Telematics Industry
Insights by
Michael L. Sena

# THE DISPATCHER

### In This Issue

Amaz'n Amazon: Making Hay While the Sun Shines	2
Dispatch Central	7
At opposite ends of the climate spectrum	7
WirelessCar turning twenty	7
Ever wonder what happened to Segway?	8
Tesla and U.S. November sales	9
<sub>1</sub> H = 2X Range + ½ Cost + 0 Tailpipe Emissions	9
Carlos Ghosn: Fallen Hero or Betrayed Emperor?1	0
A Dispatcher's Musings: Whose City Is It Anyway?1	.5



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# THE DISPATCHER

Telematics Industry Insights by Michael L. Sena January 2019 – Volume 6, Issue 3

# **Amaz'n Amazon: Making Hay While the Sun Shines**

WHY THE NAME AMAZON? Foundation stories are part of a company's lore. As the story is told, Jeff Bezos and his wife MacKenzie wanted a name that started with "A" (the Yellow Pages were still around back in 1994). They looked in a dictionary (also something that people had in their possession then) and came to the word "Amazon". The word seemed exotic, different, and was the name of the biggest river in the world. Their idea for a company was exotic and different (selling books on the Internet), and one day they hoped it would be big. So AMAZON it would be.

1. Butler, Mark. How to Use the Internet. Ziff-Davis Press.

Amazon Echo Auto puts Alexa in your car to respond to your every wish just by talking to it.



"Nothing lasts forever," Jeff Bezos told his staff at a company conference on November 16<sup>th</sup>. "One day, Amazon will fail, Amazon will go bankrupt. If you look at large companies, their lifespans tend to be 30-plus years not hundred-plus years," he continued. These comments to his staff came in response to a question from one of them about what lessons Amazon could learn from the Sears bankruptcy. "Focus on our customers and we'll have a longer life," was his answer. Founded on July 5<sup>th</sup> 1994, the company is getting closer to the 30-year point. In spite of the fact that its market capitalization has retreated from a high of over \$1 trillion in August to \$735 billion in late November, a similar fall to its other FAANG members, it is not likely that Amazon is going to disappear anytime soon.

What is AMAZON? Twenty-four years ago that was easy to say but difficult to understand. It was a company that would sell books over the Internet. Uh-huh. But what did that mean? Do you remember the Internet in 1994? Dialup modems and T-1 connections got you to a place you could never have imagined existed and you had no idea what to do once you got there. One of the first how-to books on the topic appeared in May of that year. 1 It covered e-mail, using UNIX, news groups, online etiquette, surfing and searching the Internet (with a capital 'I'). How did Bezos make the leap from this to deciding to compete with the likes of Borders and Barnes & Noble? I guess that's why he's the wealthiest person in the world today. Even EBAY didn't come along for another year, in May of '95, and by then Amazon had sold its first book: Fluid Concepts and Creative Analogies: Computer Models of the Fundamental Mechanisms of Thought. The rest is, as they say, history.

Why am I devoting pages of **THE DISPATCHER** to AMAZON? First, because it is no longer just a product seller. It moved on from there in 2002. Its *Amazon Web Services (AWS)* division is providing the cloud-based IT platform for many of the connected vehicle services being delivered today, and its Amazon *Echo Auto Division* (yes, it has one) wants to

put its Alexa personal assistant in our cars. Second, it is having a huge impact on transport logistics systems and infrastructure, on community development (both positive and negative), on global information technology and on world politics. I believe that anyone involved with transport needs to understand what Amazon is doing now and will be doing during the time it has left as a going concern, whether that's six, seventy-six or more years. One way or another, what Amazon does will affect you and the business you are in, if it has not already done so.

#### After being Walmarted, we are being Amazoned

I made up the term 'Wal-Marting' when I wrote <u>Beating Traffic</u> (see last page). It describes a logistics process that was one of the primary reasons for Walmart's success. (Note: Walmart changed its name from Wal-Mart to Walmart in June 2008, two years after my book was published.) The idea was to consolidate deliveries from suppliers to their own distribution centers and then to optimize deliveries to its stores using its own fleet of 7,000 trucks. It perfected just-in-time deliveries using in-store data collection technology developed in-house. It located its big box stores on the outskirts of cities with plenty of parking, paid low wages to its non-unionized staff, advertised "Everyday Low Prices", and pushed its suppliers to deliver the goods at rock bottom prices, which pushed them in turn to source everything from low cost countries, principally China.



When Sam Walton, the company's founder, died in 1992, he was the second richest person in the world, a step behind Bill Gates. He didn't have a chance to see the rise of on-line shopping, but his heirs who took over did not see Jeff Bezos and Amazon in their trucks' rear view mirrors. Bezos definitely saw Walmart in his Honda's headlights. Walmart made it impossible for local shops or smaller grocery, appliance, convenience goods, clothes and even book stores to beat it on price, and many closed. This forced everyone who was price-sensitive (who isn't) to travel to its stores. It increased the distance between what people wanted to—or had to—buy, and where they lived. It was the perfect victim for Amazon because what Amazon does is decrease to zero the distance between a product and a customer. It does this by delivering the product directly to the customer.



