

# openSAP Invites, Episode 09

## Transcript

**Elisabeth Riemann:** Welcome to openSAP Invites, I'm your host, Elisabeth Riemann, and in this episode, we'll be learning about SAP Fiori design system with Thomas Reiss and hearing how it helps provide a consistent, high quality user experience for all SAP products. We chat about design, both good and bad, and find out how SAP Fiori is transforming and harmonizing the SAP user experience across apps, devices, and platforms. Discover what's to come and how SAP is simplifying, enhancing, and bringing intelligence to the enterprise user experience. Thomas Reiss is Vice President of SAP User Experience Product Management, focusing on the adoption of innovations such as SAP Fiori and SAP Co-Pilot in SAP applications, Thomas joined SAP in 1993 as a developer and has had various leadership roles in development since 1995. Prior to joining SAP, he spent two years as a developer and computer security at BASF AG. He holds a Ph.D. and an MA in Electrical and Information Sciences from the University of Cambridge, England. Let's say hello.

**Elisabeth Riemann:** Hello, Tom.

**Thomas Reiss:** Hi, Lizzie.

**Elisabeth Riemann:** Welcome to openSAP Invites. Tom, it's a pleasure to welcome you back to openSAP. Your latest openSAP course, "SAP Fiori Overview: Design, Develop, and Deploy" was extremely popular with our learners with over forty-one thousand enrollments since it was held in June and the feedback has been really glowing. So, before we start, congratulations to you and to everyone on the team who was involved here. Today, we're going to be talking about the importance of great design and user experience. And in particular, I'm looking forward to hearing more about the new developments and enhancements that have been added to SAP Fiori since the summer and discovering what comes next. Tom, I don't want to encourage you to give too much away in our intro, but you might like to give us a few hints right now about what's new and why we should stay tuned.

**Thomas Reiss:** The two most important things that have become available since the course was on the one hand, the spaces and pages with multi page spaces and the other one being the Central Entry Point with the launchpad in the cloud. And especially the latter one is something customers have been asking for many years. So, it's very good that we can actually now have a first step on that journey.,

**Elisabeth Riemann:** When it comes to user experience, I really love the fact that all of us really do have an opinion on what can make something really great or really terrible to use. And I think it's often these extremes that we remember most. So, to go to our warm-up question, Tom, can you maybe share one of the worst or most painful examples of user experience that you've ever encountered?

**Thomas Reiss:** Yeah, actually, I've got two. One really minor one, but it shows how the devil is in the details, so to speak, the way I was using it, I mean, everyone uses Excel, Excel, normally great usability. But it was set up in a way that I had into my name as the originator of the entry. And if I typed in my name, absolutely perfectly, Thomas with a space Reiss, it wouldn't accept it. But then there was a dropdown box. And if I then selected my name, it looked exactly the same and it worked. And these are the kind of usability things that just drive you nuts. So small little thing like that obviously is not the worst experience, but that one just, you know, and these little things can make a huge difference

**Thomas Reiss:** Another example, which I heard from colleagues way back when I started out at SAP, they were even telling it first before I even joined. So, this was maybe in the 80s or the beginning of the 90s, a customer actually on R/2 the mainframe system. The screens weren't very big in those days. They had actually configured the system so that the screen was only for the field to enter data without any labels. So, you had to know exactly what to put in each field because there's no description at all. And the user of that screen absolutely loved it because they could just enter what they had to enter all in one screen without having to go to another screen and what have you. So, it was interesting because for that particular user, it was perfect. But of course, almost everyone got everyone else. It was a complete catastrophe from a usability point of view. So, it just shows how user experience is also very user or use-case specific.

**Elisabeth Riemann:** So, Tom, in your experience, staying with design, what distinguishes good from bad user experience and is it even possible to define something that's so subjective?

**Thomas Reiss:** Good user experience means that you really feel comfortable using the software. It's like a trusted friend. You know how it works. You feel comfortable using it, you know it. It's just like a tool, like a hammer is, you know, everyone trusts the hammer to put a nail in the wall, know you just trust the software, it'll do what I what I need it to do. Then, of course, a bad user experience is one where you don't really feel comfortable using the software because it does strange things, or you want to do something, and it won't do it. Or like the example I had, you want to type in your name and it just won't accept it.

**Elisabeth Riemann:** SAP Fiori is the user experience for SAP software. And Tom, can you briefly explain its evolution to us and how it's transforming the user experience for business users?

