Hello and welcome to this Avaya Oceana™ Fundamentals course.
I have heard quite a lot about Avaya Oceana™ as the game changing next generation Customer Engagement solution. I would like to understand why there is such a buzz around this new solution. Could you explain what is so special about it?

Sure, I can do that! But first I will give an introduction to what trends we see in the current Customer Engagement market. That way you have a bit of a context. Then I will give you a high-level overview of the Avaya Oceana™ solution and of course a discussion on the functionality included in the current release of Avaya Oceana™. I’ll take you through a review of the different solution components in Avaya Oceana™ and how they work together. I will also discuss how they interact with other Avaya Aura components and Avaya Contact Center solution elements. After this overview we will have a look at implementation and deployment options for Avaya Oceana™. Would that be what you are looking for?

Yes, that is exactly what I'm looking for!
Customer Engagement is a market that always seems to be in some type of a transformation, what can you tell us about the latest developments?

Ever changing customer behavior, new communication technologies and new devices make that organizations have to be agile and have to stay tuned with or even ahead of the latest trends to maintain customer relations and to stay competitive in their market space.

In 2016, Accenture reported that 62% of businesses are planning to invest in digital technology. Gartner tells us that 32% of businesses who undertook the transformation state their businesses are now digital businesses.

IDC predicted four factors are most important: cloud, big data, mobile devices and social channels and says that businesses are becoming connected to a digital fabric. That is not only driving how business gets done, but it is also providing opportunities to improve customer, employee, partner and supplier relationships.

Importantly, there are underlying enabling technology and architectural trends. Software-defined, scale, security, apps, web, omni-channel, API-centric development/transaction models.
But is it changing that fast?

Yes, absolutely! Only ten years ago Customer Engagement was almost exclusively voice oriented, complemented with a little e-mail. Today non voice, digital interactions already account for 35% of customer contact, and the volume is growing so rapidly, that it is expected non-voice interactions will overtake voice in two year’s time.

Do realize in some specific markets digital has already largely overtaken voice. Organizations targeting youth or for instance the gamer-community already experience 90% digital contact vs 10% voice!

But there is more!
OK, so what else is changing?

This fast and unstoppable shift in customer behavior towards digital is accompanied by another major trend: Customers expect a quick and efficient service via any channel. Not so long ago a caller would not be surprised if an agent would ask a lot of questions and if a call had to be transferred that many questions would be asked again. Today a customer contacting an organization expects better: They don’t want to have to repeat information and will start turning their back on organizations that are expecting them to do so. Customers are less loyal nowadays, and customer service is one of the most powerful tools to anchor the relationship. This means the Customer Engagement tools we provide need to be able to accompany a customer throughout the customer engagement and information captured earlier in the contact or in earlier contact should be used actively to find solutions to problems customers want to have solved. That means the information should be used to find the best match in the organization to deal with the specific customer and the customer’s problem, regardless on how the customer contacts the organization. So we need to do away with any solution that is silo’d, contacts need to flow seamlessly through the process, maintaining the full context captured from all available sources. With attributes based matching we connect a customer to the best contact within the organization based on all information available, such as the product, the number of contacts already logged in a certain time frame for the issue, the overall spending of the customer with the organization, the capabilities of
available agents and experts, existing relationships with agents or experts, and all this in addition to criteria we used in traditional solutions, such as Wait Time, Expected Wait time, language etc.
So how do we address those trends?

Avaya’s answer to the growing demand for an Omni-channel Customer Engagement solution that maintains Context throughout the contact, regardless of which and how many different channels are being used is Avaya Oceana™.

Avaya Oceana™ leverages the incredible power of Avaya Breeze. Avaya Breeze is a flexible applications development platform that provides unprecedented speed and simplicity in creating customer-driven mobile applications across video, email, short messaging service, and voice. This easy-to-implement, low-cost platform helps resolve diverse business issues such as rapid team formation; it helps removing gaps between web applications and core communications infrastructures, and making business processes more efficient. With the largest installed base of customers in the industry, this new development environment from Avaya offers a market opportunity of nearly 80 million users, without the need for detailed understanding of communications networks, programming or protocols.