The Amazon logo has an arrow that points from the 'a' to the 'z' in the name, explaining the company's intended mission for satisfying its customers' needs. Today, Amazon operates in five business areas:

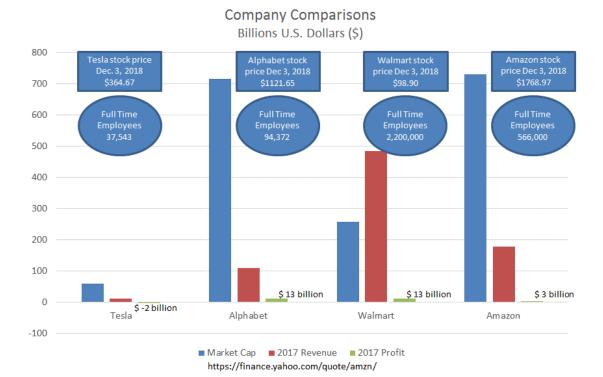
- 1. Online retail sale of consumer products. As of September 4, 2018, Amazon opened three Amazon Go cashierless convenience stores in Seattle. It also owns Whole Foods, a chain of grocery stores in the U.S.
- 2. Manufacture and sale of its own electronic devices, including kindle e-readers, fire tablest, TVs and echo devices.
- 3. Kindle Direct Publishing, an online service that allows independent authors and publishers to make their books available in the Kindle (online) Store. It also offers programs that authors, musicians, filmmakers, app developers and others to publish and sell their content.
- 4. Amazon Web Services (AWS) provides computing, data storage, database management and other services as well as fulfillment, publishing, digital content subscriptions, advertising and co-branded credit card services. (AWS accounted for 12% of Amazon revenue in Q3 2018.)
- 5. Amazon Prime, a membership program which provides free shipping of various of products as well as streaming of movies and TV episodes.

Amazon has built its own warehouses (called fulfillment centers) distributed across the U.S. and in foreign markets, more than 100 of them between 2006 and 2018, and spent billions doing it. These are staffed with hundreds of thousands of workers as well as worker bots. It is this logistics network that allows Amazon to delivery packages almost as quickly as the customer presses the 'Buy' button.

The chart below tells the story better than words of how the investment community views the prospects of the two companies. Amazon has a market value that is three times higher than



A view inside one of Amazon's fulfillment centers



Walmart's and a stock price almost twenty times higher. It has onequarter the number of employees, but its employee numbers are growing quickly. Unlike Google or Facebook that have huge valuations, high stock prices and gargantuan profits, but low staff and capital costs, Amazon has the first three, but makes large capital investments and employs lots of people.

#### Head in the cloud, ties in the sky

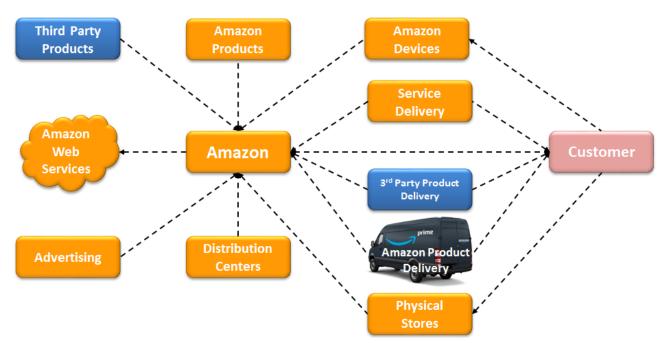
Selling other companies' books, clothes then groceries and eventually everything over the Internet is how AMAZON attained its first level of growth. The next level was achieved with services and its own products. It became a publisher of its own books and created tools to help budding authors write and distribute the book of their dreams. It developed the *Kindle* e-book reader to let you download any book you ordered from its site. It developed its own TV and



then started to produce programming for it. The company relentlessly follows the principle that its customers want to minimize the time and the difficulty of being united with any product or service they decide they desire, and are willing to match the price they are willing to pay with how quickly and easily they receive the product or service.

It took Amazon eight years to make its first quarterly profit. That happened in the last quarter of 2002 when it reported net income of \$5 million on fourth-quarter sales of \$1.12 billion. Its share price rose back then 24% to \$12.60. It did not consistently generate robust quarterly profits until 2015, and that's when its share price began its inexorable rise. It was over \$2000/share in late August, but retreated to around \$1700 by early December. Amazon really started to take off, figuratively, in 2015 when its *AWS* went into fifth gear. The division is generating around \$25 billion in annual revenues. *AWS* is the most popular public cloud infrastructure platform, comprising 41.5% of application workloads in the public cloud. Microsoft's Azure currently has 29.4% market share, according to Gartner.

#### Amazon Data Flow



As the diagram above shows, Amazon is literally the spider in the data web, with the web provided by AWS. An amazing 57 million U.S. households were signed up for its Prime service. That's around 50% of all U.S. households. Everything those customers purchase through Amazon, either on the web or in one its growing numbers

of physical stores, every device that is connected to Amazon, becomes part of the information storehouse.

In addition to its own delivery vans, in the future Amazon will be dropping packages into the waiting arms of its customers from unmanned aerial vehicles (aka, drones). How this will happen and when is right now pure speculation, but tests are being made, patents are being filed and the groundwork is being laid on the regulatory front to be able to <u>fly a tie</u> to a customer who needs one if he is in his car when he finds out that he has to make a presentation to the board when he arrives at the office, and the dress code is formal.

