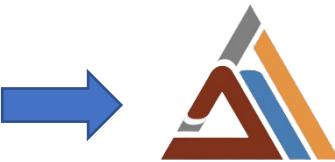


National podium winner in ICPC the most prestigious programming competition in the world

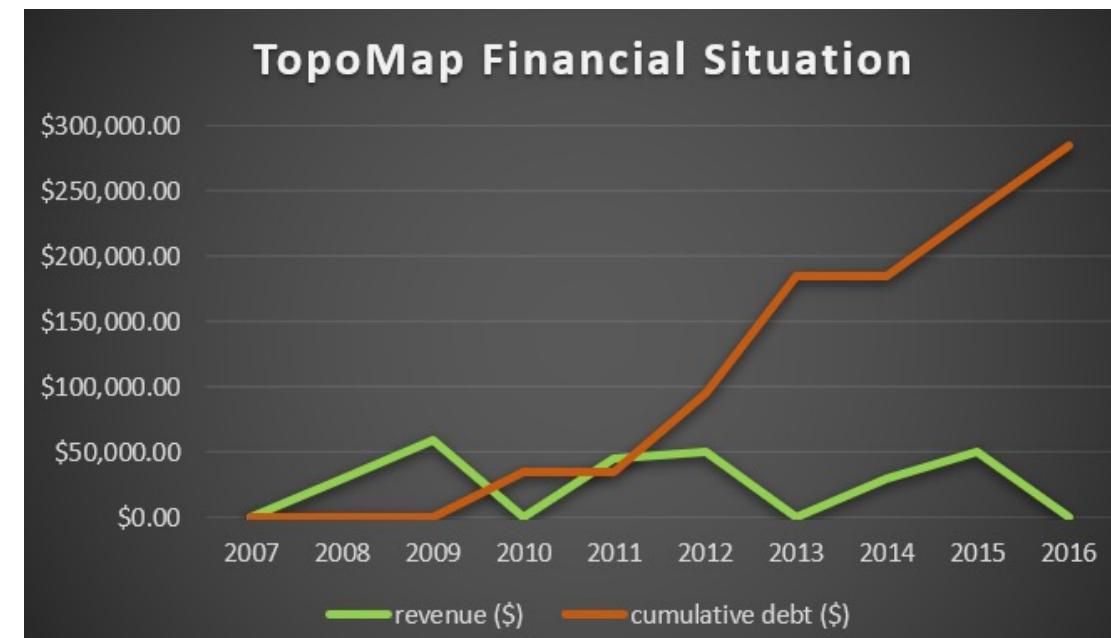
A Family Business Success Story

In the meantime

- **Family business:** TopoMap, founded in 2007
- **Specialization:** B2B Topography and geomatics
- **Financial struggle:** Deficit for 10 years, cumulative debt of \$300,000



At **2016** Decided to study Topography and Computer Science at EHTP, the most prestigious school in the country



A Family Business Success Story

Implementing Technology in TopoMap

- Introduced technological solutions to optimize workflow :
 - Business process optimization
 - cloud-based system infrastructure
 - infrastructure networking
 - staff training to new GIS technologies (topographical drones , ArcGIS , 3D models ...)
 - Developed Tools for automating repetitive tasks



<https://youtube.com/shorts/fdf3KrEa1tQ>

- Developed **TopoMap CadGIS** a software extension to manage land title lifecycle according to Cadastral office standards