Avaya Oceana™ can be implemented in conjunction to Avaya Aura® Call Center Elite to provide context preserving attributes based routing in an omni-channel environment.
So what does this mean for our customers?

Instead of handling one channel at a time, Avaya Oceana™ allows the organization to handle multiple channels, and contacts can cross from one channel to another and all this within the context of that customer. Every piece of information collected during each contact is available either to an agent or to other applications, such as Work Assignment to take educated intelligent routing decisions.

With Avaya Oceanalytics™ we take Reporting to the next level: Analytics. We’re not just collecting lots of data, but we are transforming that data into actionable data, that help us optimize the efficiency and effectiveness of the contact center.

The context we mentioned earlier, also allows to see what the customer already has done to resolve an issue, we can see he or she sent an email a week ago, browsed the web site three days ago and sent an SMS yesterday. When that customer calls in today, the agent knows the history and also knows this customer is probably keen to get the issue resolved quickly.

Avaya Oceana™ does not just handle calls from the traditional telephony network, but also integrates solutions for web based communications, from PCs or Mobile devices and these contacts are processed in exactly the same way as any other channel, again within context. Avaya Oceana™ integrates seamlessly with Avaya Aura Experience portal, so self service is an integral part of the solution. Self-service is often used for the
first level segmentation of incoming contacts and can provide content to the Context as well as the Customer Journey.
Let’s now move on to the overview of the Avaya Oceana™ solution.
We should first look at the key components in Avaya Oceana™ and their role in the solution. Could you start with an overview of the key aspects of Avaya Oceana™?
I surely can.

Engage across all devices and channels with what is needed when it's needed, where it's needed - all seamlessly, together, and within the context.

Modern Agent and Supervisor Workspaces: HTML5 based omni-channel desktops that are easy to use and a powerful driver for user productivity.

Visual Workflows: Drag and drop design makes it easier to bring the right resources, the right content, and the context together across your CRM and other systems to serve the customer’s needs and the needs of your business.

Powerful Analytics: Designed for omni-channel from the ground up with a new data model designed to provide new and powerful insights

360 Degree Customer Context: Capture the customer experience across all touch points by storing data crumbs in a high speed in-memory data grid. Use relevant context in routing workflows and share with agents to enable smarter decisions

Extend into Enterprise: Easily bring resources across your enterprise to help with customer issues irrespective of their physical location and job.

Attributes-based Matching: Automate matching of enterprise resources with customer interactions based on real-time awareness of business goals, KPIs, and customer data.

Platform for Innovation: Built on Avaya Breeze with modular Snap-ins that can be scaled, managed, and extended with third party and custom apps and cloud services.
Can you elaborate a bit on the omni channel aspects in Avaya Oceana™?

As we have seen Avaya Oceana™ is the next generation customer engagement solution from Avaya, designed for the digital age, that delivers a fully integrated Omnichannel solution across all enterprise touch points. With Avaya Oceana™, enterprises can seamlessly handle all channels: traditional voice, web and mobile chat, email, SMS (and in the future web and mobile video, web and mobile voice, and social media) using single intelligent attributes based routing, through a unified agent desktop that provides a 360 degree Omnichannel customer journey approach.

An what role does the Engagement Designer play in Avaya Oceana™?
Avaya Engagement Designer is an Avaya Breeze™ snap-in that enables Business Analysts and other non-developers to create Workflow Definitions that describe and execute business processes. A Workflow Definition comprises a series of connected events and tasks. Workflows are developed using drag and drop and development does not require deep knowledge of programming languages or telecommunications.

The Engagement Designer graphical user interface provides a palette of available events, tasks, decision gates and data that are dragged onto the canvas and linked to construct the Workflow Definition.

A standard set of tasks is supported by Avaya Breeze, on which Engagement Designer is deployed; additional tasks may be provided by other snap-ins deployed and licensed in the environment.

Engagement Designer provides built-in editors and tools that make it easy to create a data schema, map data across workflows, validate workflows and to deploy Workflow Definitions through a few mouse clicks.