# anazon

An Amazon Prime Air UAV is ready for lift off from its launch pad.

#### How do I get to Santa's workshop, Alexa?

I have an odd feeling that the past twenty-four years of Amazon's activities were simply a prelude and the symphony is about to begin. The lead performer will be Alexa singing through the Echo Dot.<sup>2</sup> By the end of 2018, Canalys, a technology research firm, estimates that there will be 100 million smart speakers installed worldwide. National Public Radio commissioned a report from Edson Research on the topic, and it found that 8 million Americans own three or more smart speakers, apparently so that one of those speakers will never be out of hearing range. At this rate, by 2021, there will be as many smart speakers as people, and many of them will be connecting to Amazon's spider web. The car will be just one more of the many devices that will be connected.

Voice-based interaction has always been considered the optimal way for drivers to interact with vehicle controls so that they could keep their eyes on the road and hands on the wheel. Apple, Google and Microsoft have been working with automotive OEMs and are already part of many vehicle platforms. Amazon is just now starting to join the fray, but it brings so much more to the battle for hearts, minds and ears. To its credit, Amazon admitted it was not a proactive decision to enter the car market. It learned that some enterprising *Echo Dot* customers had hacked their way into a car's infotainment system and got Alexa to play music and offer directions just as if it was sitting on a coffee table at home.

What could put the kibosh on Amazon's spider web building? One might be a government decision that it has gotten too big and controls too much. This is more likely in Europe than in the U.S.<sup>3</sup> Another might be that customers come to the conclusion that Amazon controls too much of their lives. So far, low prices, fast delivery and big selection—Amazon's mantra—has kept them faithful.

2. APPLE *Siri*, Google *Assistant*, MICROSOFT *Cortana* are other personal assistants in smart speakers.

3. See *THE DISPATCHER*, September 2018: Data Control is the Key to the Future of Transport.

## **Dispatch Central**



Police use water cannons against the 'Yellow Vests' at the Arc de Triomphe in Paris on 1 December.



London protesters claim they want to save the environment by stopping vehicular traffic.. I wonder if they think about how their weekly bath water is heated.



WirelessCar's new offices in Göteborg occupy two floors of a building close to the center of the city.

#### At opposite ends of the climate spectrum

THEY WERE PROTESTING in the streets of London and Paris in November. The Paris protests continued into December and turned violent. In London, a group calling itself the Extinction Rebellion sat down in the middle of intersections and crammed their bodies by the thousands onto five major central London bridges to disrupt the flow of all motorized vehicles. "The 'social contract' has been broken," one of the London protesters was quoted as saying in an article in The Observer, "and it is therefore not only our right but our moral duty to bypass the government's inaction and flagrant dereliction of duty and to rebel to defend life itself." As I said in my article in the November issue of THE **DISPATCHER**, they would be doing more good by moving their protests to the city's electric power stations that use coal, gas and oil for more than 65% of its electricity generation.

Demonstrators in Paris, wearing yellow reflector vests that French drivers must always keep in their vehicles, took to the streets to protest against the high price of fuel which has resulted from major increases in taxes on fuel. Most of the demonstrators came from regions outside of Paris where they say fuel tax increases have a disproportionately higher negative effect than in the cities because there are no available public transport alternatives to private cars and farmers and other workers depend on vehicles that use petrol and diesel fuels. The protesters accused the politicians and city dwellers, the 'cosmopolitans', of living the high life at the expense of the people living on the countryside.



#### WirelessCar turning twenty

STAYING POWER. That's what it took for WIRELESSCAR to last to its twentieth anniversary. And it hasn't just survived; it has thrived. Approaching 4 million connected cars and having over three hundred employees, WIRELESSCAR is the telematics service provider (TSP) for Volvo Cars, JLR, Daimler, Nissan, Subaru, VW Group among others operating in global markets. In September it moved into new quarters in Göteborg city proper. I visited them in November and had a quick tour of their new offices before sitting down

to lunch with Magnus Johansson and Patrik Nilsson. Magnus is Director of Business Development and I have known him since my time as head of *WirelessCar Consulting* at the turn of the Millennium. Patrik and I first met in 1998 when we were both working with Volvo on its first telematics system. Martin Rosell has been the company's managing director for ten of its twenty years and has led it through its various ownership shifts and periods of uncertainty. He and his team should celebrate their achievements and look forward to the next twenty years.

It will do so as a company majority-owned by VW Group. On December 19<sup>th</sup> it was announced that Volvo Group will sell 75% of its WirelessCar shares to VW for \$121.5 million. The deal must still be approved by European authorities, but VW says it expects it to be approved within the first half of 2019.

æ

#### Ever wonder what happened to Segway?

See that BIRD scooter? It's made by a China-based company that used to have the name NINEBOT, INC., but is now named SEGWAY-NINEBOT. The original Segway Inc. was founded in 1999 by the Dean Kamen, inventor of the Segway Personal Transporter. Gyroscopes were used to balance the PT on two wheels, and it moved in response to the rider shifting his or her weight from side to side and forward or back. It was one of the first drive-by-wire technologies in which software, not mechanical linkages, is used to drive a vehicle. On top of this, it ran on a rechargeable battery. It was a great invention, but it was too expensive (\$4,950!), and the company refused to allow them to be sold in a city until the city passed an ordnance allowing them to be driven on its sidewalks. (Clearly, Uber's Travis Kalanick learned a lesson from this: Ask for forgiveness, not for permission.) The company struggled and ran out of money during the financial crisis in 2009. It was sold in December of that year to a group led by British entrepreneur Jim Heselden. The following year, Heselden rode a Segway off a cliff. In 2013, the company was acquired by Summit Strategic Invesments, but little happened until 2014 when it filed a complaint with the U.S. International Trade Commission about infringements of its patents by several Chinese companies, including NINEBOT.

