

LINER & PORT AGENCY PLENARY MEETING 2nd OCTOBER 2019

DISRUPTIVE TECHNOLOGIES: CHALLENGES AND OPPORTUNITIES FOR FONASBA MEMBERS

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• Is it already affecting your daily work?

"Yes, in every possible way. Communication with Principals and Authorities is more and more electronic. With clients in a way as well because it's much via e-mail, files, etc. Nowadays without a phone or a computer and internet you cannot work any longer."

"Yes. The reuse of data entry is a reality and increasingly exploited by companies. Due to the interaction of systems and companies, systems become more critical. Security and credibility in partnerships help process optimization."

"Yes, nowadays all parties communicate in a digital way."



Do you forsee advantages in using intensively the digital communication?

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"Absolutely, booking / SI / Invoicing channels are already mainly performed using web or EDI channels"

"Yes, nowadays all parties communicate in a digital way."

"Yes, it is a general trend in the daily business routines among principals and clients, and any Economic Operator is facing digitalization in liaison with the authorities as a whole."



• Does it affect the informal advantages of the personal relationship?

"Yes, there are less personal contact and this fact is even more obvious with the younger generations."

"I think the big advantage of the usage of digital media is the speed and simplicity. Sending a WhatsApp message is a quick act and **it helps to keep in touch**. However, I think that a personal phone call or a personal appointment is still best way to build a close and trusting relationship. However, this costs time, which one does not always have. In the end, it is a matter of dosage."

"YES, the service is replaceable" "We don't see it on that way."

"Yes. When something out of the ordinary happens, 'digital' processes are often not able to respond and that's when relationships matter and these have been made less strong and less effective because there is less personal contact in today's world. It's a downside effect of digitalization."

"The overall answer is no, and the digital social platforms has enlarged the exposure via SoMe systems, and is being used in addition to the personal contact. It has become easy and much less expensive to conduct online meetings inclusive face appearance. That has become a great advantage e.g. within sales and negotiation efforts "



Are you or some of your employees quoting freights through what's app? If yes do you register in your files?

"Quoting through online media has been a tool for several years. I do not know if any is using WHAT'S APP.)"

"Yes. Not extensively but it may happen. And there is likely to be a failure in registering these quotes until they are actually translated into a booking by a client. It's one of the shortcoming of these varied and dispersed means of communicating – WhatsApp, SMS, Messenger, e-mail, Skype, ICE, etc. Sometimes you know you have sent a message but do not recall via what means..."

"We currently do not make any binding offers via WhatsApp. However, we give indications (not binding) to customers, with whom we have a close trusting relationship, and who need a short-term tendency.

"Informal yes, official no"

"No, we do not quote through what's app."



What are the main concerns in replacing the old personal communication by the digital channel?

"The management of the massive amounts of information available."

"For me it's not a matter of concern. It's more a matter of keeping a trace of what is being or has been done by the organization for future reference. In the past you could look for a 'paper trail', now you will have to look for an 'electronic trace' and this is less obvious. Your first problem is where to look... In the past when you died people found your letters, now they will have to look for your files and these may be anywhere and nowhere."

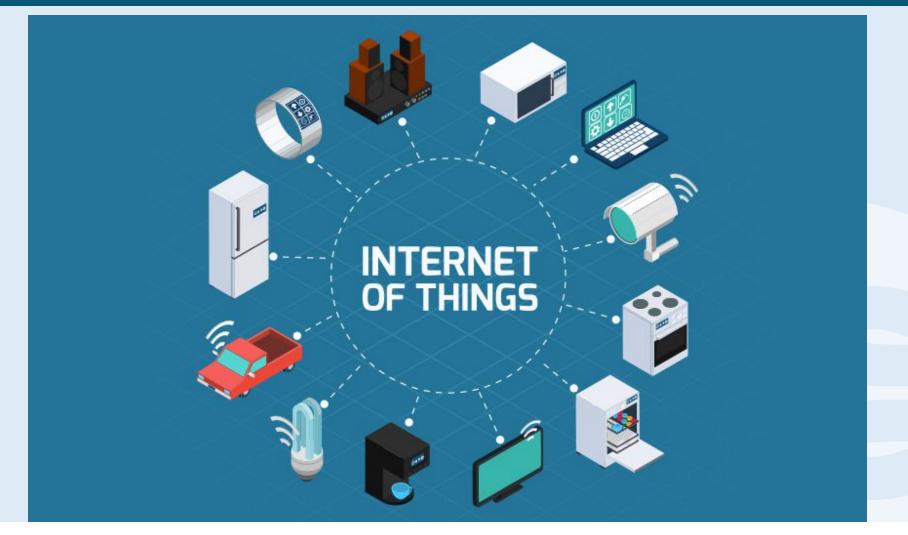
"The concerns may be that people skip personal contact and get out of training in that kind of exercise. But for most people it seems to be adding to the personal contact, and provides the individual with greater exposure if the medias are used regularly."