**Thomas Reiss:** Yeah, so basically, I mean, we started out, I think it was 2013 timeframe with customers wanting to give their users these kind of self-service applications for, for example, a leave request requesting vacation. Also, typical thing is that a manager is giving approval, so they don't normally work in the system day to day. we realized that we really that the SAP GUI wasn't up to the modern state of the art user experience for this kind of casual users. So that's where we looked into alternatives and came up with Fiori. So HTML5, the Web-based application responses that runs on smartphones, tablets well as the desktop, which of course is important for these kind of casual use cases these days. And then we realized that actually that's a whole lot more potential in SAPUI5 this framework, the HTML5 framework that we built for Fiori and of course the design and took it to the next level. Then 2016, with Fiori 2.0, we actually got a Red Dot Design Award. We in fact quite a few design awards the last few years. I think it's well over 40.

**Thomas Reiss:** With Fiori 2.0, we expanded it for desktop use cases. And now what we also then realized is, of course, it's always been responsive. There are occasionally these use cases where people are on the road all the time and the applications they use is their tool. It's like the hammer for putting the nail, it's their tool they need when they're

on the road talking to customers or looking at assets, you know, doing maintenance, this kind of stuff. So, we realized that are these cases, of course, a native mobile experience using iOS or Android, of course, is even better than a Web one, especially if you have to also work offline. So, we expanded Fiori to be a design system that's covering not only the Web language, but also the native mobile languages. So, we have a design language for iOS and Android. And we also started looking at a conversational user experience a couple of years ago. And with Fiori 3, this is the current evolution that started a year ago. This is a multi-year journey, we're bringing all these aspects together now, adding aspects also like intelligence. Of course, we don't have any surface intelligence to the user and looking also consistency across all our products and also integrations. For example, like I mentioned earlier, the central entry point is, of course, a very key thing that is now gradually becoming available.

**Elisabeth Riemann:** What are the human and business benefits of good user experience? You mentioned some of these in the course, and I wonder if you could recap on those for us.

**Thomas Reiss:** Yes, I mean, of course, it's the human ones, obviously, a good experience avoids the frustration that I talked about with the actual example and makes, of course, people just happy to use the system. You often actually end up with better data quality if it's easy to use and people are going to make fewer mistakes. And then, of course, that ends up not only being something that people are happier about, but also you can really attach real business value to that, of course, because if you get wrong data in the system, that can be very expensive to fix it or it could even cause wrong outcomes or wrong decisions being made. And of course, another aspect, actually, which is perhaps relevant more for IT or for the business actually, is these days, companies are fighting to attract talent. And if you want to get really good motivated people, you want to give them an attractive working environment. And of course, these days of software you work with, as is a very important part of that work environment. And if you're offering people sort of the old legacy software, the mainframes or the stuff you don't want to work with, then of course, that's going to be frustrating. So, you know, if you're looking for talent, then it's actually a very key element for motivation of people. And of course, other aspects are the applications of easy to use. And you don't need so much training. So, you save costs on training. And of course, having happier people, I mean, for IT, the IT department providing the software to the business, of course, it's

also good for them because they have a good reputation then with the business owners that they're providing them with nice solutions rather than the old.

**Elisabeth Riemann:** And so, Tom, how can we avoid some of the design failures that you mentioned at the beginning and ensure, as you mentioned, that good designs harmonizes across different apps and devices and that it scales? How does SAP Fiori design system work here?

**Thomas Reiss:** If you're designing one application, of course, design thinking is a great way of understanding what the end user needs. And of course, that's always the key, because then you end up building something that the user can use for their day-to-day work and they really feel happy and comfortable with. Of course, if you're designing hundreds or thousands of apps, you need to ensure consistency across them. So, if everyone just built their own app completely differently, just as they see fit for their use case, each one might fit the use case, but if you start using two or three different apps, that can get completely confused. So, you need to have a certain amount of coherency so that you have, for example, simple things like action placement. Where do you find the save button, where do you find edit buttons? You don't want to have it in one application top right, the other one bottom left and the other one maybe the middle or on the right somewhere. So, you have to have this consistency where to put the button. Then of course, if you are listing data, what do the lists look like? What does the table look like? So, this is where we have the Fiori design system coming in that really defines not only how individual buttons look like, and labels look like what the table looks like, but also how together with the findings of the floor plans and guidelines on where to place actions and these kind of things, not only for the Web, like I said, also for iOS and Android. So, we have the whole design system and a design system, of course, that is not only these guidelines and so on. But it's also the message behind it that we define a persona. So, when you're doing designing your application, of course, you talk to end users, but then you define a sort of proteau end-user.

