PASCAL OUVRÉ: Hello everyone. My name is Pascal Ouvré. I’m Senior Manager in the Accenture Industry X.0 practice, helping clients to improve their engineering efficiency. And I would like to welcome everyone to our webinar today.

We are going to dive into the impact of the COVID-19 on the Engineering and Construction industry and share our thoughts on how to outmaneuver uncertainty and emerge stronger.

We have the chance to have three speakers today, so let me introduce them quickly. We have, first, Stephanie Whittaker from Encord. Encord is the European Network of Construction Companies for Research and Development. Stephanie leads the Encord’s Foresighting work group. It provides Europe, major contractors with insights to develop business strategies that mitigate risks and help capitalize on future opportunities. Hello, Stephanie.

We have also the chance to have Olivier Lepinoy from Autodesk here today. Olivier is part of the Autodesk business development team for the architecture, engineering and construction industry. He builds and develops the condition for Autodesk to be part of its client strategic initiatives. He has also a deep knowledge of strategists to help firms, profit and grow new businesses. Hello, Olivier.

And we have also Charlotte Bizeau from Accenture. Charlotte is a Senior Manager in Accenture’s Technology Practice based in Australia. For more than 13 years, Charlotte has helped companies transform their business through innovative and digital programs.

You have the possibility during the webinar to send us questions. So at the end, I will take some of them and submit them to our analysts. So feel free.

As you know, today, companies are experiencing unprecedented disruption. The global COVID-19 pandemic has clearly changed our experiences as customers, as employees, as citizens, as humans. And our attitudes and behavior are changing as a result.

We would like to take a moment to extend our deep sympathies to those who have lost their loved ones and we would like also to acknowledge the hard work of those on the front lines, medical professionals, first responders and those in construction.
Just before we get started, I would like to read a brief statement. First, we are going to have a frank and open discussion, but we need to remain compliant with competition laws, so we will not be agreeing on any aspect of competition. So the topics that we are not going to discuss today are price or price related data, strategic planning or marketing information and, of course, agreements among competitors.

My first question to start is for Stephanie. Stephanie, can you tell us what the state of the impact of the COVID-19 on the engineering and construction industry is?

STEPHANIE WHITTAKER: Yes, I can, Pascal. Good morning everyone. So at the end of April, Encord carried out a survey and virtual roundtable with its members, which include many of Europe’s main contractors and suppliers. Today, I’m just going to give a brief overview of some of the headline points from this research.

The immediate impacts of COVID-19 were very much dependent on location. Some countries, such as Sweden, saw no site closures, where other such as England, saw temporary closers due to public pressure. In general, there were far less closures than people had feared. Over half of respondents reported that less than 25% of their sites were closed. And at the other end, only 6% saw large scale closures with over 75% of sites closed.

With most sites now reopened, the focus has shifted towards how to deliver schemes while social distancing remains. In particular, managing the impact on program. If fewer resources are allowed onsite or it becomes hard to obtain materials. One of the biggest changes we saw was in relation to home working. The view pre-COVID was that flexible or home working was not possible in the industry. Yet, by April, over 75% of respondents had over half of their workforce at home. And of those, 42% had over 75% of their office base workforce at home.

We’re not sure how this will translate to long term trends, but recent research has found across the board, across multiple sectors, 20% of people want to continue working from home permanently and around 70% want to work at home one or two days a week.

At present, it’s unclear how home working affects productivity, 32% of respondents stated that they did not know if it had an increase or decrease on their staff productivity. We would anticipate more clarity on this as people get more used to working from home and organizations better understand the input effect of home working on output.

As a result, it will be an area that Encord will continue to track as part of our research and into the impacts of COVID on construction.

Can we move to the next slide please? In terms of digital, we’ll probably talk a little bit more about that later on in the webinar, but very briefly, we found that 62% of companies were deploying new technologies as a result of COVID, things like virtual conferencing, such as Teams and cloud-based tools for site solutions and also designing.

As we move past the initial shockwave, we found that companies were beginning to digest what business would be like within a new normal. Over 43% were anticipating changes to their business strategy, mainly in three key areas, workplace, so that means home working, reducing office space because fewer people would be in the office and less business travel. We’re also looking at changes in processes, more offsite, improved health and safety and ways to manage remotely.