"Control of digital traffic information"

"The digital world is more transparent. Clients can go direct. The need of a agent is shrinking!"

"There is always the danger to choose the timesaving and fast digital way of communication too often and thus to maintain only a **superficial relationship**. I think, however, that one should take the time at certain intervals for the old-fashioned personal appointments. A digital relationship can never completely replace a personal one."







• Are you using a lot of IOT/AI in your daily work? If yes give exemples

"Some, specially related with our smart phones and computer applications. The GPS location of clients helps to organize the sales visits, or the group emails that allow to send information to specific teams."

"(Internet of Things (IOT) is natural tool for individuals and companies as they conduct the daily business routines. They may often lead to provide value for a task of any kind, privately or at work. The big search engines, such as e.g. Google is in many ways an integrated part of finding and using IOT. With regard to Artificial Intelligence (AI) shipping generates a lot of data and they are often processed via Business Intelligence (BI) systems with algorithm settings that enable the end-user to have valuable knowledge to support its business determination)

No, not yet. And still you do though you may not realize it. Microsoft Office 365 is full of AI which makes your life easier. Your phone as well. Simple things like knowing that when you send an e-mail to someone you will also copy in the same persons all the time (you write the first letter of an addressee and the rest comes along...), like your phone knowing that when you leave the office you go home, etc...



• What are in your opinion the advantages foresseen in the massive use of IOT/AI?

"Increase productivity; Quicker and smoother processes; identification os costs savings."

"Faster information and automation of routine tasks"

"Speedy communication and decision making processes."

"It is supposed to make your life easier. And in many ways it does. The developments that we see and those coming will take all of this to a next level."

"Real time control of assets and advanced security."

"The ability to facilitate processes, provide data and knowledge in a trustworthy and cost efficient way is a vast benefit of IOT and AI.

"Time saving in the most ordinary and repetitive tasks."



 Do your Organization already have progessionals with expertise in IOT/AI? Do you think it willbe needed?

"For many IOT is in use without experts involved, since everyone has access to the internet. But for those companies which benefits from "big data", AI is and will continue to be a must, and will have dedicated staff to deal with it and/or to integrate AI in the business models."

Almost all replied No. No. Except for one YES. Yes







Is you/your Organization concerned about the use of Blockchain? To what extent do you think it might harm your business?

"My Organization is presently investigating to make use of Blockchain."

"Yes. We think that business will be affected in a way or another"

"I am not concerned about the use of Blockchain. It's a technology that has its advantages and that is an opportunity. Do not see that it will harm our business."

"It is not a concern, it is an opportunity to improve the business."

"Blockchain technology is a way to facilitate all the processes in connection with trade e.g. containing shipping, transaction of ownership of the goods, payment of goods and customs clearance a.o. If those companies investing in Blockchain technology succeed on a large scale, which is still to be seen, they are a game changer and will impact how business is done. But because of the IOT, smaller operators will find their way of setting up small scale style Blockchains to facilitate trade and provision of services.)"

"No. In the longer term, Blockchain will reduce the need for intermediaries"



• Do you think Blockchain will make you lose contact with the market?

"No. It contributes to direct follow-ups and improve the relationship with customers."

"No, but services will disappear and with them sources of revenue"

"At this moment we think it's a new way of doing business"

"No, it will enhance the ability to make business in a secure and efficient way."

"I do not think it is the case, because the chains within the Blockchains is yet to have Economic Operators with back-office personnel to support the value which each individual Economic Operator within the Blockchain brings to the trade process in the Blockchain."