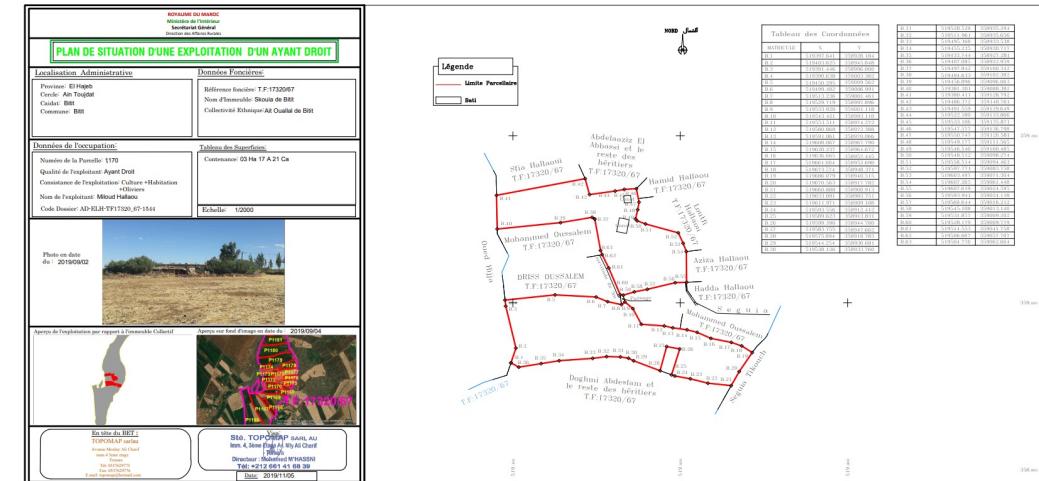
A Family Business Success Story

Taking a Leap of Faith

- Company struggling, but bid on a large public contract
- Required were 25 topography technicians for office work, but TopoMap had **only 4** available
- a **4-month** deadline



Decided to develop **TopoBot** a solution to automate most of the plan-making process to meet the project

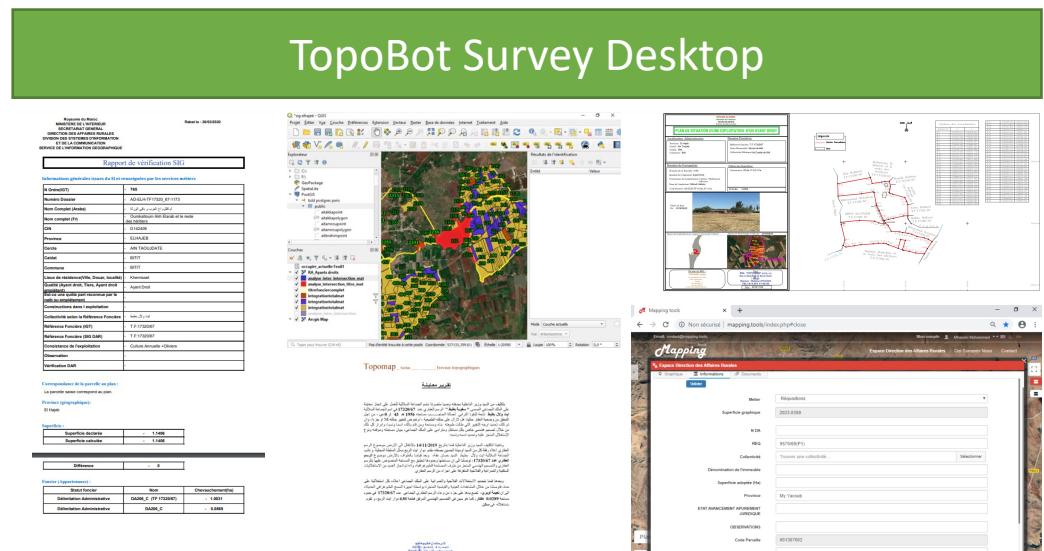
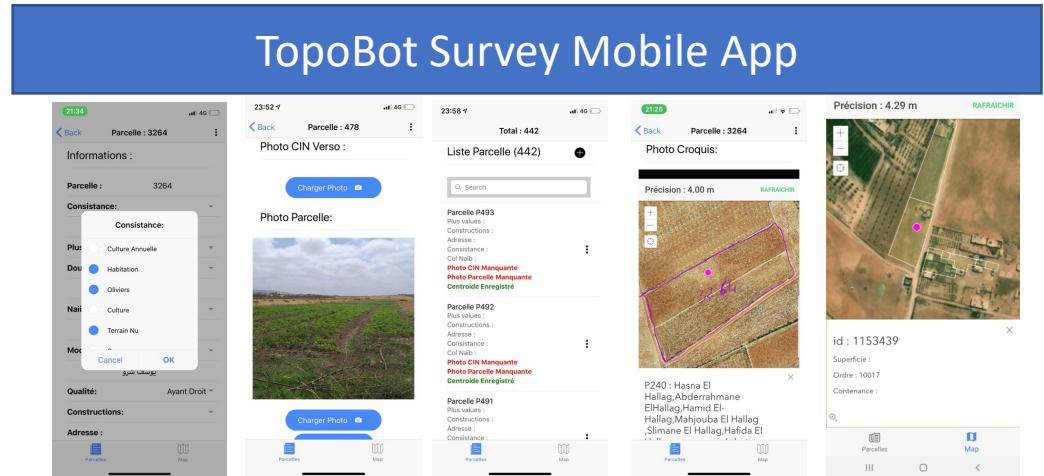