And finally, in terms of technology, faster deployment of tools. Again, as with the work patterns, we will expect some movement in this area, but I anticipate as it becomes a bit clearer, what will happen, things will start to firm up in terms of what strategic changes we will see from construction companies.
As the lockdowns are lifted, the economic climate remains very uncertain and there is still a long way to go before it becomes clear what the outcomes of COVID might be for construction. Despite this, the consensus was that people were very proud of how quickly the industry had adapted to changes caused by the pandemic.

Few want to return to the old ways of doing things and believe this positive performance is a mockup of what could be possible in the future as we move to embrace new opportunities and address risks.

Back to you, Pascal.

PASCAL OUVRE: Thank you, Stephanie. My next question is for Olivier. Olivier, what action are you seeing specifically in the short term?

OLIVIER LEPINOY: Thank you, Pascal. You can go to the next slide. Hello, everyone. Yes, let’s take a quick look at the state of the market. I will be brief because Stephanie explained really well what we observed as well.

Across the world, ADC firms are experiencing or have experienced a dramatic span of project impacts from very few changes to slow downs only, to almost all active sites put on hold. We have seen how fragile our existing ecosystems are.

In the United States, the Association of General Contractors surveyed more than 800 of their members. More than half of U.S. firms have had projects halted, 53% of the firms reported they have been directed to cancel upcoming projects. In Europe, an industry reports indicated that about 50% of consortium companies have closed sites. The U.S. Association of General Contractors also found that 23% of member firms are experiencing supply chain slowdowns from material, equipment and parts.

Can you go to the next slide? What about the shortened responses to this situation? This is what we are hearing from our customers and how they are coping with this disruption and uncertainty. Every company has implemented COVID safety procedures to keep sites safe and healthy and to reopen as soon as possible. This has been priority number one.

Of course, as we expected, firms are scrutinizing costs more than ever before. They are exploring which job functions can be done remotely.

Everybody is also examining project pipelines, looking to see which projects will be stopped and where new opportunities are going to come.

Not surprising a lot of excitement and increasing interest in prefabrication in modular, customers realize this will lead to a safe and more rapid deployment. Overall, this crisis – during this crisis, new ways of working, more creative ways of working have emerged because we are essential to our customers’ businesses, we need our best to support these new ways of working.

First, we offer a lot of flexibility to our clients across the globe to use our technology. Then you need to access and use their Autodesk products and data, collaborate with their teams and remain productive while working remotely.

So rapid response team and a dedicated resource centers have been put in place to help them in the most agile manner, it help them stay productive basically.

Back to you, Pascal.

PASCAL OUVRE: Thank you, Olivier. Charlotte, what do you see from your side on the short term actions?

CHARLOTTE BIZEAU: Thank you, Olivier. Hello everybody. So from my side, I see three impacts on the short term. The first one is to manage the cash imperative and revisisthe operating models. Cash is king and it becomes even more critical during times like these to keep the company running, but also, to invest in the bounce back.
So one of the levels of action I have seen is to reduce the fixed costs, looking at possibilities to optimize operations and personal cost.

Historically, engineering and construction is a small margin business supported by highly decentralized and agile operating models. And engineering and construction companies are currently rethinking their operating model, defining a new balance between a central to stretch costs and local to maintain agility, leveraging offshore value services for engineering, for example, or for corporate services, such as finance and HR.

The second impact I see is that workers need to comply with the new health and safety guidelines published by governments and industry consortiums.

Companies have adopted new ways and safe ways of working. Working remotely when possible and this is possible for engineering, for the function, the corporate function and some project management activities and ensuring physical distance on worksite. And that means, for example, reviewing the worksite schedule to limit the number of workers in the same area, spreading working hours into several shifts or even to the weekend. And thirdly, construction companies need to manage projects and contracts with agility.

Project complexity is already high, was a high level of risk and COVID is putting additional pressure on projects delivery. So companies need to understand deeply the impact of COVID on each project, project by project, review and adjust project planning, predict the slippage in cost or in time and communicate, some would even say negotiate new milestones with all stakeholders.

Over to you, Pascal.

PASCAL OUVRE: Thank you, Charlotte. Charlotte, you mentioned new ways of working. Could you give us some example please and tell us also, how does it impact engineering and construction companies?

CHARLOTTE BIZEAU: Yes, let’s double-click on the new ways of working. So one of the most visible impact is the remote working when possible, using more collaborative digital platform and we have seen the rise of platforms such as Teams and Zooms, but also industry specific platforms and then technology.