Each Workflow Definition itself is deployed as a snap-in on Avaya Breeze.

This browser based design tool helps Business and IT Analysts model processes and execute them without writing code. This way it enables Enterprise Architects, Line of Business leaders, etc. to visually model customer journeys and workflows.
It reduces time to market for engagement solutions dramatically and is adaptive to changes in solutions. Engagement Designer is built on latest industry standards and technology and conforms to the Business Process Modeling and Notation (BPMN) 2.0.
So we define the workflow in Engagement Designer. Could you talk a bit about how calls are routed in the Avaya Oceana™ solution?

Sure, calls enter Avaya Oceana™ through a fronting IVR, for instance the Avaya Aura Experience Portal, which provides the first level of call segregation; information collected here is stored in the Context Store for later use in the workflow.

The call is now forwarded to Call Center Elite. Through an Adjunct route Avaya Breeze is informed about the call and that kicks off the Avaya Oceana™ Workflow.

The Workflow calls the Work Assignment Engine to select the agent. Work Assignment applies the same logic for each type of contact and for each channel. The entire journey through the contact center is accompanied by the Contact’s Context, delivered and maintained by the Context Store. Once the resource to handle the contact is selected the Agent receive a contact card in the Avaya Oceana™ Workspaces user interface.

OK, that is clear, and what about a digital contact, such as for instance a chat?
Well, the mechanism is pretty much the same. Of course with the exception of not needing Call Center Elite, nor the Experience Portal. The chat session comes in through the Chat Snap-in. The Context store again is used to collect and store data relevant for later decisions in the workflow or in later contacts. The Chat Snap-in is running in the Breeze environment and triggers the start of the Avaya Oceana™ Snap-in. The best resource to deal with the contact, within the context of the current contact is requested from the Work Assignment Engine and once the resource is selected a contact card is presented to the agent in the Avaya Oceana™ Workspaces web based user interface.

You mentioned earlier the Work Assignment Engine uses Attributes Based resource selection. Can you tell us more about that?
Yes indeed, Work Assignment is at the heart of the Attribute based matching of work to the best available resource. The Workflow designed in Engagement Designer submits a Resource request, including all relevant attributes describing the desired resource to handle the contact. Attributes can be of many types, for instance language, product knowledge, technical or commercial expertise etc. The combination of requested attributes is referred to as the requested ‘service’. Each available resource in the contact center is typed with such a service set, and can be assigned a proficiency level for each attribute. This allows Work Assignment to find the best available resources for an available contact.

But where does this differ from Skills Based Routing?
Well, Work Assignment can use all types of data to take routing decisions, such as situational data, customer specific information and agent data. So you could for instance consider the drop in the share price of company XYZ with a customer who has more than 10,000 USD of stock in that company for choosing an agent that has received special training to deal with these investors and is specialized in guiding customers through the process of securing investments. You can also consider for instance promotions on products that match well with the customer’s profile and buying history.

Data sources as you can see are a wide range of databases, ERP systems, but can also include an IVR or Contact Center data, from the Context Store or from historical data.

Does that make sense so far?

Yes, it clarifies a lot. Maybe we should give an example to highlight the differences with traditional Skills Based Routing, could you do that?
Yes, of course.

Let's take a look at call handled by work assignment attributed based matching – here a workflow is created that taps the matching engine matching rules “escalate call as a priority based on context” – Julia obviously isn’t happy. Her customer interaction history indicate she was not successful at resolving her problem…Work Assignment also looks at attributes of resources differently…skill of agents, proficiency of agents in soft skills like customer escalations….and makes a different matching choice than Skills Based Routing would – pairing Julie with Gerry who is great at handling general billing questions and customer escalations…. Skills Based Routing would have routed the call to Amy, since she is longest available within the skill.

Better outcome for Julie, better outcome for the business by increasing the likelihood of preventing customer defection and continued frustration…

Yes, this make perfect sense to me now! But this raises a question. With e-mail for instance the customer is not expecting a real-time answer. Is there a way for the system to assign such e-mail contacts to an agent that becomes available? So rather an agent looking for work than work looking for an agent, if you understand what I mean.
Yes, so basically your question is: How does it work the other way round, right?

