# COMPANY FACT SHEET

## Business Summary

There is a new industrial revolution in the works, and many industries are already embracing the change. Companies from diverse areas, from marketing to agriculture and health care, are starting to leverage Artificial Intelligence technologies, paired with automation, to improve efficiencies and unlock new business opportunities. However, the application of these technologies is still very limited when it comes to the automation of complex engineering processes. In today's world, Engineering knowledge is not easily transferable as it doesn't reside in a digital format. Now, imagine a system that simplifies the acquisition of this knowledge and the creation of specialized tasks to automate Network Operations. This was the premise for founding Tupl in 2014. While the rest of the wireless industry is coming late to this realization, Tupl has been delivering impressive results in terms of reduced manual labor (90%), higher speed (100x) and higher accuracy (4x) when compared to existing, manual engineering processes.

## Customer Problem & Opportunity Size

Our customers need to find ways to reduce their operational costs in the face of increasing competition and declining ARPU, and at the same time, accomplish tasks that never get properly done because of their complexity and the lack of time. Automation of manual, repetitive tasks, is the only way forward. Unlike classifying images or voice sounds, making a qualified engineering decision involves complex data management paired with deep domain expertise, based on information points coming from a diverse set of data sources which are often siloed. Every customer workflow is somehow unique, so resolving engineering problems requires a high level of customization, which is very costly to do using legacy technologies.

We estimate that, in the Wireless Operator market alone, such automation can provide north of $100M/year cost savings for a Tier1 operator. That equals $10B/year savings worldwide.

## Tupl Solution

We have created a specialized AI Engine, TuplOS, whose goal is to simplify the development of automation utilities and to enable the creation of a Digital Knowledge database for complex processes. It is well known that up to 80% of the AI value creation cycle is invested in data transformation and training, and thus the TuplOS system includes utilities to collect data, generate features, create models and simplify training processes. While very simple to use, our AI Engine enables the development of complex automation applications. Example applications include automated technical customer care (Automated Customer Complaint Resolution – ACCR), Proactive Care, automatic network troubleshooting (Network Advisor), network construction prediction, and operations work flow management (Unifier). Most of these are creating benefits north of $10M/year/operator/use case, proven by actual numbers from our clients.

## Tupl Customers Today and Tomorrow

The more competitive the market, the greater the automation need. Hence, our first customers are the most aggressive operators in the most competitive markets: United States and Japan.

We are currently working with some of the most influential mobile telecom operators however, our process automation by AI system is generic and soon you will find Tupl in new vertical industries. We also plan to enable our 3rd Party ecosystem, to foster further innovation and added scale.

## The Tupl Advantage

It is clear to us that there is a burning need for operations automation. Current attempts have been made by companies using legacy SW approaches that are heavy-weight and not maintainable. With our AI Engine approach, we can deliver solutions that are faster and, not purely relying on code, are more adaptable and easier to maintain.

Furthermore, using our approach we have been able to deliver applications that were previously deemed too complex to be achieved. We intend to establish Tupl as the global leader in IntelligentProcess Automation (IPA) for network operations.

## Tupl Core Team



**Petri Hautakangas, CEO**
Roamed the world in Sales Exec and CTO positions until it was finally clear to him: start-ups with the right team and vision are bringing the next level of innovation. Joined October 2015.



**Pablo Tapia, Founder and CTO**
Visionary with execution skills. R&D roles, patents, book author, key staff at T-Mobile; all to get groomed for founding and CTOingTupl. The rest is history.



**Hichem Garnaoui, COO**
Joined Tupl from Google in September 2017. True story; was interviewed for Tupl Board position, but got so excited that he wanted to join full-time. Brings operations excellence like no other.



**Héctor Montes, VP Sales**
Co-founder, bringing a wealth of experience in mobile network optimization, process automation and OSS/BSS market space; with a passion for making disruption a reality.