"No. Blockchain is an enabling technology. Do not think that it will make companies lose contact with the market. It may make their interaction with the market more secure and hopefully more efficient."



 What kind of strategy (if any) are you/your Organization intending to put in place to face and take advantage of this new communication tools?

"Gradually adjust, studying case by case. On demand"

"We are not yet there. Due to our size we will come to the technology when it will be more mature and more widespread in use."

"We're still investigating ."

"The technology is evolving at a tremendous pace and the objective is to stay open to the major trends."

"Many companies already take advantage of SoMe medias as part of their communication tools, which are all Cloud based. In that way SME companies can efficiently manage communication with broad exposure in a cost effective way."

"Learn aboout the technology, attend pilot projects."

Bitcoins and similar





Bitcoins and similar



• Do you think it will be a common practice to start using the new digital currencies to pay freights? Are there any advantages or disadvantages?

"Not in the short term. Disadvantages are high price volatibility and secutrity. Advantages are practicality and agility"

"As long as there is no official legal framework from the national central banks there will be uncertainties."

"From my perspective too early to tell. I would say no, not immediately. And freights not likely to be the driving force behind the generalization of a new currency. Maybe social networks or e-commerce will do the trick... "

"No, I don't think so as invoices of, for example, pilots and service providers will continue to be issued in the local currency. The exchange rates would be a disadvantage and unnecessary expense.."

"The use of the new digital currencies will not start with the freights, but it will reach the shipping business as well."

"It is a matter of how generalized the new currencies will be, as soon as the new currencies enter in the usual commercial transactions, they will also be accepted in all the shipping business."

"I think there is still a way to make digital currencies common practice, but vendors should be ready to accept payment in them. You can buy freight in bitcoin today, but it is not a common practice. The authorities world-wide are suspicious to Bitcoins and equivalent, because they are obviously also hiding monetary criminal activities. But with a more open digital currency platforms we will see an increase in the trade with them. And they fit well for Blockchain technology."

Bitcoins and similar



• What about the Disbursement Accounts? Could they be settled in the future by bitcoins or similar?

"Digital currencies are so far speculative and unstable in value and add an element of risk, which most of us avoid. They may in time be useful as an instrument of value transfer, with very short term exposure, instead of the current slow and expensive bank procedures"

"It is a matter of how generalized the new currencies will be, as soon as the new currencies enter in the usual commercial transactions, they will also be accepted in all the shipping business. ."

"Not in the near future."

"Interesting thought but currently I don't see any advantages in using Bitcoin or similar crypto currencies for Disbursement Accounts. As mentioned above the invoices of, for example, pilots and service providers will continue to be issued in the local currency."







• Do you envisage it as a reality in the next 5 years? Ten years? More?

"I think +10 years on a commercially large scale"

"It's already a reality. But it will take some years to become widespread. I'd say more than 10 years but it's as good a guess as any ."

"Smaller river ferries < 10 years. Oceangoing vessel > 10 years"

"It is already a reality"

"Just like the autonomous cars, it is not a question of technology availability but a question of regulation. I would say 10 years."



• Do you think it only affect the container vessels?

"NO"



• What will be the meaning of attending a vessel in the future?

"The main changes will be on the type of tools used to perform a vessel attendance and the amount of labor force."

"Much more technical and system based."

"Something will surely different in this digital era."

"Advent of autonomous vessels will diminish husbandry and crew matters. Vessel operations, finance, cargo matters, documentation and dealing with port authorities will develop at their own pace."

"Routine tasks carried out in automatic way, and focus on problems solution where knowledge is needed"

"Probably the same as today, like it is the same as yesterday. What changes is the scope of services rendered and how these services are rendered. And it is the part of how the services are rendered that may significantly affect or totally disrupt our business."

"Attending the vessel means watch keeping, safety on-board and surveillance of cargo. Even autonomous vessels need some human involvement."



• Safety/Security?

"All the regulation required will for sure guarantee all the safety and security."

