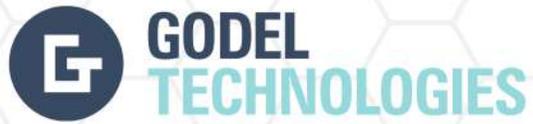# GODEL TECHNOLOGIES

Partnership case study

Godel and Karhoo: Innovation, teamwork and trust.

Introduction

Karhoo, founded in 2017, is a global marketplace platform called the **"Karhoo Mobility Exchange"**, upon which taxi and private fleet companies can resell their services through brands.

These brands promote these services via their ecommerce websites and apps to millions of clients. Backed by Groupe Renault, Karhoo's revolutionary offering is rapidly expanding across Europe and all continents.

KARHOO
Visit the Karhoo website

The challenge

In late 2018, Karhoo's growth was accelerating rapidly. The Karhoo Mobility Exchange was gaining ground in its market having proven itself as unique and highly valuable – but being based in London, the company found it difficult to scale their in-house software development team.

They required a high calibre of talent to achieve their strategic goals. To meet these requirements, they determined that Godel – a nearshore software delivery partner – was the best choice.

"Godel was chosen to support Karhoo to scale up their technical operations as they proved to be extremely technically competent and aligned to our agile way of working"

Bill Wilkins, CTO, Karhoo.

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The Société nationale des chemins de fer français is France's national state-owned railway company. It operates the country's national rail traffic.

Partnership kick-off

The partnership commenced with a small Godel pod, which consisted of senior frontend developers, a test automation engineer and an Agile Delivery Co-ordinator. The first step saw the Godel team take a trip from Belarus to visit the Karhoo offices in London.

This two-week "kick-off phase" is a practice Godel often employs to ensure a shared mindset in its partnerships from the very beginning. The newly partnered Godel and Karhoo teams began to collaborate from day one, working to understand the initial scope of work, define goals and explore one another's' ways of working.

At the time, the mission of the partnership was to work on a taxi booking solution called **"Mon Chauffeur TGV Inoui"** for French rail operator SNCF. Timelines were in place – the work was toward a solution which had to be deployed within months of the team's kick-off.

Mon Chauffeur is a consumer-focused taxi booking system located on SNCF's website that allows rail customers to book taxis from railway stations the length and breadth of France. With added velocity from Godel in place combined with the in-depth kick-off phase which defined effective collaborative practices from the outset, **the solution was delivered on time.**

"Godel has been instrumental in the delivery of Mon Chauffeur for SNCF and is helping us more widely across our front-end product development, web apps and software development kits. Importantly the teams at Godel are tightly integrated with our in-house staff in London and Krakow, Poland,"

- Bill Wilkins, CTO, Karhoo.

Expansion

Mon Chauffeur's successful release marked a milestone for the partnered team. It **evidenced the value of the partnership**, proving that accelerated software delivery leads to business growth. Further, a sense of trust in Godel was firmly in place at this point – expectations had been exceeded and commitments had been met.

New requirements were defined that saw Godel embedded across Karhoo's teams to support delivery. A **product mindset** had been established by the initial Mon Chauffeur team – Godel understood Karhoo's values, objectives and domain. The initial team filtered this information to new Godel team members, ensuring the same quality of delivery observed in the first engagement would be present at scale.

"With the success of the Mon Chauffeur launch, Karhoo continued to grow the Godel teams to be able to support the growing needs of the business.   These new teams were then spread across the product engineering group"

Bill Wilkins, CTO, Karhoo.

Partnership at scale

Replicating the successful approach taken with the first team, each additional pod would spend their first weeks onsite in London with Karhoo's stakeholders, and vice-versa with Karhoo making visits to Godel's offices.

The staff would spend this time having informal coffees, group planning sessions and senior business meetings in one-to-ones or as teams, rapidly integrating into a truly unified product team. This practice **sets a precedent of transparency in the long term**: teams that know each other well from close interaction in the beginning continue to communicate effectively and consistently when remote.

Karhoo would add Godel to four workstreams in total during this scaling phase. A team named "Operation Tooling" was set up to build a greenfield solution which would become part of Karhoo Mobility Exchange.

This team was the first in which Godel provisioned all roles required for end-to-end product development.

Karhoo decided to reallocate its first Godel ADC, Yauheniya Prakhina, to the role of Product Owner. She, along with her team, **had built a level of product knowledge that would be expected of an in-house Karhoo employee.**

A critical part of Karhoo's software delivery ecosystem is integrating many third party "supply partners" into Karhoo's platform, to expand the reach of the Karhoo Mobility Exchange. This is complex work, since each third party has its own structure. A "Supply Engineering" Godel pod was formed in aid of this work.

This team delivered an integration framework developed using **highly responsive open APIs** and innovative architectural practices, which **greatly accelerated the integration process.**

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"The Godel Supply Engineering pod was an important addition to our engineering Organisation at Karhoo boosting our capability to deliver supply integrations. They inherited an architecture that although functional was inefficient from a developer experience perspective.

The Godel pod were able to look beyond simply continuing to use this legacy system. **They proposed and then developed an improved development framework** with integrated test automation support.

This framework is now successfully deployed and has enabled us to accelerate the delivery of new integrations and concurrently improved their quality. In doing so they have helped us in a key business objective."