That is exactly what I mean, yes!

Where in the first case we had a work item coming in and we searched for a resource to fulfill it, we now look at a scenario where a resource becomes available and we need to find work for that resource. First we look at the attributes of the available resource. Then based on the provided attributes, a selection of work items is made and after we apply the set of business rules we find the best matching work item for that available resource. That work item is then forwarded to the agent through the work card in the Workspaces interface.

Does this make sense?

Yes, it does!

We have touched on the Context Store several times, but for me it is still a bit mystic, can you tell us more about it?
Yes, I can.

The Avaya Context Store is a Memory Data Grid that can store contextual information provided by customers Enterprise Applications. The Context Store is responsible for routing data and historical data to be shared between Experience Portal, Engagement Designer, Work Assignment, EPS, and the multimedia Snap-Ins, such as Chat and Email. Context Store Data can also be used to display Customer data to Agents and show historical Journey information in the Workspaces user interface.

When you say it a memory grid, that means the data is temporary, right?

Yes, data in the Context Store ages and will be removed after some time. It is not permanent, you’re right.

But is there a way to keep that data permanently, if we choose to do so?

Yes, sure data can be stored in external applications and Context Store data can also be made available to our reporting tools, so we can use the data for detailed analytics.

Can we also populate the Context Store with data I have stored elsewhere?

Yes, it is also possible to enter data into the Context Store from external sources.

One last question: Could other external applications write data into the Context Store as well?
Yes, we provide a REST API that allows software developers to write applications to do so.

Maybe we should provide an example on how this would work, can you do that?
Yes, here is an example of how this could work. A customer has tried to get in touch with the company ten days ago, but failed the login procedure. Then the customer sent an SMS and an agent responded with a link to reset the password. The customer then browsed the web site for some other issue three days ago and yesterday sent an email to product support. And now that customer is calling in, obviously in a hurry to solve the outstanding issue. The agent answering the call has all the details we just discussed on the screen and therefore does not have to ask a lot of questions to determine the issue and to find a solution. The customer is really impressed by the fact the whole history is known and that there is no need to tell the agent what already has been tried to resolve the issue.

And as you mentioned earlier, such customer experience will enhance retention and customer satisfaction.

Absolutely!

I think it would be good to now have a look at the architecture and how all the components work together to deliver the Avaya Oceana™ solution.
Yes, we can do that. Let’s start with a high level overview.

Avaya Oceana™ is a tiered solution that allows the business to use a common set of tools to be used to manage business logic for routing, reporting, desktop, and other higher level functions to handle customer interactions.

As you can see Avaya Breeze is at the heart of the Avaya Oceana™ solution. The routing logic, persistent context and other key functions in Avaya Oceana are built on top of that Avaya Breeze layer. The functionality can be extended or customized through Avaya Breeze Snap-ins in the blue layer. That is an incredibly important feature to ensure Avaya Oceana™ is a future-proofed contact center product.

Then at the top we have the Agent and Supervisor desktops. These are HTML5 webbased interfaces based on the Avaya Oceana™ Client SDK. This SDK allows third parties to create custom clients, for instance integrated in their own business application suite.

On the right side, we have the Oceanalytics Component for reporting and analytics. And finally on the left side we have the OA&M components, predominantly being System Manager and Avaya Control Manager.

So, in the red and blue layers on top of the Avaya Breeze layer we would find the snap-ins, am I right?
Indeed in the red layer you have the various snap-in components that are included in Avaya Oceana™, such as Engagement Designer, Work Assignment and the Context Store. The other components in this layer are used to connect for instance to the Communication Manager to Agent Client interface etc.

In the blue layer we find two types of components: As you already mentioned Snap-ins, such as the Chat Snap-in and the Co Browse Snap-in. But here we also have a number of Connectors, that allow the solution to connect to external systems, such the cloud based Avaya Automated Chat service and the SMS connector, that enables us to go and retrieve SMS messages from the SMS Gateway. These external systems are detailed in the grey layer, that contains the external systems we can connect to through the use of existing snap-ins or connectors.