In a classic "If you can't beat 'em, buy 'em" move, NINEBOT made an offer that Segway's owners saw as a perfect segue. NINEBOT is now free to use all of those Segway patents to make all types of personal transport devices. Segway-NINEBOT is on track to sell 1 million scooters in 2018, which represents only one-fifth of its total

There are plenty of Segway photos, but this one of Apple co-founder Steve Wozniak playing Segway polo is a classic. And if you wondered where the name came from, it is a homophone of the word 'segue', which means a "smooth transition from one topic to the next."



Below is the **Loomo Delivery** robot. It looks more like a mobile washing machine, but it's still in its early stages of development.



revenue. The rest comes from self-balancing unicycles, e-skates and other devices. It is developing an unmanned delivery vehicle called *Loomo* that it plans to introduce to the Chinese market in five years.

#### Tesla and U.S. November sales

It is looking like Tesla's sales numbers are not a fluke. November sales were 21,700, higher by 1,000 than Mazda and 3,000 more than Audi. A year ago, Tesla sold 4,200 cars in November. All of this growth is for the Tesla Model 3. Once again, *Automotive News* did not make any reference in its U.S. sales report to Tesla's 417% increase over the same month a year ago.

H

#### <sub>1</sub>H = 2X Range + ½ Cost + 0 Tailpipe Emissions

Water-stabilized hydrogen fuel will deliver twice the range of petrol/gasoline at one-half the price and with zero tailpipe emissions. That's ELECTRIQ-GLOBAL claims. It is an Israeli-Australian company that has invented a new liquid fuel that can be transported and pumped like gasoline or diesel fuels so that it can use the current fuel logistics model. By stabilizing hydrogen gas with water, ELEC-TRIQ-GLOBAL says it eliminates the major problems with hydrogen fuel while retaining its principal advantages compared to both oilbased fuels (harmful emissions) and battery electric vehicles (building the re-charging network and the time it takes to re-charge). Straight-up hydrogen is energy-inefficient to produce, it is difficult to store and transport, and it is explosive, adding additional danger in case of a crash. Its main advantage is that it can be integrated into the current fuel distribution infrastructure, that is, it is stored in tanks and can be pumped into a car so that drivers can re-fuel anywhere and quickly.

ELECTRIQ-GLOBAL has found a way to stabilize hydrogen in a liquid form that is 60% water. It is then put through a process, which the company said is "surprisingly simple" to produce the final fuel, that is 3% hydrogen and 97% supporting material. The company says that everything from the connection to the fuel cell from the tank onwards is already on the road in the form of a Toyota Mirai or cars from Daimler and Hyundai.

The 97% of what is left in the tank after all the hydrogen has been released is pumped back when the tank is refilled and recycled. Sounds like the tankers are carrying both spent and charged fuel, making them one-half as efficient. More work needed, I think.

Just when I thought that the Musketeer had learned a valuable life lesson from his run-in with the SEC, he shows up on the U.S. TV program 60 MINUTES and says: "I want to be clear. I don't respect the SEC, but I respect the U.S. justice system." Then he said he "handpicked" his successor as Chairman and as the largest shareholder he can "get anything done that I want." After the show, the company issued a statement saying it was complying with the SEC settlement. Stop being a petulant kid, Elon, and focus.

The yellow parts are what Electriq-Global has invented. The blue parts are standard vehicle fuel cell technology.



The liquid form of hydrogen is pumped into a vehicle's standard-sized fuel tank. Added to the vehicle's fuel tank is a module called a 'Switch', which releases small amounts of a catalyzing chemical into the fuel to release the hydrogen from the fuel. The hydrogen is sent to a fuel cell to be converted to electric energy which is used to power the electric drivetrain.

## **Carlos Ghosn: Fallen Hero or Betrayed Emperor?**

THERE IS ONE person who can surely commiserate with Carlos Ghosn, and that is P.G. Gyllenhammar, the chairman of the board of AB Volvo in 1993 when he was forced out of the company as a result of a failed merger between Volvo and Renault. Both Gyllenhammar and Ghosn were chairmen of companies that RENAULT wanted to acquire, Volvo for Gyllenhammar and Nissan for Ghosn. Both med were betrayed by their second-in-command. Both men lost their chairman positions. There the similarities end. Ghosn is suspected of legal wrong-doing (although he strenuously denies the charges and has not been convicted); Gyllanhammar was definitely never accused of anything illegal. It now appears that there is reason to believe that Carlos Ghosn's present legal tribulations are less related to what he has been accused of by Japan's authorities, under reporting of income, and more the result of his being the primary proponent of a merger between RENAULT and NISSAN that is more of a takeover by RENAULT.