**Thomas Reiss:** Let's say you will maybe be working in sales and marketing and sales and got this background and these kinds of things you're expecting. This is what is important for you. So, defining a persona is important. And of course, doing design reviews internally, etc. So, we have the whole the whole process just in looking at things like accessibility is also, of course, a key part of the design system as well.

**Elisabeth Riemann:** And when you say accessibility, which aspects do you mean there, what what's covered by accessibility?

**Thomas Reiss:** One of our absolute corporate values is inclusion, that we include people who have disabilities of all kinds. Of course, for user experience these are typically then more visual impairments. So, for example, we have high contrast versions of Fiori. By contrast, black, or high contrast, white. So, you know, if you need a higher contrast, then you can use that. Other aspects are also keyboard enablements. So, people who have problems using a mouse, for example, that they can at least use a keyboard. And even for people who can't even see anything or hardly anything on the screen, for example, are things like screen readers which will actually read out the elements that are on the screen so that you can at least that way grasp what's there and work with the system. It is very, very important in many countries, for example. So, if you're providing software for the government, they actually stipulate it must be accessible. And also, large corporations often have that stipulation that you're not being allowed to give software to employees if it's actually not accessible to the vast majority of the workforce, doesn't need it. It absolutely will have to be accessible. So, you don't basically exclude people that have disabilities.

**Elisabeth Riemann:** And that's so important. And you talked a little bit as well about the whole workflows and the whole interview process and coming up with the personas and doing the research. Just to get an idea, how long does that whole process take?

**Thomas Reiss:** I think the important thing, of course, is getting access to customers, users, if you like, but we get the end users that we can talk to from then, actually. I mean, it depends, of course. Also, it's a completely new area where we have to understand the business. Really, what are they doing? What are the motivations or is it something where we're designing maybe a new version of an app or a new app in a domain that's familiar to us? I mean, obviously, for example, we got huge functionality in Financials. And so, if we're building new Fiori apps, for example, to cover functionality that's already covered with the classic UI, for example, obviously we have a lot of domain knowledge. So that's a much quicker process. I mean, we still want to check how people work working these days because the old UIs have built maybe 10, 20 years ago. So, it's obviously important still to check, how are people working these

days, what they expect now versus what they used to expect. But of course, that's a much quicker process, whereas if it's a new domain, then obviously you need more time to understand what these that are doing.,

**Elisabeth Riemann:** And of course, that makes sense. So, once we kind of say we understand our users' needs and requirements, we fully understand the domain and what the processes are involved. How do we go about looking at the specific technologies and tools that we can use when we want to adapt existing SAP app, for example? What how do we start there?

**Thomas Reiss:** If we've developed applications, of course, one of the key selling points, if you like, of SAP software, it is very powerful or it can be very easily configured, I should say. So, there's a huge range of configuration possibilities to fit the various business needs and one important aspect with Fiori, of course, is that you can configure the UI. So the Fiori apps we have this so-called UI flexibility, which means that even if we ship a UI in a certain way, customer administrators, for example, users can change the way the application looks so they could hide fields that are relevant perhaps to the customer, they could move fields or regroup them in different ways. And the other aspect that's important is that end users themselves, they can also personalize a lot. So, one thing that's very powerful, actually, if you have these lists, often you have a lot of different filters that you apply, and you can very easily save variants of an application. So, you might have for a certain sales organization to work or certain country. You could have a certain set of filters for that, you save them as a variant and just choose the variant and then off you go. And of course, on the launchpad itself, also, users can do a lot of personalization, putting their favorite tiles all on one page, for