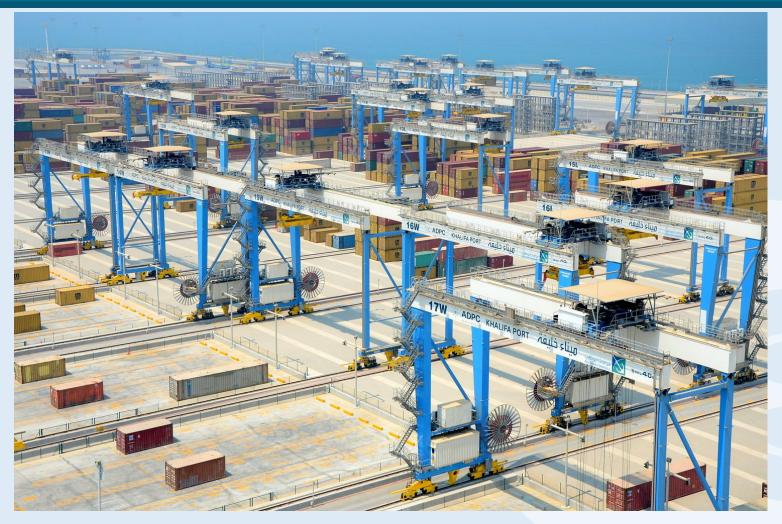
"As with any automation it gets safer as technology matures. And it won't be deployed till it is safe enough."

"Improvement expected."

"Safety: There will be a lack of experience on board. There will always be unexpected situations in which a long-serving Captain could make better decisions on-site. There will be 'ghost vessels' in case of a massive system breakdown which will be a risk for others ; Security: unmanned vessel avoid the possibility of hostages but "cargo piracy" most probably increase."

Robotized Terminals





Robotized Terminals



• Pros and Cons

"24/7/365 operation. Digital vulnerability in the Robot tech, require human involvement."

"I think it is a trend that is inevitable. Have already seen one operating and quite honestly see mostly pros. Stevedoring labor has been a problem and is much more costly than it should be.."

"Pros: Efficiency, Control, less personal costsmaybe. As different personnel is needed. Cons: Any breakdown will cost a lot of time and money"

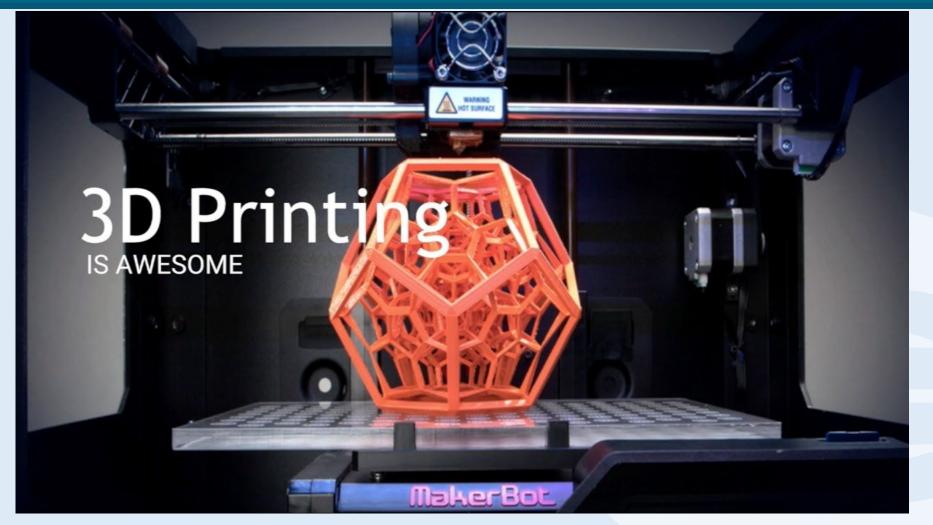
"Agility and scalability are definitely pros. But the capacity to adapt to the digital era, succeeding with new investments and in different areas is still a doubt."

"Only pros, mainly regarding safety for humans and speed of operation."

"Pros= accidents reduction, faster operations, performance guarantee / cons= machines replacing people"

3D Printers





3D Printers



• At what extension do you think it will affect the transport business? And yours?

"It will affect the transport business more directly related with finished goods but there can also be an opportunity with the transport of all the materials required to produce and use the printers."

"This technology can strongly affect shipping and affect our business. There will still be a need for transport but 3D printing may bring about a reduction in the transport of components and finished goods. It can be a real game changer for the containerized industry and a threat."