Let’s take the example of global engineering group Worley. Chris Ashton is the CEO and explained in the media recently that the way they’re going to work going forward is not going to be the same as it was before COVID. And that this situation has fast-tracked a cultural shift at the company.

He explained that at least half of his 46,000 staff expected to work remotely, part or all of the time in the future. And this has a direct impact on Worley’s P&L. It was an estimated cost saving of 70 million by the end of 2021, just by reducing office spaces around the world.

On the work side, it’s a big different. Construction companies must do everything that is reasonably possible to keep workers at safe physical distance and implement control measures. And these new requirements come on top of the existing health and safety procedures.

What I have seen is that some companies are testing tracking bracelets when two workers come too close together. They have an alarm from the bracelets and this is the case of report having been at Antwerp in Belgium.

We can also see construction companies use apps to trace contacts and identify potential exposure and also, computer vision. And computer vision is a mature and good technology because it can help with the new COVID requirements, but also with other health and safety requirements. So, for example, it can identify when a worker is in a dangerous zone or when he’s too close to equipment, for example.
But all of these new ways of working are not neutral for the industry and there’s an impact on productivity metrics that induces extra costs. And according to the French unions, the capital, it can go up to 25% increase in daily costs, stressing even more one of the industry’s structural challenges, which is increasing productivity.

Back to you, Pascal.

PASCAL OUVRÉ: Thank you, Charlotte. Digital seems to be an important piece. So, Olivier, how digital can help overcome current challenges?

OLIVIER LEPINOY: Yes, Pascal, you can move to the next slide. Regarding digital, we have seen something interesting happen. We already had these gaps, but we have seen an increased focus on bridging the gaps between digital and physical workflows. Design teams and onsite teams were encouraged to be more creative, thoughtful and innovative to deal with the new reality. And surprisingly, we’ve seen a massive increase in digital collaboration tools and processes.

Industry leaders from across the world have shared with us how digital tools have enabled work to continue on critical projects. It helped to keep design, production activities on target and it made it easier for site work to continue despite the lockdowns.

So virtual collaboration can take many forms. Here are some of them. Firstly, increased use of cloud collaboration tools for documentation, drawings, data and model sharing. This way, stakeholders managed to move the design and constructions forward. Some examples of this collaboration tools may include products part of the Autodesk portfolio, like a BIM 360 and cloud build.

Second, moving client meetings from whiteboard and Post-Its to digital environments. Most online meeting tools like Zoom, Skype, Webex, have been used for planning and project review sessions. MURAL helped to facilitate brainstorming and agile decision-making.

Third, we have also teams exploring new ways to manage the early pre-construction phases. Many teams have explored how the bidding process can move online. The same for the selection of subcontractors. Tools such as building connected can help team make true partners and manage the bid process online.

Fourthly, there’s also an increased use of ready to capture tools like 360-degree photography, data scanning or drones. This is how this will help overcome the current challenges.

Back to you, Pascal.

PASCAL OUVRÉ: Thank you, Olivier. My question is then for Stephanie from Encord. How do you see the benefits of digital?

STEPHANIE WHITTAKER: At this point, I’d like to build on what Olivier has said about collaboration. From my own personal experiences, we found that digital has enabled us to achieve better and more frequent collaboration. In Encord, my work group brings together people from across Europe and often numbers that face to meetings are low because of the time commitments needed to attend. Moving to digital meetings has allowed us to meet in greater numbers, more frequently and really increase the speed of work. During the lockdown period, we’ve actually achieved outputs that we would normally have taken months, but it’s only actually taken us a few weeks to do. So that is a real good testament to the benefits of digital.

I’d also like to look at two more areas. Firstly, the Encord research highlighted that companies were predicting a move to more offsite methods of construction and digital technologies are a real enabler in this. For example, sensors embedded in products will allow us to track components throughout the manufacturing process, improving logistics planning and site deficiencies. While the creation of digital kits apart, choosing them, will help people to adopt a
more standardized approach to modular construction generating the volumes needed to make the numbers stack up.

Finally, social distancing and a skill shortage in construction will also lead to greater use of automation and autonomy. 3D concrete printing robots are already allowing us to make elements that can be combined into structures, such as bridges, retaining walls, street furniture. Using offsite technologies such as these, helps us to reduce the numbers of people we need onsite, while also allowing us to cut waste and emissions.

Back to you, Pascal.

PASCAL OUVRE: Thank you, Stephanie. And, Charlotte, what could be all the benefits of digital?