**Elisabeth Riemann:** And how we go about developing native, SAP Fiori apps?

**Thomas Reiss:** Now, developing apps, which of course we do, but also customers and partners can do again. Of course, it depends, obviously, on the use case, but let's take a typical sort of desktop use case and our recommendations, definitely, if you the SAPUI5, a very powerful framework, if you would just doing native JavaScript HTML, then you really would be doing a lot of that work. I mean, obviously there are whole other frameworks out that these days, but SAPUI5 has the whole Fiori design system, if you like, and it's built-in. So that of course, makes it much, much easier to make sure

that you're following the design guidelines. And of course, following the design guidelines saves you a lot of time designing applications, because, of course, you can imagine, there are so many different ways and principle that you could put together a UI. Of course, it helps you a lot if you've got already the pattern and recommendations. You know, if you want to do a list this way, if you want to go to details it this way, where to put the buttons, what kind of buttons, which are the filter bar look like? So already from a design point of view, you save a lot of time by having the design system and then use a simplified of course, it's very easy to develop because all the controls are there already specified by the design system. And very often in business we see very typical patterns. For example, you have a list of sales orders or list of accounts that you need to process. Then you need to maybe look at an individual accounts, you need to look at the business object. We call that we have a product or a supplier. So, these kinds of patterns are very typical. And we have something called Fiori elements, which allows you to actually build applications with these patterns out of the box without any JavaScript coding and of course, the right OData service. It's not automatic that no free lunch with development, but you have the right OData service with the annotations telling, you know, which the semantics of a field like this is the amount. This is the unit of measure, for example, these go together, then you can just get them straight out of the box. Very efficient, kind of almost kind of low-code development.

**Elisabeth Riemann:** So that's low-code development, right? That's really good for citizen developers and people who want to make the changes

**Thomas Reiss:** Well,

**Elisabeth Riemann:** Fairly quickly, I guess.

**Thomas Reiss:** Yeah, I mean, that's what we're heading towards, so if I give an outlook, where are we heading towards its native? It is of course towards the low-code development environment. And in that sense, Fiori tools is a step in that direction. I wouldn't yet call it maybe out in the market. Low code is perhaps even lower a development background. So, I think you should do a Fiori elements, you're probably still a developer, but you really don't need to know very much about how it all works. So, it really



**Elisabeth Riemann:** Ok.

**Thomas Reiss:** Is in that sense, low effort, low hurdle

**Elisabeth Riemann:** And if we look at classic UIs, can you tell us how SAP is applying the SAP Fiori design to existing products and applications?

**Thomas Reiss:** If you're building new applications, it is very easy to start from scratch with SAPUI5, for example, or, of course, on iOS. But we do have a lot of products out there, the digital core itself, and, of course, also accounted for that. So, we finally acquired over the years. And so, what we're doing there is where will we establish the kind of design council within SAP with representatives from each of the lines of business and agreed together Fiori 3 is the direction for all of us, for the whole company. And then we define together also first steps on the adoption path to get a consistent or coherent look and feel across our product. So, the very first step are basically applying the theme that we have about the colors and the and the font and so on of the Fiori 3 Quartz theme it's called. And also, this shell header bar at the top, so this thin bar at the top of every screen where you have, for example, the menu to we have help or notifications. This we've also standardized because although it's a small thing, but every product had to have been looking a little bit different. So, we standardize on that and other aspects that, for example, we're looking at the action placement. Like I said, when you put the save button, the execute button. So, these are all similar places. And step by step, we're working on that. Another area, technology wise we're looking into is how can we, for example, provide Web components? Because from a business point of view, it's just not feasible that these products can throw away their old technology and just completely rebuild the UI, it just wouldn't make business sense. So instead, we look at how can we help enable them, for example, Web components. It looks very promising as a means for allowing them to sort of reuse parts that are already fulfilling the guidelines.

**Elisabeth Riemann:** I think consistency is key, right? You said it's kind of giving everything the same look and feel, deciding where the actions are displayed and things. And one thing I've often wondered is how does the discussion go when you're deciding where the save button should be or where certain central functions are? Because I

could guess that's very subjective too. Are there very long, drawn out research phases, discussions, workshops to really fine tune and optimize everything?

**Thomas Reiss:** Well, I mean, well, first of all, you're asking the wrong person, because I'm not a designer, so I'm not involved in all these design discussions. But yes, I mean, I do see there is a lot of work that went into the whole design system. And sometimes, you know, looking from outside, you sort of think, why did that take so long? But of course, it is because there's a lot of discussions, but also there's a lot of research that is done. So, you can actually do usability testing where you kind of build mock-up applications. Right. And then you simply ask people, do ABC comparison, OK, you have this task to do, please do it. You watch them doing it. And of course, maybe at the end of the task, after them press and execute button or, you know, save button and then you see how quickly do they find the save buttons or maybe you give them a number of different tasks to do and then the same buttons in one place or another. So, they're actually it's not just sort of argumentation. And I think this is better than so on. You can really actually do this kind of user research. And actually nowadays, of course, with the digital world, it's quite easy. You can get for a small fee, people are willing to contribute to do these kind of user research activities. It's just something that's not directly related to the business scope of the function, but, you know, something like that. And then you can go quite easily. A whole lot of people doing this, kind of participating in these kind of little research activities.

