

The Israeli Auto-Tech Industry Is Waiting for Alibaba

Where will the next automotive industry Check Point emerge from? What makes electronics giants take out their checkbooks? And who will reach Alibaba's buried treasure?

Dubi Ben Gladyahu, March 14, 2017, 6:37 AM

Following our series of articles about the "smart car" revolution in Israeli hi-tech, we have received a phone call a few days ago, from an investor in a large hedge fund, who wanted to warn from the occurrence of a bubble. "Local companies in the field, which have been founded by two or three friends a year or two ago, act as if they are the next MobilEye or Waze", he lamented. "Capital raises are performed according to astronomical valuations, sometimes before companies even generate revenue, let alone profits. Even blue chip companies, which generate solid, growing revenues, are not granted such pricing".

No doubt, a considerable part of valuations of auto-tech companies in Israel and overseas, according to which investments and acquisitions are made, are based primarily on the potential of future revenues. Green, connected autonomous cars currently enjoy a fashionable, glamorous global buzz, which attracts venture capital investors like moths to a flame. However, a car is not another consumer good. It is a product with unique attributes, backed by a \$ 1.5 trillion industry, which is undergoing a rapid change. Beyond the direct, obvious potential, deriving from the multiplications of dozens of millions of vehicles every year, any product or technology, which succeeds in penetrating this field, creates a whole array of manufacturers, byproducts and suppliers dependencies. Hi-tech people fashionably term it "ecosystem".

Therefore, the business potential summoned for new players by connected cars is much greater than what's above ground. To illustrate this potential, we will focus on some examples, both technological and business-related.

Automotive cyber security – basis for the next Check Point?

Five or six years ago, the term "automotive cyber security" was simply not part of the automotive industry glossary. Although in recent years many models have been outfitted with smart multimedia systems and interfaces that allow fleet management and remote manufacturer updates, car surroundings were still considered by the industry to be isolated and secured, with a minimal risk of malicious external penetration.

The smarter, more connected the car becomes, the greater the threats. The ultimate future threat is hacker attack on autonomous vehicles, which will take the command over the vehicle from its driver. Therefore, every manufacturer, who develops autonomous cars for four or five years ahead, must protect them from this scenario. Actually, there is no need for looking too far ahead: vehicle cyber threats exist these days as well, recent reporting of methods developed in recent years by the CIA to wirelessly connect to cars and extract sensitive driver information aside.

On a more down-to-earth level, millions of drivers depend on wireless navigation applications to arrive at their destination. Outer penetration of crowd-based navigation networks might strategically disrupt traffic in entire cities or countries. The massive congestions, which occurred a few weeks ago on the road to Jerusalem, due to a (probably internal) Waze software issue, properly demonstrate the risk.

A recent DeLoitte research summarizes it better than we do: "The more complex cars become, the greater the potential of outside attacks on them. One vulnerable component might leave the entire inner system of the car exposed to an attack, with the potential damage ranging from driver inconvenience to massive dysfunctions in the vehicle. Facing such challenges, car manufacturers must remain vigilant and secured".

Regulators around the world work night and day to establish legislation which will require car manufacturers to use secure components and communication protocols in all future serial vehicles. This, in itself, creates business potential for supplying software/hardware components for millions of vehicles. However, this is only the beginning of a long-term income flow: the global emerging regulation will require car manufacturers to perform regular updates to address new threats throughout the life of the vehicle – whether the customers are aware of it and whether they like it or not. Therefore, the potential revenue model of this technology is more like the continuous revenue flow model of antivirus companies and Check Point than that of companies manufacturing chips for the automotive industry. It is likely that a company, which will succeed in embedding its protection platform in a vehicle manufacturer's production line, will enjoy a business status of a somewhat unbreakable bond.

Investors from the entire spectrum

On the business level, car manufacturers and their large suppliers (Tier 1) are the most natural clients of companies in the developing Israeli auto-tech field. They are also the ones supposed to generate most of the revenues and provide most of the investments. However, the actual picture is much wider. In an ascending order, we will review three examples of the hidden potential of strategic investments in Israeli auto-tech: companies of various sectors, all from the last month.

Our "light weighted" example would be regarded as a substantial, heavy weighted event on routine days. Earlier this month, chip giant ON Semiconductors, which is traded on NASDAQ with a market cap of ~ \$6.5 billion, announced the establishing of a connected cars components R&D center in Israel. The center will be established following the acquisition of IBM's patents and R&D activities in Haifa, in the field of proximity sensors for connected cars.

The company's press release stated, "We look forward to delivering a wider range of sensing products and technology to meet our customers' needs for next-generation ADAS and fully autonomous driving solutions. The acquisition creates a new Israel design center for ON Semiconductor that reports directly into the automotive solutions division within the Image Sensor Group. The new design center is located in Haifa, Israel. It includes staff, equipment, research facilities and intellectual property."

On routine days, an announcement of a chip giant investing in the connected cars sector in Israel would have rocked the local community boat. However, due to the current flow of global investments in this sector, it barely hit the radar. Either way, the underlying implication is outstanding: global chip companies want a piece of Israel's connected car pie as well.