fully automated drawing with TopoBot

A Family Business Success Story

TopoBot Overview

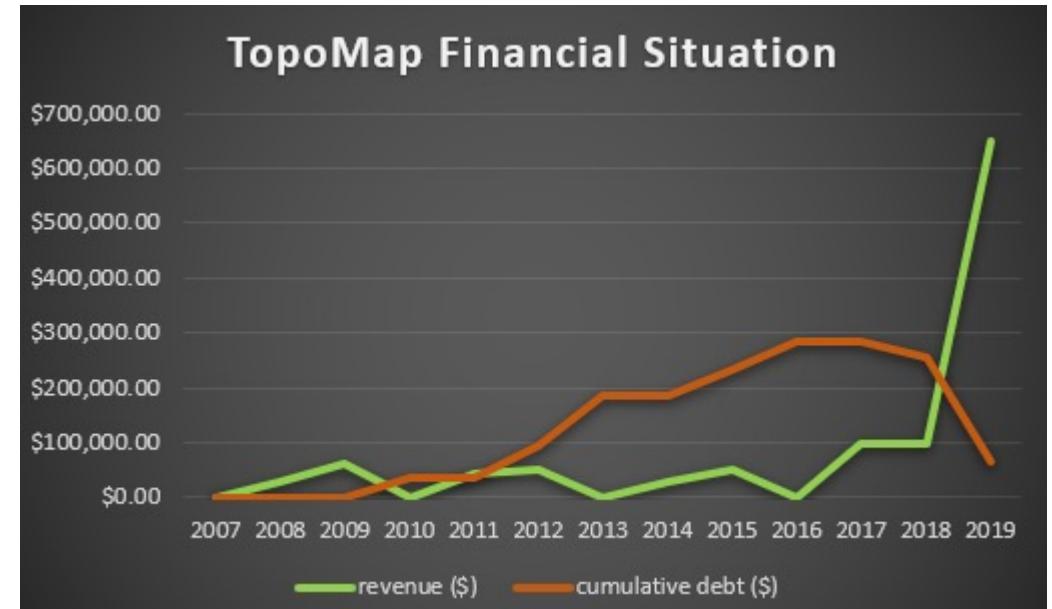
- Mobile solution for data acquisition
- AutoCAD extension for automated drawing
- Automatic report and parcel sheet generation
- Automated geometric data correction
- Centralized database for real-time data
- Bot script to integrate data throughout the ministry platform
- Cartographic server for drone images



A Family Business Success Story

Project Success

- Error rate reduced **from 60-70% to 1-2%**
- Plan generation time decreased from **7 hours to 2 minutes**
- **7x increase in revenue** compared to the previous years
- Market leader in topography survey sector (short-term)
- All company debt fully repaid



A Family Business Success Story

Overcoming Challenges

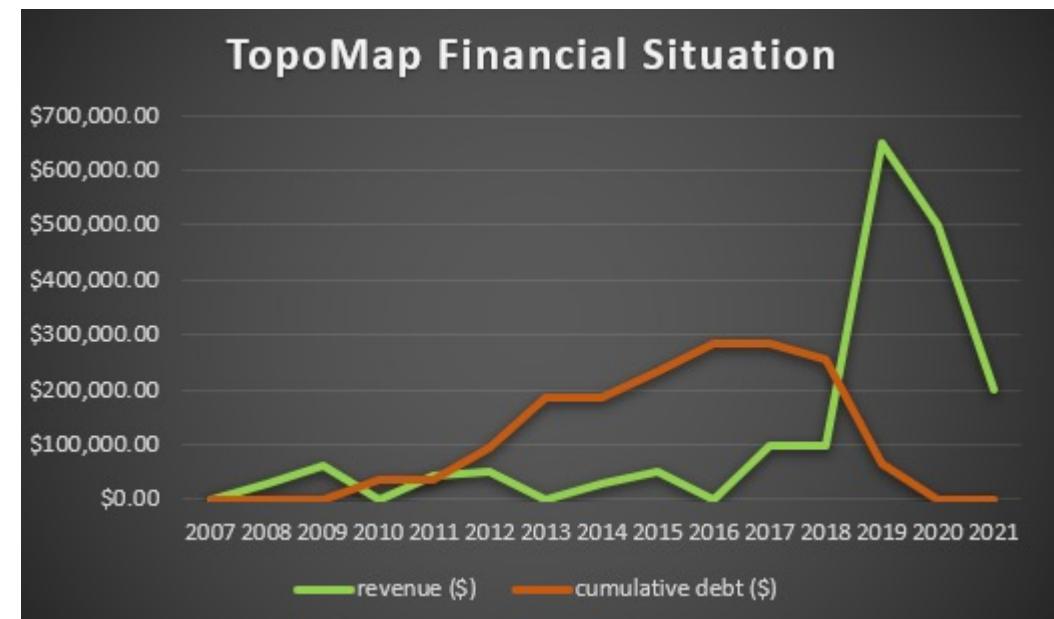
The COVID-19 pandemic resulted in a decrease in topographical survey business