**Elisabeth Riemann:** And is it true that you can track the way people's eyes, that their focus moves around the screen so you can see whether they're looking for a certain

**Thomas Reiss:** Yeah,

**Elisabeth Riemann:** Button

**Thomas Reiss:** That's right,

**Elisabeth Riemann:** Or

**Thomas Reiss:** I

**Elisabeth Riemann:** Feature?

**Thomas Reiss:** Mean, it depends it depends, of course, that some of your colleagues have you remotely. But yes, if we have, for example, events where we have, we can, of course, do eye tracking to see where people are looking. That can be very powerful. Of course, what we can also do is track where the mouse has been moved. That's, of course, also powerful.

**Elisabeth Riemann:** That's good to really hear about the design aspects and the user research

**Thomas Reiss:** But

**Elisabeth Riemann:** As well there.

**Thomas Reiss:** Like

**Thomas Reiss:** I said, I'm

**Thomas Reiss:** Not I'm not I'm not a designer.,

**Elisabeth Riemann:** If we look now at the operational side, can you tell us a little bit more about SAP Fiori Launchpad and how this works as an entry point?

**Thomas Reiss:** If you've got hundreds of applications you want to start and of course you need some way of accessing them, and obviously if you look at a smartphone these days or Windows, for example, you've got basically what on the launch pad we call them tiles to actually launch an application. So basically, the launch pad is exactly this kind of a start page for launching applications. What we realized is, of course, especially we have hundreds of applications available to you. You need to have more ways of organizing it. So just recently, we've introduced what we call the space is concerned. That's one of the Fiori 3 innovations, which means you have far more flexibility in how you lay out these pages. So, before we just had one page that had groups and then you could group the tiles in groups and navigate to the various groups. Now, what we have is more than one page. So instead of having just the one page, you can have multiple

pages and these pages can be grouped into what we call spaces and the space we kind of say should be applied for a certain role that you have. So maybe you're a sales manager, but you also partly do occasional sales representative work as well. Often you have access to both functions. So, you'd have a space for you with the pages that you need as a manager and you'd have a space with the pages that you need to work internal sales.

**Thomas Reiss:** . As before users can personalize it so that you could, give users, empty space, and then they can just simply define their own sections and they have pages that they add to their space, or at least that one page they could they could pick up the page and just put their favorites there. We have the approach that we shouldn't put all the applications that you could possibly access on these pages, because that would make it very full, but only the ones that you that you regularly use are important to you. And that means, of course, there are some that are not on the page anywhere. So how do you find those? So basically, there are three ways of doing that. You can do search for easily as powerful Windows or whatever. You could just type in the name of the application, find it and start it. We actually also have a menu in Fiori in the launchpad at the top and also what we call the App Finder, which is what you use also for personalizing it yourself in the App Finder you have access also to all the all the applications.

**Elisabeth Riemann:** I really like that it reduces the number of apps that you have visible in one space at a particular time, so it really is based on your role, your particular task that you do frequently, and you're not kind of overwhelmed by the full wealth of

**Thomas Reiss:** No

**Elisabeth Riemann:** All the different apps that are available.

**Thomas Reiss:** Idea to.

**Elisabeth Riemann:** That's a really good approach. And Tom, in your latest openSAP course, you introduce the vision for the Central Entry Point for SAP Cloud Platform, and you outlined here how it would really help integrate SAP products in the cloud and also

on premise and how it would enable a consistent and coherent user experience. So, I really want to ask you today, can you give us an update there?