Mal Minhas, VP Engineering

Innovation

Innovation has been present across the Godel and Karhoo partnership from the outset. Karhoo's implicit trust of its Godel teams has created an open environment for the teams to experiment, challenge and put forward ideas – as well as implementing them as real solutions.

Again, the teams' product mindset means their focus encompasses not only the immediate technical challenge, but the wider, long-term vision of Karhoo's products and overall market requirements. Therefore, innovative directions are always toward business value, and never "for the sake of innovation".

An example of such innovation surrounded Karhoo's testing processes. As the solution scaled to involve more third parties, manual testing became cumbersome. Godel consulted on best practices for building a test automation framework and a full transition strategy. This included a full analysis of different testing approaches and their application to Karhoo, an implementation plan and various testing options.

Godel's manual and test automation engineers then joined the Karhoo teams and implemented this framework in just 8 months. Now, test automation is in place for certain parts of the platform, with manual testing in place where required.

Teamwork

Godel and Karhoo's partnership **quickly reached maturity in terms of technical practice and working culture.** By setting foundational principles for teamwork back in 2018, there is clear best practice for the partnership as it grows.

The partnered teams are flexible in their choice of development methodology – some are SCRUM, some use SCRUMBAN for example. At a high level, processes are synchronised across teams to ensure unity overall, but nuances are adjusted depending on product and team context.

Godel's pods work closely with Karhoo teams based in both London and Poland. Collaboration is not negatively impacted at all by geography – in fact, the teams' practices surrounding remote working are highly resilient

Daily video conference stand ups, weekly retrospectives and constant communication over apps like Slack ensure this. Regular business trips also take place between all three locations. Like any team, there have been challenges to overcome regarding collaboration.

In agile software delivery it is important that each team member feels they can share their thoughts to the wider team and stakeholders. Godel's ADCs, delivery managers and tech leads worked with developers via informal catch ups, discussion sessions and brainstorming meetings to encourage open communication.

This helped build a **culture of communication** within the partnered teams, where nobody is afraid to share.

Community culture

Godel has been closely involved in Karhoo's "communities" initiative which brings employees together on key topics, providing different learning opportunities. The "agile community of practice" is one example, a weekly educational platform for Godel and Karhoo employees to discuss all things agile.

Both Godel and Karhoo team members alike work together closely in each community to create presentations, write resources and host events. This is part of Karhoo's wider focus on continuous team education and improvement. Closely involving Godel in these communities underlines how **trust is the foundation of this partnership.**

Having proven the value of innovation, the partnered teams **constantly strive to find new ways of working.** Hackathons have proved a fantastic avenue to this. Remote working was simply a challenge to overcome: the teams set up a video conferencing schedule between Brest, Belarus and Krakow, Poland. Together they conducted a hackathon to navigate ideas which helped them build a new backend architecture solution for a Karhoo product.

The remote working element was not a difficult hurdle to overcome in hosting hackathons. Godel and Karhoo have been able to host multi-way events across London, Krakow and Belarus which have involved trips to one another's' offices and fully virtual set-ups alike. The events are a fun way to encourage creative thinking, which is why Karhoo focuses them on real business challenges. Proof-of-concepts have been built during these hackathons which have been applied to the Karhoo platform as functional solutions.

![Godel Technologies logo]

Conclusion

Godel and Karhoo have built a fully integrated partnership based on resilience, trust and transparency. Time and again the partnership's business value has been proven, with Karhoo trailblazing in the transport sector with its rapid and unique technology innovations.

Proof of success has also been seen in industry recognition from a software perspective. Last year a Godel developer and tech lead working with Karhoo, Yuliya Maksimchyk, won "Software Engineer of the Year" at the Computing Women in IT Excellence awards. Part of her success here was down to her work developing the front-end of Karhoo Mobility Exchange.

Ultimately Godel's product mindset and true agile collaboration with Karhoo means continuing this pace of innovation – and accelerating it further – is in the future for this partnership.

"We look forward to an ongoing and prosperous future working with Godel, they have already proved invaluable to helping Karhoo succeed and will continue to be a valuable partner ongoing."

concludes Bill Wilkins, CTO, Karhoo.

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About Godel

Godel Technologies is an agile nearshore software delivery partner. Headquartered in Manchester with centres of software engineering excellence across Europe, it builds high-performing teams to deliver mission-critical solutions for UK companies.

Agile delivery underpins Godel's client engagements. Since 2002 it has delivered teams which work in close collaboration with clients' teams, accelerating delivery of software roadmaps.

Godel provides a unique team delivery model for product development. Combining team augmentation with dedicated team expertise, the product delivery model takes shared ownership of clients' digital product vision and takes it from conception to market.

Clients which chose Godel to deliver their mission-critical products include comparethemarket.com, AO.com, Feefo, Shell Energy and Karhoo. Each of Godel's clients has a unique mission, culture, way of working and set of objectives. Godel aligns with each; its high-performant people providing domain and technical expertise, guiding products to successful delivery.

Technical expertise extends across full-stack software engineering, quality assurance and test automation, business analysis, data, DevOps, cloud migration, artificial intelligence and machine learning, mobile and many other areas.

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