CHARLOTTE BIZEAU: Yes, Pascal, on top of what Olivier and Stephanie already mentioned, digital is a foundation of the current transformation. It enables collaboration - we have touched on this - cost savings and value creation across the value chain. For example, it can help automatically collect information from the work site and this information is key to enable simulation and data driven decision. And I’m talking here, for example, of tagged equipment and we can monitor the usage of the equipment, for example, a crane, versus it’s idle time to measure productivity, but also to leverage that for predictive maintenance.

This data can also strengthen product management capabilities by enabling an end-to-end digital integrated platform from sales, CRM, contract management, project scheduling, to product controls, ERP, procurement, etc.

But a large share of these solutions were already identified as digital building blocks for the construction industry before COVID. The current situation will accelerate industry transformation and their adoption.

Over to you.

PASCAL OUVRE: Thank you, Charlotte. We are still in such a situation that resilience is maybe a key challenge. So, Charlotte, what do you think are the building blocks of result of resilience?

CHARLOTTE BIZEAU: I think there are two main building blocks of resilience. The first one is digital and we have already discussed this, but I believe that the fast track of digital adoption by augmenting the workers and engineers with digital collaboration capabilities, by automating low added value activities and sharing data for insightful data driven decision-making is key.

Technology change fast and people less. So as technology disrupts the traditional role and way of working, I believe the successful companies to adopt digital will be those that manage the human factor, giving people a central role in the design and implementation of technology.

The second building block for me is that engineering and construction companies need to reinvent their relationship with third parties, clients, suppliers, subcontractors.

Today’s construction ecosystem is highly complex, fragmented and project based. And in the future, I believe it will move to more standardized, consolidated and integrated processes, leveraging a collaborative ecosystem platform with contractors and suppliers to share the data and build new insights across the value chain and to accelerate and secure the delivery of a project.

Over to you.

PASCAL OUVRE: Thank you. Olivier, what is your point of view regarding building blocks for resilience?

OLIVIER LEPINOY: Please, Pascal, can you move to the next slide? Thank you. To speak of resilience, I want to introduce another notion, return to better. This is the idea that once we are able to get back to normal, we actually strive to return to there. That is to say, become more
resilient. Now your return to better could look like a lot of things. For example, a continued commitment to safety, health and well-being. Construction is a people business and protecting people should continue to be priority number one, not only physical safety, but also mental well-being.

Also, an increased focus on diversity of teams, teams with unique backgrounds and six skill sets. The industry is poised to attract non-traditional professionals. Digital natives can help drive innovations into the way we work.

We also continuing to see an increased move to more industrialized approaches to construction, prefabrication of site modular, possibility even more exploration into robotics and automation.

The role of data, dashboards and predictive analytics may get a boost. To have track construction progress, also to accelerate the move to more lead indicators for health and safety, quality and productivity too.

Last, a focus on digital workflows and information technologies. And an increased attention on lead methodologies will rise. Basically, because resources, supplies, workforce and budgets will find themselves constrained in the future. So for me, these five blocks are ways to become more resilient on the long term.

Back to you.

PASCAL OUVRE: Thank you, Olivier. And, Stephanie, what do you think?

STEPHANIE WHITTAKER: So I think one of the big problems we’ve got is that construction is facing a talent shortage. Currently, we are unable to attract enough workers with traditional skills and at the same time, we’re also finding it hard to recruit and retain those with the new skills that we need to deliver projects in the future, such as data analysts and IoT specialists.

One answer is to retrain the existing employees we have, but the biggest challenge we need to address is the public’s perception of construction and the careers it offers, so that we become a sector of choice for those workers.

The second block I think we have is as countries emerge from COVID-19, there is a growing demand for a greener economy and a greener way of living. In December 2019, the EU launched its Green Deal Plan to provide Europe with a new growth strategy that transforms us into a modern resource efficient, sustainable and competitive economy.

If we have to develop resilience as an industry, we need to understand how this impacts the way we operate as companies. And also, the implications for how we design, build and operate assets. With the built environment playing such a vital role in the creation of sustainable communities. It is crucial that we are involved in the shaping of these for any frameworks and guidelines to support this strategy rather than others setting the agenda for us.

Back to you, Pascal.

PASCAL OUVRE: Thank you, Stephanie, but I’m coming back to you. Looking ahead, what kind of cultural changes do you think are required for the industry?