**Thomas Reiss:** The good news is it's now available at least in the first half of this year where we're expanding and adding more features. But the idea, of course, is I mean, we have many customers have more than one system, one product from SAP. Often, they have even more than one S/4HANA system or maybe for S/4HANA system and the Business Suite systems that can be distributed around the world or regionally. And of course, we have other products like SuccessFactors, like Concur, Ariba, and so on. And today each of these products has their own start page, for example. And of course, customers would like to give their users a user has to use three or four of these different products they want to get from, if you like, one start page to one place they go and they can access their apps. And this is exactly the idea with this central entry point that we have with the launch pad and the launch pad today in the past has been provided by the SAP Fiori front end server and also on a cloud. And now we have as an additional technology, the SAP Cloud Platform launchpad. So that runs obviously on the Cloud Platform, Cloud Foundry and basically also provide spaces and pages. And you can hook it up to multiple backend systems. And of course, what makes it particularly powerful is this content federation that is now available with the S/4HANA 2020 one time with in fact with the S4 on that or the SAP Fiori front end server. 2020 HANA because that actually supports also S/4HANA 1809 or 1909. So basically there, if your defined spaces and pages in your S/4HANA system, you can basically connected up with the central launch pad, press a button on these pages and these spaces and pages will be copied up to the central system and from then on, the users can just access a central launch pad to get to that S4 system. And of course, if you had three or four systems, you could, of course, define the space and the pages accordingly and have them all available.

**Thomas Reiss:** So, at the moment,

**Elisabeth Riemann:** Really good to bring it all together.

**Thomas Reiss:** Yeah, to bring it together, we also have this federation for the portal enterprise portal and of course, also for any apps you built on a typical platform foundry. They can also automatically be included there. You can manually today integrate

Business Suite. We're planning, in fact, to also allow that federation going forward sometime next year. And of course, we also planning obviously to then broaden the reach by including cloud products. So, for the moment, it's on premise that was on premise. Customers were the ones asking for it most, if you like. But going forward, of course, the idea is that we can also integrate, for example, SuccessFactors services and so on into the central point.

**Elisabeth Riemann:** Really good. Can you tell us how you do that technically, what has to be done to set up the connections with Cloud Platform?

**Thomas Reiss:** Well, basically, I mean, the Cloud Connector, of course, here on-premise systems and we have some new apps available for doing the administration and setting up. You have to basically connect up. I think it's at the moment two kinds of remote connections from the from the launchpad in the cloud to the to the backend system. One of them accessing the metadata on the other one is then used for the data collection when users log on and then basically you define which role you want to have moved up, so to speak, and then the spaces and pages automatically brought up. It really is quite, quite simple to do.

**Elisabeth Riemann:** Looking to the future, can you share with us what's planned for SAP Fiori, first of all, in the coming months and maybe also if possible, I'd love to hear how you're bringing intelligence, so, AI to the enterprise user experience. Maybe you can give us an overview there of what's to come and what we can look forward to.

**Thomas Reiss:** I mentioned the central entry point. I mean, at the moment, for example, you can define the spaces in the S/4 system and send them up to the central system. But at the moment, you can't, for example, then start redefining the spaces and you're taking tiles from one and putting onto another page from another system or just mixing it up, as you might want to do. But of course, that's obviously something we have on the road maps and more powerful ways of defining spaces, managing them at entry point, of course, like I mentioned, also providing content federation, for example, for business suite systems. So, we're planning to support the front and center in that direction and of course, also other SAP products, cloud products. We're also working on a simpler kind of integration. We call it a product switch, which simply would mean between the cloud products, wherever you are, and one application for S/4HANA, you