When I heard about what happened to Carlos Ghosn in November, I had a feeling I had been there before. Déjà vu. The year was 1993. I had been on the job at AB Volvo for eight months when I learned that RENAULT and VOLVO were merging. It was really a takeover by RENAULT since Volvo would retain only 35% of the new company, but it was neverthless portrayed to the Swedish public as a fusion of two of Europe's biggest truck manufacturers and of two car companies that were completely complementary to one another. My counterpart at RENAULT, Philippe Challe, phoned me as soon as the news broke. He joked about one of us having to work for the other as the lead on digital map sourcing and integration in the new navigation systems our respective companies were developing. I had no illusions about who would be the boss. I had not yet learned to speak Swedish; now, I would have to learn to speak French.

January 1, 1994 was the planned data for the fusion, but then "something happened on the way to the forum," as they say. Brutus, in the person of Sören Gyll, was waiting for P.G. Gyllenhammar. Dr. Gyll (with a PhD in engineering) who was Volvo's CEO since May of 1992, was the front man for a palace revolt. Volvo staff and middle management, shareholders and many politicians concluded that one of Sweden's industrial jewels was

being given away to the French for a song. Renault was stateowned at the time, and although the French government promised to privatize the merged company, it reserved the right to hold onto a 'golden share' to ensure that the interests of the French were looked after. No such assurances were given to the Swedes.

#### Ghosn, 'Le Cost Killer' and 'Mr. Fix It'

The merger was stopped, and P.G. resigned with immediate effect. Both companies started the process of unravelling all of their cooperation projects. Renault's CEO at the time was Louis Schweitzer. Renault, like Volvo, now needed to look for a new partner for both its truck and car groups. It needed a way back to the U.S., a market it left in 1987 when it sold its stake in American Motors to Chrysler. During the two years following the aborted merger with Volvo, Schweitzer and Renault concentrated on privatizing. That occurred in July, 1996, with the French state reducing its share of ownership from 52% to 46%. In December of that year, Schweitzer hired Carlos Ghosn, the French-Lebanese-Brazilian, away from Michelin and made him his deputy. He put Ghosn in charge of "turning the company around from near bankruptcy," a feat which he was to perform with a fury.

Ghosn set about cleaning up the mess in Renault by cutting staff and reducing other costs, implementing new lean and just-in-time production process and standardizing vehicle parts. He also pushed hard for Renault engineers to design cars that people wanted to buy. In March 1999, Renault and Nissan signed an alliance agreement in which each company would take an ownership in the other. Renault acquired a 36.8% stake in Nissan, paying \$3.5 billion for the shares, and Nissan received a non-voting 15% stake in Renault. Nissan also became the sole licensee of Renault cars in Japan. Ghosn became Nissan's chief operating officer in June 1999, its president in June 2000 and its CEO in June 2001.

NISSAN was in terrible financial trouble at the time. Mr. Fix It went to work. He cut 21,000 NISSAN jobs (14% of the workforce), mostly in Japan, shut five Japanese plants, reduced suppliers and sold assets. He also ignored the accepted Japanese business practices of seniority-based and age-based promotions and made lifetime employment a goal, not a guarantee. After twelve months into Ghosn's three-year turnaround plan, NISSAN was profitable. His reputation as a fixer was secure by the time Louis Schweitzer retired in 2005. Ghosn became president and CEO of RENAULT. He became the first person to run two companies listed on the Fortune Global 500 simultaneously.

#### Just another brick in the Renault wall

HEJ! RENAULT! LEAVE OUR NISSAN ALONE! (adapted from PINK FLOYD). The RENAULT-NISSAN ALLIANCE rolled along. Ghosn became a legend in



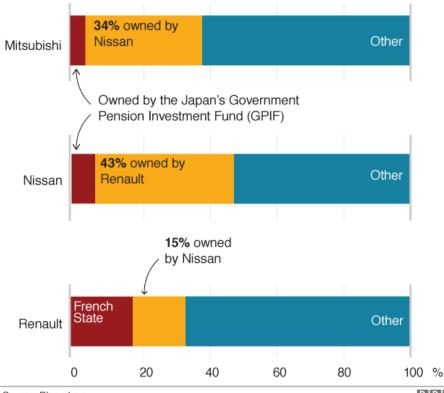
The 1995 Initiale, Renault's attempt to express luxury, contained design features that would be used in the company's models for several more years. What were the designers thinking?

France, Japan and globally. His awards are too many to mention. The two from Japan that he probably prized most was having a bento box named after him on the menus of some Tokyo restaurants, and becoming the superhero in a comic book series titled *The True Story of Carlos Ghosn* in the manga comic book *BIG Comic Superior*. In Japan, he received another nickname: 'Seven Eleven', for his early start and late end of his work day. He split his work time between Paris and Tokyo. Somehow, he managed to continue to have a life, marrying for the second time in 2016 and collecting six private residences in Tokyo, Paris, Rio de Janeiro, Amsterdam, Beirut and New York.

In October, 2016, MITSUBISHI MOTORS was added to the Alliance. In 2015, MITSUBISHI announced that it expected to make a \$1.8 billion loss as a result of exaggerating the fuel economy of its Kei cars for more than two decades. Many of those cars were sold as rebadged NISSANS. MITSUBISHI sent out an SOS, asking both for financial help and an executive to manage the company through difficulties. NISSAN replied with both. It took a 34% stake in MITSUBISHI MOTORS and Carlos Ghosn became chairman of Mitsubishi Motors. The RENAULT-NISSAN-MITSUBISHI ALLIANCE was born.

