

Vinnie

Hello and welcome back to CapTech Trends. I'm your host, Vinnie Schoenfelder. I think it's been a minute since I've done one of these, so welcome myself back, I guess. Today we're going to discuss an article written by our very own Gaby Olivera, Multilingualism and Conversation Design.

And joining us in addition to Gaby, who's a senior consultant in our customer experience practice is Reid Braswell, technical Director at CapTech and among many other SI capabilities, he's going to bring in the modern web architecture angle for us today to talk about the technical bits underneath what Gaby's talking about to help enable those results. So Gaby, Reid, welcome.

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Thanks, Vinnie.

Gaby

Yeah, thank you for having us.

Vinnie

Yeah, so I want to start with a little definition for the audience because Gaby, when we first spoke about your article, I was reminded about internationalization work I've done a long time ago, and I think this term still applies in internationalization, it's I18N is how it's written.

It's just a shorthand of I, 18 other letters, and N for the word internationalization. That's the software architecture that allows you to provide multiple locales. A locale would be both language, I think a responsive designed to allow for more verbose or less verbose languages, color schemes, images, iconography, mood, emotion, that type of stuff. But you really started this from the perspective of language, and I was curious what your motivation was kicking off this article.

Gaby

Yes. So several reasons why. One of them being very passionate about conversational tech overall. There's a small group of us that are interested in that topic in the customer experience practice area. Also having had a client engagement that focused on that really started my interest. But really at the core root of it, it comes from thinking of designing for my parents and family in mind coming from a multilingual background. I've noticed through growing up that a lot of brands, businesses, products, experiences are not designed with them in mind when we only focus on the English language and certain cultures.

Vinnie



So from a first person perspective then, what was it like for you, and if you can speak for them, your parents, growing up when something didn't have multilingual support or did, did that affect your personal brand loyalty or choices of where you would go to eat, shop, et cetera?

Gaby

Definitely. Going from which bank do we prefer to which doctors or certain health insurances do we prefer, if we had access to switch it up to certain stores and experiences. Being a five-year-old and translating and interpreting for your parents and all those types of settings, I definitely had some sway being like, all right, these people definitely welcome us more here than others and prioritize us as customers and our needs.

Vinnie

So in your research, what did you find? You spoke about first person, but more broadly in your research, what were your findings?

Gaby

Definitely some research out there says that 76% of online shoppers prefer to buy products with information in their native language, it's their comfort zone. And in addition, 40% will never buy from websites in other languages.

Vinnie

That seems significant. Yeah, it's a high number. So Reid, when I talk about 20 years ago when I was developing in IT, is that still the software architecture approach that you have a software architecture framework that you construct and have multiple instances that plug into and have to support multiple locales?

Reid

Yeah, internationalization or I18N like you reference, Vinnie, yeah, spot-on, still the approach. We've got the country code and then you've got your locale code or that language code there like en-us, en-uk. There's a lot more, I think-

Vinnie

Let's pause there before we go on-

Reid

Sure.
Vinnie
Because for those who don't know, a locale has both a country and language identifier, both that are two digits, right?
Reid
That's right.
Vinnie
The en-us would be English in US versus en-uk, which would be English in the UK.
Reid
Correct.
Vinnie
So when you put in a new operating system or get a new phone, you're doing that when it's asking you questions, where do you live and where are you?
Reid
That's right.
Vinnie
Could I change that? So if I wanted to say, "Hey, does this retailer support Spanish-speaking in the United States", how do I change that this test to see if that actually exists?
Reid

So from a website standpoint, within your browser, you can go and modify those settings and most browsers respect your native operating systems setting. So on a Mac, you can go into system preferences and change that just like you can from an iPhone or an Android device. And you can also override per site within the browser. It has the capability to do that, which is really nice because you may prefer one site that has support, you can actually get that content that you expect. That's where you can really change and test that there.