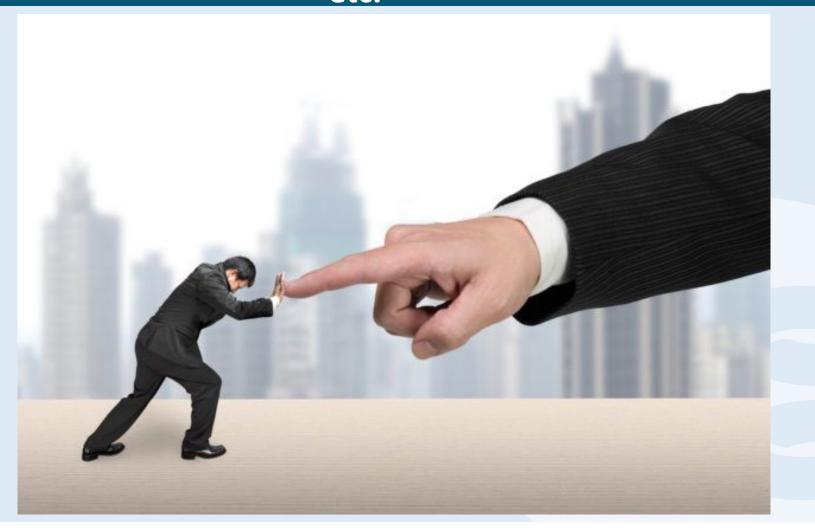
"It will impact on logistics services for e.g. spare part management, but +10 years on a larger scale."

"Raw material must still be transported. The transport of small spare parts will probaly be most affected by this. Also 3D printer must be operated by someone. Labour Asia Cheap à Labour EU expensive"

"Accessibility in equipment repair, agility to recover the operation. Initially, some high-tech and high cost items will be locally manufactured instead of shipped, but this is more likely to affect airfreight in the foreseeable future."

"Huge extension for finished goods. Transport for commodities only may be necessary. Not only our business of shipping agent but all the logistic chain will be very much affected."

Global Carriers, Global Logistic Providers, Global Traders, etc.



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In a globalized trade/logistic/transport world what can the small/médium size companies do to survive?

"The best option will be to have a partnership with a big sized company, trying to keep the personalized service but also at competitive prices"

"They must offer more personalized service. And they can work within, or as part of, global networks. The big if is whether customers are willing to pay for this different service as opposed to a more digitized, less personalized, but lower cost alternative."

"Make comprehensive use of IOT, digital tools in the Cloud in general and tangible customer service also with personal contact. Then they will be able to make some kind of integrated services using the philosophy of Blockchain, to make trade easier."

"Focus and concentrate on their strengths. As a small company, you need the set up to fit in a global logistic chain. Connectivity to other system (e.g. in truck sector it is almost mandatory for all contracted carrier to send ETA and ATA messages through a system. If they do not have connectivity to that system they will canceled out of the tender)."

"Work in partnerships sharing experience and technology."

"Economy depends on and benefits extensively from scale. Small and medium companies will depend on niches and/or specialized knowledge, abilities or relationships to thrive. Providing this kind of service to the large companies where their size is not a benefit or is a hindrance, is their niche."

"Follow the market changes and look for daily improvements where we can apply technology and have our service model different."

Global Carriers, Global Logistic Providers, Global Traders, etc



 Is your Company already involved within the logistic chain business? If yes what percentage of the income?

"About 50% of our income."

"Always tries to handle the complete transport chain from A to Z."

"We are shipping agents and our percentage is small."

"Yes. 10%."

"Yes, we are already involved."

Cybersecurity





Cybersecurity



- Do you feel safe with the actual state of the art in what concerns security of data and systems?
 - "No, not really."
 - "No! Every system can be hacked."
 - "Cybersecurity will always remain a race in which attackers are always one step ahead. There will always be new attack strategies for every defense. The more attractive an attack, the more vulnerable a company is ."
 - "It's a constant concern that seems to have no end. Each day need to find a better way of dealing with security issues"
 - "We believe that the European Data Regulation (Security) Act should be extended to the rest of the world. And other standards will come to help with this."
 - "No, I do not feel safe. It's an area of great concern and of great risk to all companies and to the world at large. Almost everything about our everyday life is supported by systems and security of those systems may not be robust enough let alone failsafe modes."