could just switch to the homepage of the system. That's, of course, a simpler kind of integration. That's also something we're planning for next year. And actually, something just came out a few a few days ago in fact, we've actually downported the Quartz Dark theme also to basically the UI5 version that's used in the long-term maintenance and available then also for the content services. So even Business Suite systems can also now if they want to use the Quartz Dark theme as well. Coming to a topic intelligence. I mean, one of the we haven't really talked about it very much, one powerful way, we are surfacing intelligence that this is the business situation, the situation handling approach that we have where you can deal with not so common situations so not the day to day deliveries arriving, trucks arriving. I mean, that would be a worklist kind of application, but maybe something like a contract is expiring, which doesn't happen very often. So, you might forget about it to some action to be taken. Or a very nice example actually is a supplier is actually maybe confirmed. The delivery of somebody said, look, something went wrong. They can't actually deliver everything as planned. So now you have to react to another supplier and so on. And so, the system will give you a proactive notification and then you can click on the notification, takes you to the situation overview so to speak, which explains the situation and gives and proposes alternatives how to deal with it. And we have some examples of this already with variants, for example, with an object page. But what we want what we plan to do from a design point of view is have a real dedicated situation page that can really bring together all the information, give you the proposals, even explanations. And just recently, we, in fact, shipped a very first version, of this whole first idea of this for this message-based situation only where you can deal with messages or error messages if they come up with a long kind of batch report that runs overnight, you don't want to have you having to always check the error logs because normally everything goes through. So, you know, they might not check and then they miss something. So now we have to you can have situations attached there and customers can configure what kind of proposed actions should be done to deal with individual messages. So that's a first step in that direction. So, situation handling, of course, the big thing. And of course, another thing that we're looking into, I mentioned the CoPilot, the natural language interaction is being re-engineered at the moment. And I'm convinced this is going to be a really big thing in the future. I think it's perhaps an underestimated engineering challenge. I mean, it's quite easy to do simple search like things that we get with using Siri or Alexa or so on that specific domain. In a business context, it can get quite tricky finding scalable solution, because, of course, we have hundreds of thousands of UIs and use cases at SAP. But I

think if we once we get that nut cracked, if you like, and we have to have a chat bots or the digital assistant available that will really help users, you know, you can just get information much quicker than having to find the app click it, maybe select some filters to find out what the quotation that you worked on yesterday. Where if you could just say that? Give me the quotation I worked on yesterday and there it is. That's, of course, much quicker. So that's, of course, the dream we have there. We have to see, we have a beta program running at the moment with S/4HANA and with the chat bots when we're looking at the results from that and at the moment considering when we're in the planning stage at the moment to see what we do with that next year.

**Elisabeth Riemann:** A lot of exciting things to come then potentially.

**Thomas Reiss:** Yeah.

**Elisabeth Riemann:** So, I guess we should watch this space then. Yeah, very good. Thank you for sharing those insights.

**Thomas Reiss:** One more thing to mention, I said this realized and we talked about the launchpad know we have to say that the title set, of course, we're also looking at providing richer visualization. So next year, for example, we're planning to provide what we call flat tile. So half tiles in the single width so you can get more tiles on the screen if you like. And also having sections that contain links for example. So, if you don't need the additional information, you can put tile, but also just have a section with links to directly open up applications that way. So that's certainly something that we're planning for next year. And of course, we're continuing to look into going further and actually provide even cards on these home pages, which potentially provide even more information. But that's one of those things where we're also being able to use the research. Does it really help users actually having a card or is it something that looks and looks nice on the marketing slide? But actually users don't need it.

**Elisabeth Riemann:** Makes sense, a lot of potential optimizations, and I think it's really good to get that user feedback as well and find out, OK, did it like the cards and if so, what use cases do they see for them?

**Thomas Reiss:** Well,



**Elisabeth Riemann:** How is it really going to help them

**Thomas Reiss:** Yeah.

**Elisabeth Riemann:** And helps us really focus our development on the real priorities that our customers have at the end of the day.

**Thomas Reiss:** I just think yeah, and I mean, talking about perhaps also something to mention is I mean, we mentioned it earlier, how are we getting the security design into the existing systems, if you like? And one thing we've looked at with this one, I mean, we've got a lot of new applications now. We give people the launchpad, but we also see doing this user research, we see a lot of users. Of course, we have a lot of professional users, they have a certain way of working, using shortcuts that get comfortable with that. And we've realized, actually, if you look at the security design, we haven't catered to that quite as well as we could have done, perhaps, I mean, because they had a different focus. But we need to expand in that direction. We now have a project running to bring together, if you like, the user experience and more the classical experience to make that work better together so that people who are more familiar with the classical way of working can profit better from Fiori and vice versa. So aspect of security also be put together. And we've seen also some aspects that are slightly different where we're looking at making those also the same across the technology. So we've been investing a little bit in the in the good old SAP GUI technology, for example, to bring that closer and put improvements there, but also looking at Fiori as well itself and seeing how we could perhaps make things quicker that maybe make navigation quicker than it is today. So, a lot of a lot of exciting things coming.

**Elisabeth Riemann:** Yeah, it's just really nice to hear how things have developed from 2013, from the very early days, and now that you will be looking at all the different users or the different contexts, the different use cases, that's really fantastic.

**Elisabeth Riemann:** So, Tom, if I can ask you now about your learning recommendations, I wanted to ask what courses or tutorials would you recommend for beginners who now want to get started with SAP Fiori.