OK, and that is why we have the customer’s web server there because of the Co Browse snap-in and the Automated Chat service you mentioned earlier.

Maybe now is a good moment to go into a bit more detail on the Avaya Oceana™ Workspaces.
Yes, your timing is excellent, because in the next part we will indeed look at Avaya Oceana™ Workspaces.
So Avaya Oceana™ Workspaces is the Graphical User Interface the agents will use, am I right?

Yes, but there is more. Avaya Oceana™ Workspaces is the new intuitive HTML5 based omnichannel desktop that delivers a single desktop designed to empower users with context across all channels. With this new modern desktop, users can engage with customers regardless of the channel type. Avaya Oceana™ Workspaces is comprised of several widgets, that allow users to customize their user environment to match their work.

The interface presents interaction cards that are designed to enable agents to perform specific tasks on any interaction type as Avaya Oceana™ Workspaces brings key customer data from multiple sources into one area for agents and supervisors.

From Avaya Oceana™ Workspaces, provide rich content to the agent about the customer when interactions are happening:

Create and visualize the customer journey of any customer

View and interact with context data for each interaction in the customer journey

Filter on touch points, e.g. to only see data from a specific touch point or filter out touch points from the visualization
So what we see here at the top are the interaction cards you mentioned, right?

Yes, at the top you see the interaction cards. They contain all the work this agent is working on. For the active interaction card we see customer details, the customer history, the details of this specific interactions and at the bottom right you see the list of available experts, relevant to this specific interaction. The two interaction cards on the left are representing chat sessions while the one on the right is an email conversation.

You said for Agents and Supervisors; does that mean Oceana Workspaces is also used by Supervisors?

Absolutely! Avaya Oceana™ Workspaces provides different feature flavors depending on the User Type – Agent or Supervisor. The Supervisor interface support the Teamviewer, which provides the ability for the supervisor to see a visual representation of the team of agents assigned to that Supervisor. The Supervisor interface also integrates Oceananalytics Reporting and allows attribute changes to Oceana Users and Agents. In the near future we will add Supervisor Observe and Barge-In for Live Chats and Live Voice Interactions, through a feature pack.

Could you tell us more about the customer journey you mentioned several times?
Sure!

Currently the agent is working on a interaction and the interface displays the customer journey. As you can see the journey includes details on earlier interactions, web pages the customer has browsed and earlier chat sessions as well as routing decisions and the journey overview incorporates the notes made by the agent during the selected contact.

That is an excellent tool for the agent to efficiently deal with customer queries!

It is indeed.
Let's move to the next Oceana solution component: Avaya Oceanalytics™.
Avaya Oceanalytics™ provides real-time and historical reporting tools that help track trends and improve the overall performance. The Avaya Oceana™ Supervisor User Interface enables supervisor reporting powered by the Avaya Oceanalytics™ framework.

In addition to reporting Avaya Oceanalytics™ offers advanced analytics capabilities and it enables users to create their own custom reports. Avaya Oceanalytics™ incorporates rich visualization features for reports and dashboards through the Business Intelligence Presentation layer.

Avaya Oceanalytics™ also provides data stream capabilities that enables data-only subscription for integration with 3rd party applications (Please note that this function is not part of the initial offer). We initially release a bundle of four collector snap-ins for Avaya Call Center Elite, Avaya Aura Experience Portal, Avaya Aura Contact Center and Proactive Contact. In later release we will add connectors for Avaya Interaction Center and Call Management System, CMS.

So will Avaya Oceanalytics™ replace Call Management System, CMS?

Good question! No, absolutely NOT! Avaya Oceanalytics™ is not a replacement for CMS. CMS is our flagship voice and operational only reporting product. Avaya Oceanalytics™ is our product to support multiple data sources if a customer wants to marry two streams of data across systems.

We will continue to support CMS as an Elite only reporting product. Avaya
Oceanalytics™ is our unified reporting offer across sources.

OK, clear! Could you show some examples of Avaya Oceanalytics™ reports?
Real-Time Dashboards

Yes, here is an example of a real-time dashboard. The user has created this dashboard by dragging items from the palette on the right the presentation pane. As you can see data is presented in various formats, to either quickly review the detail through the tabular format, or to monitor the agents group through the graphical representation.