#### How the Alliance works

Size of stakes by car manufacturer





RENAULT-NISSAN-MITSUBISHI, the world's leading automotive Alliance, today announced that its member companies sold a combined total of 10,608,366 units in the 12 months to December 31, 2017.

GROUPE RENAULT'S sales were up 8.5% to **3,761,63**.

NISSAN MOTOR CO. LTD. sold **5,816,278** vehicles worldwide, up 4.6%.

MITSUBISHI MOTORS CORPORATION sold **1,030,454** vehicles in 2017, up 10%.

Source: https://www.alliance-2022.com/news/renault-nissan-mitsubishisells-10-6-million-vehicles-in-2017/

Source: Bloomberg

**12** | Page

THE DISPATCHER

January 2019

In 2017, Ghosn relinquished his CEO position at NISSAN. Was the then 63-year-old executive getting ready to retire? Hardly. It appears now that he needed more time to focus on what he considered his Job Number One: cementing the Nissan brick into the RENAULT wall, "...making the Alliance irreversible," as he was quoted as saying in February of this year. In March, it was announced that RENAULT and NISSAN were in talks to merge. Both RENAULT and NISSAN shares rose on the news. RENAULT was up 8.3%, giving it a market valuation of \$36 billion, while NISSAN's market cap was bumped up to \$44 billion.

There was only one problem. Nissan wasn't totally on board. Market analysts warned that both the French and Japanese governments might not be so willing to give up their stakes in the companies. The French government still controls 15% of Renault and two board seats, and the Japanese government had around 5% in both Nissan and Mitsubishi through the Government Pension Investment Fund. Where would the headquarters be located? Would there be anything left of Japan in the final company? As spring turned to summer, Ghosn told Mitsubishi shareholders at a meeting, in response to questions about merger rumors, "Anybody who will ask Nissan and Mitsubishi to become wholly owned subsidiaries of Renault has "zero chance" of getting a result. But it seems like the solution to that problem was not to ask, but to tell.

By owning majority stakes in these companies, RENAULT had the right to replace management, and that is what was planned for NISSAN.<sup>4</sup> NISSAN'S CEO, Hiroto Saikawa, was about to be removed in order to be able to force through a merger. It looks like NISSAN went into survival-first mode. It needed a way to stop Ghosn since it was Ghosn who was driving the merger. Whether he was doing it at the behest of his RENAULT board, or whether he had convinced the board that his plan was the only way to ensure the future of Renault as a French-first company, is irrelevant.

On the 19<sup>th</sup> of November, 2018, Tokyo District Prosecutors arrested Carlos Ghosn as his private plane landed at Haneda Airport. He was taken into custody for questioning over allegations of false reporting of income and for misappropriating company funds for his private residences.<sup>5</sup> On the same day, Hiroto Saikawa gave a press conference at which he said that Ghosn would be stripped of his executive rights as a meeting to be held on the 22<sup>nd</sup> of November. Both Ghosn and Greg Kelly, Ghosn's chief of staff, declared that they acted legally and appropriately in how deferred income was handled with the Japanese tax authorities. Ghosn was dismissed by the NISSAN board of directors on the 22<sup>nd</sup> of November, and remains in custody in Tokyo.

4. Automotive News reported on 10 December that it had learned Ghosn was planning to remove Saikawa as CEO.

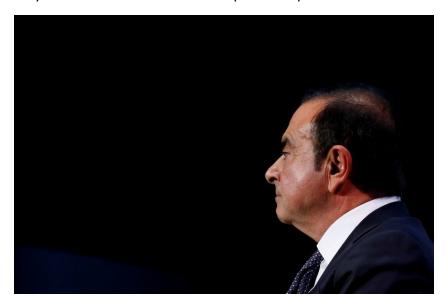
5. Ghosn's salary has been the central point of many controversies in recent years, both in Japan and abroad. The charges claim the \$40 million he reported during an unspecified five-year period represented about half of what he actually made. "Falsifying the financial statement is categorically one of the most serious crimes in the Financial Instruments and Exchange Act," pointed out deputy chief prosecutor Shinji Akimoto of the Tokyo district public prosecutors' office.

RENAULT's board of directors confirmed on the 13th of December that Carlos Ghosn is still officially its chairman and CEO. Philippe Lagayette was appointed as interim chairman until Ghosn can return to his duties. It issued a press release stating its findings and conclusions.<sup>6</sup> On the 14th, a statement was made by Lagayette refuting claims that there were discussions among board members concerning replacing Ghosn. He said the board "has not considered the potential succession of Carlos Ghosn."

#### It's Déjà Volvo All Over Again

There must be something about being taken over lock, stock, and barrel by RENAULT that sticks in the craw of the take-over subjects. Volvo pulled the plug at the last minute just as it was about to be sucked in to the RENAULT machine. NISSAN seems to have done the same thing.