**Thomas Reiss:** Well, I mean, the obvious one would, of course, be if you're not already among the 40 plus thousand people who enrolled for the year, so the overview course, then, obviously that would be the number one, of course, to have a look at that. And it's four weeks. But, you know, if you're not familiar with openSAP for weeks, sounds like a lot. But basically, each unit is typically about 15 minutes. So, it's actually pretty easy. And A, we typically have five units. So, you're not really talking about huge amounts of effort. But, so that would definitely be a recommendation if you if you want a bit more relaxed or additional information. But we do plan to pick it up again later. So that's, of course, a nice mechanism, something to keep your eyes open for. Independent, of course. I mean, if you're developing, then there's backend development on this front end of it, of course. There is actually an API Open Source Way because I think it's been around for a year now. You can certainly have a look at that. We are, in fact, right now in the process of putting together a course for Fiori elements and Fiori tools, and I didn't mention these tools before. So basically, security tools are plugged into the applications to do so. So, it's easy way of guiding users to actually build elements that makes it really easy to do and you can even use it offline.

**Thomas Reiss:** And the other aspect I mention, of course, is backends. So, we do actually also have openSAP courses for what we call the cloud application programming model so CAP for the C A P for Cloud Platform, of course. And we also have one for what's called RAP, which is the ABAP RESTful programming model,

**Elisabeth Riemann:** Those acronyms, RAP and CAP.

**Thomas Reiss:** So those are the two courses to have a look at if you if you want to learn about how to efficiently build OData services.

**Elisabeth Riemann:** So, we'll include all these links to the recommendations to the courses in the show notes and of course, the Fiori-side chats as well, they're really good. To conclude today's episode, could I ask you and it's probably difficult because you to summarize your three all-time favorite aspects of SAP Fiori?

**Thomas Reiss:** Well, first of all, I love the modern design, maybe people looking at first thing, it looks a bit sort of simple, maybe a bit gray. The Quartz theme, maybe not quite as colorful, but of course, if you're working day to day on applications, then you don't

want to have it to be too colorful. You want to have it nice and kind of relaxing, if you like, and this sort of coherency that you have, the interaction that you have with Fiori, you know how it works. You've got the flexibility with a variance that you can do once you've started using a couple of apps, you know exactly how the other apps are going to work. Another thing which I really like about Fiori is in fact the possibilities. You have what we call embedded analytics, where you can put in charts and other visualizations of the data and you even like we have with the analytical this page, you can even filter on the chart. You know, you're looking at a big list of data, but you see the chart visualizing what's actually in this long table with fifty thousand entries, one hundred thousand entries, and you can filter on a visual representation of the data. How many are in a certain category, for example, you can click on that and filter that way. So, this kind of graphical filtering, I think is actually very powerful. Another aspect that I like about it it's not just about the design, but actually Fiori elements and Fiori tools. That we've identified these typical patterns that people have in business software and that you can just so easily actually go and develop them. And not just the trivial list, but you have if you're using these Fiori elements, you get you get search, you get the filter parameters, the whole application is accessible out of the box. If you can do things like you're exposed to all these things, you get completely free. And especially accessibility is something not to be ignored. I mean, that is something that typically in a lot of people very quickly can put together a nice-looking UI and then they spend months and months and months on top making it accessible. Whereas with UI5 and of course with Fiori elements patterns you get a lot of that out of the box so that if you like, the third aspect, the related toolset that we have with with the Fiori design system and of course, not just Fiori tools, we've got the SDK for iOS and Android as well to make it really easy to actually develop.

**Elisabeth Riemann:** Really good. Thank you so much. It's been really brilliant to chat with you today, all about user experience at SAP and specifically as well to learn more about the new developments and planned innovations. Tom, thank you so, so very much.

**Thomas Reiss:** Well, thank you for interviewing me, and I hope our listeners also profited from it a bit.

**Elisabeth Riemann:** openSAP is SAP's free learning platform for Massive Open Online Courses, microlearnings, and podcasts. Check out our free learning content on [open.sap.com](https://open.sap.com). The openSAP course, "SAP Fiori Overview: Design, Develop, and Deploy" ran for four weeks starting June 09, 2020. You can still access the course content and learn for free in self-paced mode on [open.sap.com](https://open.sap.com).

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