Vinnie

So Gaby, do you do that? Do you have different plugins for different keyboards or things like that for Spanish versus English?

Gaby

Yes. Personally I do, just helps me enhance the written word of Spanish in my own experience. And also certain websites, it is prompted to me, especially when I go to a certain clothing store that is more international based and they switch it up for me. It does help a lot that there's that automatic switch, but I feel like there's always a few misses there, even with just having that type of plug-in or system. There's more ways to improve on that experience.

Vinnie

So in my experience working with clients in both web development and mobile development, basically anything with a UI, broadly there's two extremes. Companies who don't think about it at all up front and then try to cram it in later, and then those who think about it up front and architect for it up front and pay a little bit up front to have a architecture that is longer-lived and more flexible. Can you guys both talk us through the benefits or pros and cons of both 'cause I'm sure there's some pros to delaying it as well, although it's probably not preferred. So if you can touch on those points.

Gaby

I'll definitely say from a strategic aspect, when you're considering, okay, we need this type of conversational tech or our website may need to be translated into another language, ask yourselves, what are your customer base? What is that? Is it beyond just a certain culture group? And if you ask yourself that, you're already leaps ahead from the beginning and having that mindset, is this even needed for us? And if so, what other languages come down the road and when can we include it based on our budget constraints and et cetera? But having those conversations at the beginning is essential.

Having had my own experience with a certain client engagement, they definitely had in mind that we're going to have English and Spanish. They designed the entire experience of flow was very controlled despite it being AI fused in English, not considering Spanish coincide right alongside it. And ultimately once they got to the Spanish phase of just it'd be easy switch, easy translation with everything, they hit some hurdles because not everything goes into exact certain sentences and phrases were much longer in Spanish, grammatically speaking, where they had to go back and redo a lot of their work that they did with their content in the English phase of it. So it added longer, more budget increase, longer timetables for releasing this product essentially.



I think there's also, and I'll direct this towards you, Reid, some unexpected dividends. It's like I have to call them. When you do things right, you get unexpected dividends. So if you have a responsive design, then you can handle a language that's more verbose because it's going to adjust. If you do decouple content from presentation to allow, that's one of the core principles of internationalization, decoupling the content from the structure of the page, if you do that, you're also... That's the same work that has to happen for accessibility. So if you're focused on accessibility now it's easier to do internationalization and vice versa. So are my assumptions on that correct? And I guess at a high level, walk us through what that software architecture feels like with modern day content management systems.

Reid

Yeah, that's right, Vinnie. I think when you make the decision architecturally to, like you said, decouple your content from your presentation, you're already a step ahead and Gaby to your point, and you noticed that in your client, if you make those decisions upfront, both with the software architecture for your overall solution as well as your design, you reap those benefits much earlier than you might expect. There's less cycle time from either adding new languages, adding new features, but it's a strong parallel with accessibility. I think if you consider both internationalization and localization upfront as well as accessibility with any new solution, it definitely gives you a leg up. It's going to take a little bit longer upfront, but you're going to reap those benefits certainly through the life of the product, through the life of the software, whatever it may be.

Vinnie

The industry has been dealing with this for many decades and things like internationalization as a concept, as a software architecture has been around, it seems like the importance of this waxes and wanes over time. What's novel now, what's different now that's inviting this conversation to be super important again?

Gaby

Yeah. For one reason, we have a lot more advancements in our technology like Al-generated content and just being completely dependent on that generating our content doesn't automatically mean successful translations or interpretations of the initial intent, but also language and communication methods have evolved through the years. It's not just about the written and spoken word. We also now communicate through audio, visual, emojis, GIFs, memes, color, it has evolved. So how does-

Vinnie

Do you translate emoji?

Gaby

How do you translate emotion really? And that's where you need human touch, a human designer in tune with that to assist in that process.

Vinnie

So Reid, specifically then, how does this work against an omnichannel implementation where you have four or five different view-tier technologies all needing to be translated and having a consistent voice?