The Renault-Nissan-Mitsubishi Alliance was going along swimingly. At least that's what it looked like to those of us on the outside. Why did Renault have to go and spoil it by trying to turn miso soup into bouillabaisese? Where the Alliance goes from here is anyone's guess. The three companies are continuing to confirm their commitment to it. On the 3<sup>rd</sup> of December they issued the following statement: "The member companies are focused on collaboration and maximizing synergies to boost competitiveness. They have strategic collaborations with other automotive groups, including Germany's Daimler and China's Dongfeng. This strategic alliance is the industry leader in zero-emission vehicles and is developing the latest advanced technologies, with plans to offer autonomous drive, connectivity features and services on a wide range of affordable vehicles." Without the superhero Ghosn, it may be difficult for the three companies to pull it off.<sup>7</sup>



6. "As part of the agenda, Claude Baland, Senior Advisor in charge of Ethics and Compliance, and Eric Le **Grand Chief Ethics and Compliance** Officer, presented to the Board of Directors of Groupe Renault the current status of the review concerning the compensation of the Chairman and Chief Executive Officer of Renault for the years 2015-2018 which was undertaken on November 23, 2018. Their preliminary conclusion is that the compensation of the Chairman and Chief Executive Officer of Renault and the conditions under which such compensation was approved were in compliance with applicable law as well as the recommendations of the AFEP-MEDEF."

7. On the 19<sup>th</sup> of December, a the Tokyo District Court rejected a request of prosecutors to extend the detention of Carlos Ghosn and Greg Kelly, paving the way for his possible release before Christmas. Then, on the 20<sup>th</sup>, he was re-arrested on new charges.

Carlos Ghosn caught in a contemplative pose during the Paris Auto Show in October, 2018. Will it be his last?

# A Dispatcher's Musings: Whose City Is It Anyway?



The images above and below are not trick photos. The mass of people is filling San Marco Square in Venice while the cruise ship on which many arrived is moored nearby. Below is an even larger cruise ship in the Grand Canal.





The photo above is not of a mass demonstration in Prague's Old Town Square; it is a crowd of summer tourists.

EASY MOBILITY IS threatening our world heritage cities by turning them into amusement parks. Venice is sinking, Prague is heaving, and Barcelona is boiling over. It's the Bucket List Syndrome. A 'bucket list' is a list of things that one has not done before but wants to do before dying. 'Bucket' refers to 'kicking the bucket', which is slang for dying. People of all ages and nationalities are drawing up their personal bucket lists helped by what seems to be an unlimited number of books and web sites that tell you what you absolutely need to do or see in order for your life to have been worth living. Visiting Venice is on all of them, along with taking selfies in the Grand Canyon, on Machu Picchu and along the Nile. Since the likes of RYANAIR and AIRBNB have made travelling almost free, checking off all the sites is within the reach of just about everyone, and the statistics prove it.

International tourist arrivals (i.e., overnight visitors) have more than doubled during the previous twenty years from 563 million in 1996 to 1.322 billion in 2017. (Just for reference, current world population is 7.7 billion.) The increase year-on-year had been consistently around 4% per year since 2010, but it increased by 7% in 2017, almost double the previous rate of growth. Europe experienced an 8% increase from 2016 to 2017, with 671 million international arrivals in 2017, one-half of the world total. Visits to the top 100 cities in the world accounts for 46% of all international trips.

I find it odd that many of the same cities that are prime destinations for tourists, and which are doing everything in their power to encourage tourists to visit, such as London, are at the same time making major efforts to reduce vehicle usage by residents and commuters in order to meet climate change goals. London had 18.7 million international visitors in 2017, with most of them coming from the U.S. These tourists put pressure on all parts of a city's infrastructure (e.g., sewage, electricity, medical facilities and especially transport) and add to greenhouse gases, both with their travel to the cities by air and then within the cities. These same cities are building bike lanes, reducing parking spaces and charging more for those spaces

that are left, setting up congestion charging zones and even allowing protestors to close roads and bridges with the claim they want to stop global warming,<sup>7</sup> while at the same time their politicians welcome tour buses en masse. They allow the gobbling up of apartments by people who rent them out through sites like AIRBNB, thereby vastly expanding the number of overnight stay facilities (and reducing available dwellings for residents).

Certain businesses, such as tour guides, hotels, restaurants and souvenir shops, benefit from the increase in tourists, and a city's cash coffers can appear to swell if all the negative externalities are not considered, but it is the cities' citizens who find themselves most inconvenienced by crowds and annoyed by the misbehavior of visitors who bathe in the fountains, climb on statues, use the stairs of churches and public buildings as picnic places and relieve themselves on the closest available wall.<sup>8</sup>

#### **See Venice and cry**

There are beautiful cities, and then there is Venice. It is the most precious jewel in the crown of heritage cities, which makes it even more distressing to witness what is happening to it. My first of only two visits to Venice was in 1973. I saw Paris, Florence and Rome on that trip, the first time I set foot on the Continent. Venice, especially, made a major impression on my impressionable architectural mind. Everything about the place was magical. My second—and possibly my last—visit was in 2013. I was in Italy on business and decided to take the train from Bologna to Venice for a day-trip. I caught sight of the first huge cruise ship when I boarded the water taxi at the train station. When I disembarked from the taxi I entered a sea of human flesh that I could not disengage myself from until I returned to the train station and left the city. The magic spell that had been cast on me forty years before was now broken.