In 2021, secured a special public contract for topographic quarry plans with specific constraints that required research work involved a huge workload



Special project demands led to developing TopoBot Quarries and related research work



A Family Business Success Story

Innovating for the Special Project

Research Project:

- Research project management to reconstruct quarries with minimal error

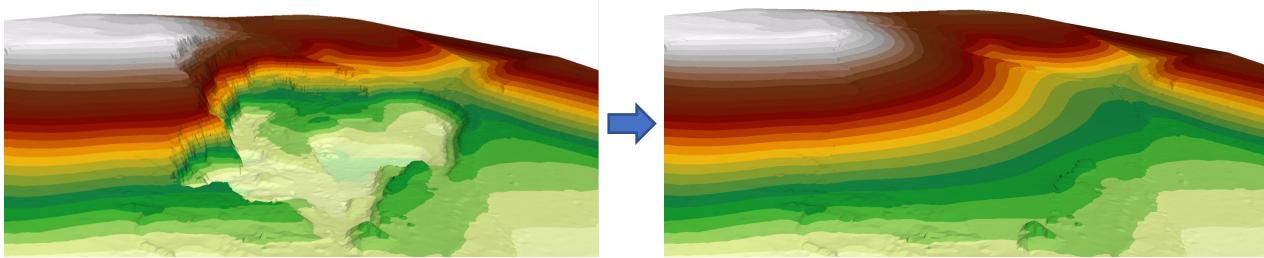
 <https://youtu.be/PsMrHKsrySc>

TopoBot Quarries :

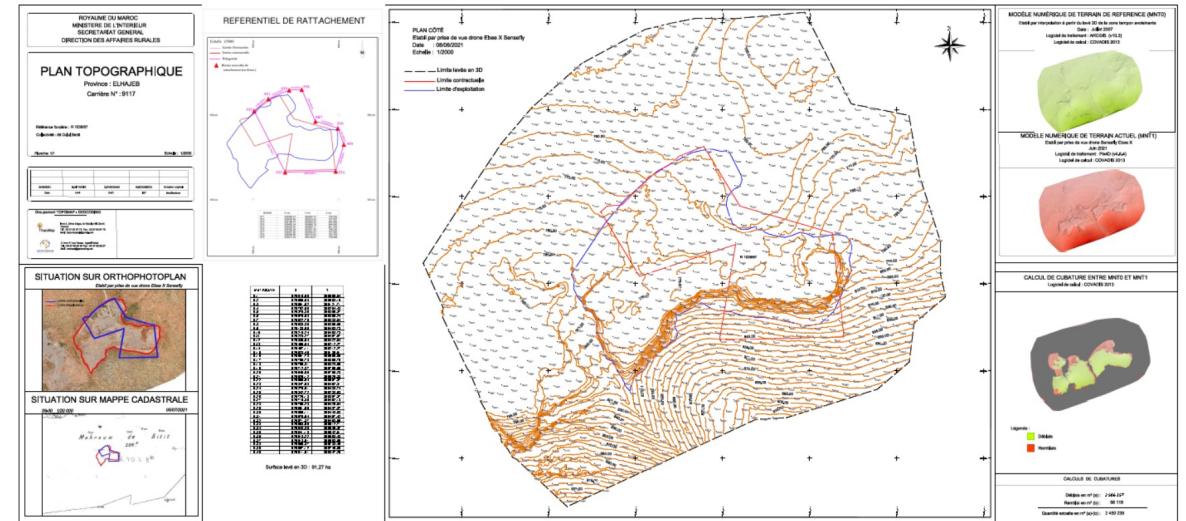
- Mobile solution for quarry data management
- 3D drone measurements for 350 quarries
- Automated topographic plan generation
- AutoCAD extension for automated drawing based on Moroccan cadastral standards
- Automatic report generation for each quarry
- Centralized real-time database
- Supervising drone data acquisition in the field