The second example is Korean Samsung Electronics, the second largest IT company in the world, with revenues of \$ 194 billion and an annual investment budget of \$ 12.1 billion. In early March, the concern's President and Chief Strategy Officer, Young Sohn, visited Israel,

and his visit focused on Samsung Electronics' investments in the automotive technology field. Recently, Samsung Electronics acquired Harman, the automotive audio-video company with strong Israeli roots, for \$ 8 billion. Sohn had clearly stated the company's current interest in Israel: "We are not going to build cars, but we are interested in applying our technology to create a smarter car". He estimated that markets related to connected cars – connections to mobile devices, smart homes, IoT products and more – at over \$100 billion. Samsung Electronics had invested, in recent years, in dozens of Israeli companies, and of its nine investments in companies in the connected car market in the last year, three had been in Israel.

Alibaba at the back door

Our last example may seem like a classic case of a "hardcore" automotive industry investor, but it holds many mysteries as well. In late February, Chinese car manufacturer SAIC (Shanghai Automotive) announced its intention of establishing in Israel a center for R&D and locating investment opportunities in the connected car field. This move, first uncovered in Globes, is, in itself, a significant landmark for the local auto-tech industry: SAIC is a major player in the Chinese automotive market, which is the largest and most fast-growing in the world, it manufactures around 5 million vehicles every year and is positioned in the middle of Forbes' "The World's Largest Companies" list.

Its potential for purchase from suppliers is very interesting as well. For instance, in February, lithium batteries manufacturer A123 has won a contract for supplying SAIC lithium-ion batteries. This deal alone was worth a billion dollar.

However, even the potential of acquiring a direct foothold at a global player of this caliber is only the tip of the iceberg. Last year, SAIC had entered into a joint strategic project with Chinese e-commerce giant, Alibaba, an amicable Chinese company with a market cap of \$ 253 billion. Repeat: \$ 254 billion. The outright objective of the companies had been to create the first internet-connected car for the Chinese market, which will always be connected to Alibaba's e-commerce system and provide "multidimensional interaction between people, cars, roads and infrastructure".

This may sound like PR in Chinese, but this venture has already produced the first joint car – a SAIC SUV, RX5, which is manufactured with an Alibaba OS, as well as components for automated communication between the car to other cars, to smart infrastructure and various cloud-based services.

In the first three months of the internet car's launch in China, for a price of about \$22,000, a waiting list of 100,000 clients ensued. Now, the companies intend to expand the venture to additional vehicles and to create a car with advanced autonomous drive.

"Alibaba is eager to enter the automotive industry", a senior figure in the company said in China recently, "and SAIC is capable of quickly turning this wish into reality".

So, we have a research and development center being established in Israel by a giant Chinese automotive company, directly connected to the Chinese Google, which has an almost unlimited budget for the acquisition of new automotive technologies in Israel. In this case, for the Israeli auto-tech sector, entering the Alibaba hidden treasure system is far from a cliché.

Foresight preparing for an IPO in the United States, General Motors Israel approaching the starting line of a blue-and-white (Israeli made) autonomous vehicle

With the excitement in the Israeli auto-tech sector, Foresight announced today a 15% expansion of its raise. The company develops systems for road accident prevention, based on twin cameras affixed to the front of the car (which provide 3D images) and a software installed in the car, designed to process and analyze the images captured by the cameras. Based on the analysis, the system identifies dangers on the road and alerts the driver to potential accidents.

Today, NIS 23.5 million (\$ 6.6 million) were raised by way of a private placement. The placement featured leading financial investors, as well as private investors with knowledge and experience in the field, including members of the Carasso family, Ayalim Mutual Funds and Final founders. The funds raised will be used to accelerate the research and development of the company's flagship product to make it available commercially, as well as to reinforce the company's equity to meet the U.S. capital market listing requirements, as part of its plan to list on the US stock exchange.

Last month, Foresight launched the alpha version of its flagship product, which provides drivers various detection and alert capabilities, such as alert to insufficient following distance, relating to the speed of the vehicle in front and the autonomous speed (of the car equipped with the system); alert to collision with vehicles, static or in motion; identification and alert to pedestrians on the driving path; identification and alert to cyclists on the driving path; identification and alert to objects of 40cm X 40cm in size on the driving path.

Each of the aforementioned capabilities is a self-contained software module, which can be separately activated per the client's choice and needs.

In the past months, the company performed a series of experiments, on roads in Israel's South and Center regions, in daytime and nighttime, under varying, challenging lighting and weather conditions, which, in some cases, made the detection of obstacles difficult. The experiments tested the system's capabilities of obstacle identification and timely alert under these difficult conditions.

In the meantime, the advanced autonomous car developed by General Motors in its R&D center in Hertzliya approaches its testing on public roads. The car is based on sensors and algorithms developed by the company's various teams in Israel, which are installed on an experimental electric car, Chevrolet Bolt, that arrived in Israel for the purpose of this test.

After the development is concluded, General Motors intends to integrate hundreds of similar cars for a long-term experiment in car-sharing fleets in the United States.

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