STEPHANIE WHITTAKER: The first point I’d like to make so it touches upon the problems that we have in attracting talent and that is we really need to change the public’s view of construction. Currently, we are viewed by many, rightly or wrongly, as an industry that has been slow to change, offers mainly manual jobs and is a doer of commoditized tasks.

As an industry, we really need to change this narrative and get better at communicating the value we create for our clients and the communities in which we work. Our failure to tackle this did cause us problems in the COVID crisis, particularly in the United Kingdom where our public opinion caused certain sites to close
temporarily.

It’s also preventing us from being an employer of choice for workers and it’s preventing us becoming an influence with policymakers. We’ve got a lot to add in terms of many of the debates that countries are having in terms of the digital economy, in terms of creating a greener and more resilient economy and we need to be at that table.

Finally, our ongoing digital transformation has meant that industry is generating, capturing and storing substantial amounts of data every day. As a result, companies are no longer just planners, designers or constructors, they’re becoming data businesses as well. This change will give us the opportunity to create new revenue streams and partnerships, which at the same time, it will also create new sets of challenges related to data ownership and our ability to share and monetize it. This must be addressed by the entire industry sooner rather than later to avoid issues down the road and damage to our reputation.

Back to you, Pascal.

PASCAL OUVRE: Thank you, Stephanie. Charlotte, what is your point of view on those changes?

CHARLOTTE BIZEAU: Thank you, Pascal. Building on what Stephanie just said, I think the full transformation of the construction industry will take time, however, the good news is that the process has already begun. Profitability in the industry is low. It’s around 5% epic margin despite high risk. Construction satisfaction is hampered by regular overtime, overbudget, lengthy claims and there’s some misaligned contractual structures and incentives between the different players.

So I think there’s a need to shift for this frantic race to the lowest price, to the competition on the total value created through the redistribution of the value created across the value chain. And this can be done by shifting to more industrialized project-based approaches where there are more dollarization of site production, automation and onsite assembly automation will be some of the key levers.

Back to you.

OLIVIER LEPINOY: Pascal, you can move to the first diagram. The biggest wave is behind us, so let’s hope. So now is the time to reflect on the past six months is even before the crisis occurred, you could see crossing the entire industry. The tipping point has been achieved, I believe. During this crisis, we have our executives reevaluate their operating models. All the things people used to do had to be reevaluated.

People realized the importance of build and data. We think this is really good. But the cultural challenge here is to go even further, to reevaluate current business models. In my opinion, this cultural change needs to happen. This is a challenge, but this will make a big difference in the future.

So with this diagram, you can see on the left, what are the core competence of this business. The only new quality ingredients, if I may say, is data and being data. With a more data driven approach, companies will reevaluate both their operation models and their business models.

To keep it simple, they will modernize their operating model and they will upgrade their business model. The challenge is to manage all these transformations at the same time. The digitalization of the daily operations, the changes in the operating models and the adaptation of the business model.

Can you move to the next slide? There are four types of business models. The more you move to the right, the more resilient you are. Companies getting cut from businesses, scale more rapidly, grow revenues faster, generate higher margins and use assets more efficiently.
The value recent reports from the Boston Consulting Group for Encord insist that this is really something to consider in the future.

I think this is a big trend now. Almost all leading AEC firms try to reinvent themselves, even if it seems a huge change, we see more and more firms launch strategic initiatives. Build a platform of data, operate it like with a new business model and offer new services to their ecosystem. This is really exciting.

So, Pascal, this is my answer to your question about the cultural changes required for the industry. It is happening already, but it is invisible to the eyes.

Back to you.

PASCAL OUVRE: Thank you. Thank you very much, Olivier. As we are arriving at the end of our webinar, this may be the time to take some questions. So if you have some questions, feel free to send us them to us. But I will start maybe with one of the first question that we got. What are some of the barriers to the industry transforming itself? Maybe, Stephanie, you can answer to that question.

STEPHANIE WHITTAKER: So I think there’s three barriers. The first one I talked about already, which is our ability to attract the right people. The second is an availability of cash to invest in key areas like what are methods of construction and digital technologies. And the third is our siloed way of working.

Too often in construction, we reinvent the wheel rather than moving things forward together and it’s really stopping us identifying better solutions faster than we would do if we were working alone.

That's it. Back to you, Pascal.

PASCAL OUVRE: Thank you. Charlotte, do you have something to add?