 <https://youtu.be/V6rn6ncZst4>

Quarries reconstitution results



TopoBot Quarries Desktop

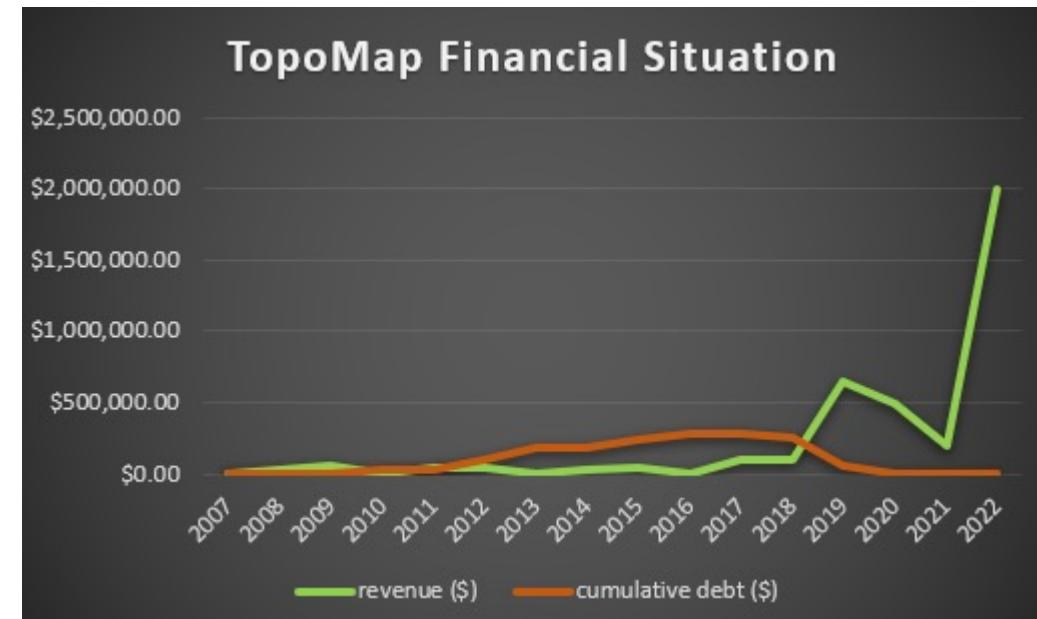


fully automated drawing with TopoBot

A Family Business Success Story

Achievements from the Quarries Project

- Error/incomplete deliverable rate reduced **from 80-90% to 1-2%**
- **3x increase in revenue** compared to the last 2 years
- Project revenue reached **\$2 million**
- Plan generation time decreased from 40-50 hours to 5 minutes
- Report generation time decreased from 20 hours to 5 minutes



A Family Business Success Story

Expanding Horizons

- Created a new company “**Handle IT Services**” offering IT consulting services
- Providing personalized training in spatial data analysis and process automation as a sole expert
- Fostering relationships with partners and expanding B2B networks



Key achievements

1. RSCollector a No-Code Geospatial Solution

- Developed a no-code solution for dynamic questionnaires in web and mobile applications
- Reduced development time by 80%

2. BigTra BTP ERP Solution

- Implemented an ERP solution for a multi-million dollar construction company
- Improved project delivery time, reduced material losses, and streamlined payroll
- Increased net gain by 25-30%