Could I also do something similar for historical reports?
Yes, but the approach needs to be a bit different, as for historical reports you need to indicate which period you want to review. So here I started by defining the period I want to review, what interval I want to use, a day, a week a month etc. Then the tool creates a number of tabs to provide the data requested.

OK, I think we now have a good idea of the components and functionality in Avaya Oceana™. Can we look at how we would implement Avaya Oceana?
Yes, in this section therefore, we will discuss how we can implement Avaya Oceana™ effectively, we will review the deployment options and we will discuss licensing as well as interoperability.
Here is a quick introduction on how Avaya Oceana™ is implemented.

Contact Center Elite customers who are currently running only a voice channel, and do not have either Avaya Interaction Center or Elite Multichannel, are perfect candidates for Avaya Oceana™ enabling them to implement multichannel and differentiate their business. The main value-additions for these customers with Avaya Oceana™ are:

- Adding additional multichannel for their agents to drive differentiation or achieve operational efficiencies
- Addition of screen-pops and CRM integrations
- Segmentation or data directed routing, or leverage advanced attributes based routing.

These customers can choose to continue to use Elite for their voice only agents, while moving the agents supporting voice and multichannel to Avaya Oceana™, who can then leverage its benefits such as working on omnichannels, contextual attributes based agent selection, unified reporting and a unified desktop workspace across all channels.

Note that Avaya Oceana™ currently has a limit of 1,000 concurrent agents. Elite customers with more than 1,000 concurrent agents that require multichannel will need to plan a phased adoption of Avaya Oceana™.

So what you’re saying is: I could run Avaya Oceana™ in parallel with Call Center Elite, but I could also move agents from Call Center Elite to Avaya Oceana™, right?
Yes, there are different models possible. First you could run Avaya Oceana™ independent of the call Center application.

In this case Avaya Oceana™ handles all the non-voice interactions and the existing Call Center application, such as Call Center Elite continues to be used for voice only contacts. That way you would have voice agents and non-voice agents.

And when I want to have some agents handle both voice and digital contacts, while maintaining a group of voice-only agents?

Well, in that case you would migrate some agents from Call Center Elite to Avaya Oceana™, and at the same time keep a group of agents exclusively on Call Center Elite.

Could I also migrate all agents from Call Center Elite to Avaya Oceana™?

Yes, that is option number three. Advantage is that you use attributes based resource assignment for all interactions. But do realize that when you do so, you need to consider the maximum capacity of Avaya Oceana™ to ensure you can migrate all agents. In this model Call Center Elite is only used to receive voice calls, that are then routed by Avaya Oceana™.

Avaya Oceana™ monitors the Elite skill in order to stay up-to-date on the agent state. In this model we do not use Skills Based Routing from Call Center Elite for any call!

Well, that answered all my questions. Thanks for that. And where can I get more information about Avaya Oceana™?
If you would like to know more, go to avaya.com and search for Avaya Oceana™ or click the image, which will take you there directly. Bookmark it if you want to be able to quickly return to the page.
Well thanks for that, it was very clear and helpful!

Let me try to recap what I now understand of Avaya Oceana™. What really sets aside Avaya Oceana™ is the architecture built upon Avaya Breeze and the Breeze Snap-ins, which make it easy to expand, enhance and customize this omni-channel solution. Second key point is the application of the Work Assignment engine to implement Attributes Based Resource selection, so we get the best available resource to assist the customer at any time and for any type of contact. And then thirdly the solution is context preserving, so that agents and for instance the Work Assignment engine know the history of the customer, on any channel, to improve the resource selection and the resolution of the customer’s query or issue. In addition the solution includes a modern customizable agent desktop in Avaya Workspaces and the solution incorporates reporting and analytics with Avaya Oceanalytics™. And then finally the solution integrates smoothly with existing Avaya Customer Engagement solutions, such as Call Center Elite, Communication Manager and Experience Portal. How is that as a summary?

Yes, I think you did cover the key points and you covered them well!