CHARLOTTE BIZEAU: Sure. I really agree with Stephanie. The fact that there’s no product owner, that the industry’s organized such in a way that it’s impossible to identify one single party that is the owner of the whole infrastructure lifecycle from start to finish, I think is a barrier.

There’s the fact that it’s a highly fragmented workforce with a subcontractor body that is disparate and largely self-employed and the fact that it was a mindset with a race to the bottom that I have touched upon before. But I think that on top of these barriers, we also have to look at the power that the industry has because it represents certain percent of total GDP. It employs a large percent of the workforce and it is at the right time to do that industrialization transformation based on the digital transformation.

Back to you, Pascal.

PASCAL OUVRE: Thank you, Charlotte. I have maybe a final question. If we can address the challenges we face and grab the opportunities available, what do you think the construction industry will look like in five years' time? Maybe, Stephanie, to start?

STEPHANIE WHITTAKER: So I would like to see a data driven construction straight that is using the information it collects to help clients make better decisions about how their assets are designed, built and operated. I also see is an industry that’s supporting the growth of its resilient economy by helping to create sustainable assets that provide social economic and environmental value for all stakeholders.

Back to you, Pascal.

PASCAL OUVRE: Thank you, Stephanie. Olivier, do you want to give your thoughts?

OLIVIER LEPINOY: Yes, sure. If all the cultural barriers and the technology barriers have been passed – are passed, what is going to happen? And I think we will see more and more platforms and we see more and more data centricity. As a consequence, we will see new types of firms and
The way I look at it is will we see mainly five new types of companies. The originators will be the firms gathering lend and financial resources. They will create data by defining they build assets.

Second, the providers. The providers will provide the data, will provide the design, the raw material, the product, the workforce, workforce could be humans or robots, the equipment. The aggregators, so configure. The aggregators will be like the general contractors of today. They will orchestrate the projects, manage the flows of data and they will run, supervise and monitor basically.

The consumers will be like the facility managers of today in charge of the maintenance and the operations. They will basically be used to data created by the others to run the build assets.

And finally, the last, the fifth configure that I see emerging are the controllers, a type of company, a type of organization which we control the finished work, the (inaudible). And they will make sure the quality of the data and the processes are enforced.

That's my answer.

PASCAL OUVRE: Thank you, Olivier. As I see that we have still have some minutes, I will take the opportunity to answer two additional questions. So I have that one. Digital transformation is big. That’s true. And has many parts, right? Where is the best place to start? Anyone, Charlotte, maybe?

CHARLOTTE BIZEAU: Yeah, sure, thanks, Pascal. Yes, digital transformation, I agree, is a big challenge. I think we need to start with putting the human in the center of it and be human centered when thinking about these technologies because at the end of the road, it has to be the workers, the customers, the people that adopt these technologies.

I would also answer that data is one of the foundations of the digital transformation as it can enable a lot of decisions, insightful decisions. It can enable the next level of work and of delivery and by sharing this data across the value chain, you can really get to insightful, more insightful insights.

Back to you.

PASCAL OUVRE: Thank you. Olivier, you want to –

OLIVIER LEPINOY: Probably no surprise my answer is the cultural aspect of the transformation. At Autodesk, we are convinced that firms need to be more intentional about these things. When I say these things, I mean digital transformation. We also know that technology is only a piece of the puzzle. So we have teams dedicated to improving and accelerating the adoption of technology at our clients. They focus on the business value delivered to the clients.

We also want our clients to make better decisions about their future. That’s why we have this program called the Art of Transformation which has been setup to manage these strategic plans. It helps clients prepare and develop their art of the ordinary initiatives with new mindsets and new behaviors. That’s why I speak about culture.

Also, a lot of initiatives fail because this domain, the cultural shift is underestimated. So this is something we take very seriously and this is something that I think we think is the biggest piece in the puzzle.

PASCAL OUVRE: Thank you, Olivier. I have a sort of question which is how can we use our partnership to connect and dig deeper into what you have shared? I think I will answer that question myself.

Don’t hesitate if you want to deep dive in some of the concepts that we have discussed today. Don’t hesitate to come back to us and to Olivier, to Charlotte, to Stephanie or to myself and we will be pleased also to go deeper in the different
topics that you would like to deep dive. Okay?

So it's time to close. So thank you very much for your attendance. Thank you very much also to our speakers, Stephanie, Charlotte, Olivier. Thank you, thank you very much. Have a great day and bye.