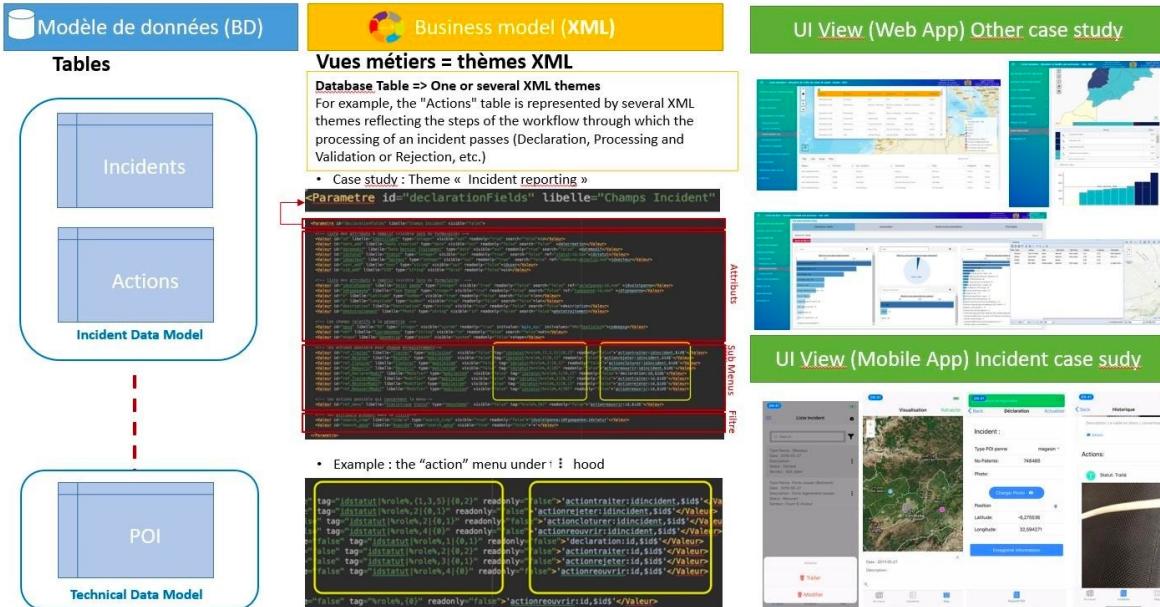
3. Pause Gourmet ERP Development

- Developed a complete ERP solution for a restaurant chain
- Increased net gain by 50-60% by streamlining management processes

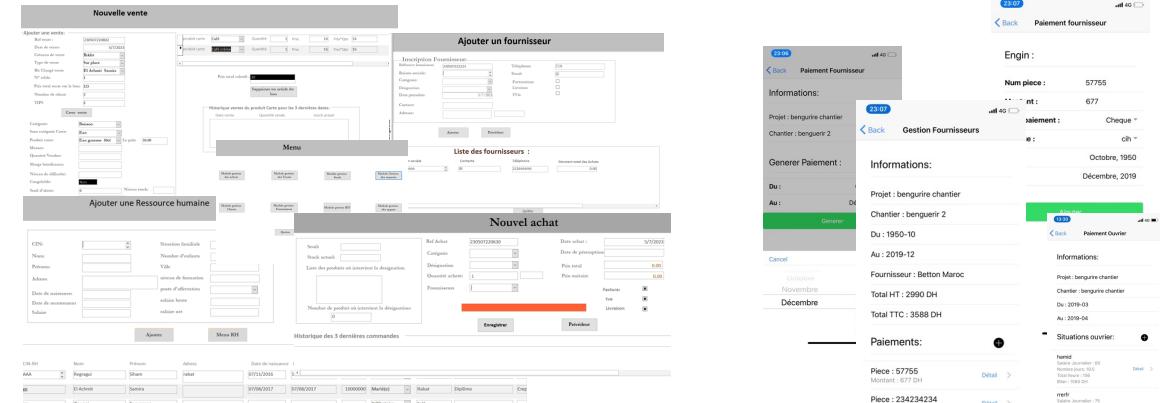
4. Web 3 MEV Projects

- Sniped exchanges to be among the first to buy shares after launching web 3 DeFi projects
- Minimized latency with cloud infrastructure, ranking in top 3 fastest buyers for 90% of launches
- Gained \$15-20k in profit

NO CODE WAS NEEDED TO GENERATE THOSE APPS !



Under the Hood: RSCollector's Logic



BigTra and Pause Gourmet ERP

Failures and Lessons Learned

1. Adalyse - Advertising Data Analysis Platform

- Developed a mobile app for analyzing Facebook Ads data
- Project was not completed due to legal constraints and the need for Facebook Ads approval
- **Lesson:** Consider legal aspects before starting a project

<https://youtu.be/UFS7ihEKLZY>

2. E-commerce Projects

- Launched and managed dropshipping and cash-on-delivery e-commerce businesses (BuyorCry and TipytoShop)
- Gained \$20-30k in revenue
- **Lesson:** Thoroughly plan for scaling the business before starting

<https://www.youtube.com/watch?v=rz-yfXtFuGE>

<http://web.archive.org/web/20200811003804/http://buyorcry.net/>

Adalyse mobile app



BuyorCry and Tipyto Shop



Conclusion

My passion for technology, education, and dedication to the family business transformed Topomap into a market leader, and led to the creation of a new consulting company Proven ability to innovate and deliver results in challenging circumstances while expanding B2B networks