Venice, during the past thirty years, has lost more than one-half of its residents. It is down to 55,000 from 120,000. The number of visitors who come to the city every day is 65,000, adding up to 24 million per year. Only one-half of those visitors stay overnight, and an increasing number of those who do sleep over do so in an Airbnb-converted bedroom, so the official hotel stays are down. What caused this situation? There is a simple answer. In the 1970s, the building owners fought for a change in the city's rent control ordinance, and they won. Rents went through the roof, and renters went out the doors. The only Venetians who are left are those who

7. In London, protestors from a group called *Extinction Rebellion* blocked bridges and roads in late November. According to a report in London's Independent newspaper, "...bearing banners and placards, the activists are preventing cars, buses and lorries from passing for seven-minute periods, then stepping aside for two minute intervals before repeating the cycle." The police made some arrests, but the protests continued.

8. "Budapest's District VII has a rich past. The site of the wartime Jewish ghetto, it is still home to the Great Synagogue on Dohany Street, the second-largest Jewish place of worship in the world, and to many other architectural jewels. Haunted by history, the narrow alleys and tree-lined squares have survived invasion by Nazis and Soviet forces. Now it is known as the buli-negyed, or party quarter. But the latest incomers, the thousands of tourists pouring into the hipsterrun pubs and artisan cocktail bars every night, are causing growing resentment."

THE ECONOMIST. "Budapest's party district is annoying locals". Oct 11<sup>th</sup> 2018

own their own homes and those who can afford to pay the high rents—and, of course, the politicians. Even the gondoliers have to commute into the city.



An organization with the name No Grandi Navi (No Big Ships) has been fighting to keep the monster cruise liners out of the lagoon. These ships bring around 2 million of the tourists to the city each year, and their passengers are the least beneficial kind of tourist because they

eat and sleep aboard their floating hotels. But it is the ships that are the real problem. Venice has always been at the mercy of the tides, but dredging the shallow lagoon to allow the ships to enter makes the flooding problem much, much worse. It may have made sense to have a major port (Italy's eighth largest) located in the lagoon several hundred years ago when ships were smaller, but it makes no sense today when its very presence endangers the survival of the city. It is the politicians who cave into the demands of the port operator to allow the cruise ships to continue to enter the sensitive waters in the city's center which they have to pass in order to reach the port.

#### Over tourism is a symptom of the real ailment

It is everyone's dream to see the world, and cheap travel is making it possible. But that dream should not turn into a nightmare for those who are being seen, nor cause their displacement due to the value of their habitat becoming more valuable as an overnight dwelling for a tourist. Why has this situation been allowed to develop, to get to the point where it is causing serious distress?

It seems that politicians who are running the cities or villages that have turned into wonderlands have allowed over tourism to happen, either by their actions (e.g., providing incentives to airlines and tour operators or, as in Venice, making it more profitable to rent out rooms to tourists rather than residents), or by their inactions (e.g., by not enforcing their laws about operating hotels in residential areas). It is as if they have discovered the *goose that lays golden eggs* that will allow them to run 'their' cities without having pesky citizens (who vote) get in the way. If the tourist numbers continue to climb in Venice, eventually there will be no residents left and plenty of places for the tourists to stay. When that day comes, Venice will truly be an amusement park and not a city.

The founding and the rise of Venice corresponds to the weakening and final fall of the Western Roman Empire. Venice was initially a collection of lagoon communities on 118 small islands in the northern Adriatic Sea between the mouths of the Po and Piave rivers. The communities united for mutual defense against the Goths and Lombards in the 6<sup>th</sup> and 7<sup>th</sup> centuries. The first Doge of Venice was Orso Ipato, who was the leader of the people of the lagoon. The city's splendid buildings were constructed as the wealth of its families rose, and were constructed on millions of closely spaced wooden piles since there was no solid ground above water level. The piles pass through sand and mud until they reach a layer of compressed clay. The piles were made mostly from alder trees, which is a wood noted for its water resistance. On top of the piles was placed Istrian limestone, and it is on the limestone that the buildings' foundations rest.

Venice's subsidence was recognized as a major issue decades ago, when scientists realized that pumping groundwater from beneath the city, combined with the ground's compaction from centuries of building, was causing the city to settle. Officials put a stop to the groundwater pumping, but studies have shown that the city is subsiding on average about 1 to 2 millimeters a year. The 117 islands in the lagoon are also sinking, with northern sections of the lagoon dropping at a rate of 2 to 3 mm per year, and the southern lagoon subsiding at 3 to 4 mm per year.

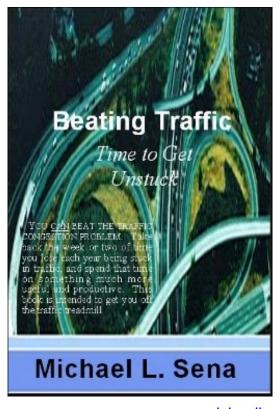


Piazza san Marco under water during aqua alta (high tide)

#### About Michael L. Sena

Michael Sena, through his writing, speaking and client work, attempts to bring clarity to an often opaque world of vehicle telematics. He has not just studied the technologies and analyzed the services, he has developed and implemented them. He has shaped visions and followed through to delivering them. What drives him—why he does what he does—is his desire to move the industry forward: to see accident statistics fall because of safety improvements related to advanced driver assistance systems; to see congestion on all roads reduced because of better traffic information and improved route selection; to see global emissions from transport eliminated because of designing the most fuel efficient vehicles.

This newsletter touches on the principal themes of the industry, highlighting what, how and why developments are occurring so that you can develop your own strategies for the future.



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