Reid

Yeah, it's certainly a challenge Vinnie, and I think it kind of depends on a lot of business factors like do you need the same level of internationalization, localization across every channel? And let's say the business says, yeah, I want that. There's a lot of considerations there. I think depending on which channel that you're bringing your experience, your product, your application, your service to, there are some constraints that the device, the channel itself may have itself. So print is got its own type and print's very much still a real thing. Thinking about advertising, thinking about where you're meeting that customer from an advertising standpoint. If you look at a watch type or a smaller device footprint, what does it look like there?

From a mobile app standpoint, and Vinnie, I know you know this a little bit better than myself, but when you want to localize and internationalize content there between menu items and different things like that, that has to ship with the device. So there's some different considerations that you have to make from an architectural standpoint versus if I am meeting my customer on the web, I'm guaranteed that they have a internet connection. That's why they're on the web.

And maybe I'm pulling that content for a Spanish presentation from a language standpoint, from a service, and maybe you can centralize some of that. So by again decoupling my content and how I'm localizing that for my different customers that I'm supporting, I can extract that out into maybe content as a service. And there's different platforms and software as a service providers that can do that for you. There are also good technologies that exist out there where you can bundle that in a way that is static, but in a dynamic way that it can be respecting of your users, their settings on their device so that you can present that content for them.

Vinnie

So when I think about omnichannel, and again for those who may not be familiar with that term, early on you would pretty much communicate through individual channels, could be print media, could be web, it could be whatever. Then you got to multichannel or you were doing it in multiple ways and then became omnichannel, which you're doing it in many ways, and each way is aware of what the other one's doing. So if I go from the web to the phone, I'm not starting over, it's picking Proprietary and Confidential • © 2024 CapTech Ventures, Inc. All Rights Reserved.

me up where I left off and I haven't experienced across devices. So you spoke about that a bit, but then when I start thinking about it more deeply, I get into what kind of content types are there, because handling static text is different than other types of content. So can you rattle off some of the other different content types and how that creates a challenge?

Reid

Sure. So I think at the end of the day, content is king or queen, however you want to phrase that, and I think that means from a business standpoint, depending on how valuable is your content to the user, and it may vary by industry. If you're a government site or you're within the retail space or a utility type space, your content is at the end of the day what your users experience. And a lot of times when we do a lot of modernization work, there's a lot of static stuff and there's a lot that we are trying to think through when we try to modernize from an architecture standpoint, support internationalization.

Vinnie

So static content is content that's basically hard-coded content. It doesn't to be hard-coded in the app.

Reid

That's right.

Vinnie Schoenfelder:

But it's already written down.

Reid

It's already written.

Vinnie

Right. Content. So that's static.

Reid

That's right. And when you shift to dynamic, that can also be in different segmented pieces.

Vinnie



So dynamic would be pulling from a database, pulling from a third-party service, somebody else has content or content that's generated-
Reid
That's right.
Vinnie
From the data you already have, but you may not know what it is until you request it.
Reid
Correct. And then when you get into the dynamic pieces, it may not just be text, it could be images it could be other types of, like we talked about with different, how is language presented, how are you communicating with your customer? Thinking about that as all of content I think is super important on the dynamic sense.
Vinnie
Well, so then with static, you could pre-translate and review. With dynamic you can't and review in the same way.
Reid
Correct.
Vinnie
So you're doing that probably real time and real time, you're hoping for the best, or is it going to a human translated for review?
Reid
Yeah, I think it depends on your use case and your industry. It could be on device. I think we're seeing a lot of advancements in hardware, especially on the mobile side. I know Apple and Android are pushing that forward from an AI standpoint, and we've touched a little bit on that today.
Vinnie

Well, would you put Al in the dynamic bucket or is that its own bucket? Feels like its own bucket. It

CapTech.

feels like a Venn diagram.

Reid

I think you could argue that Vinnie. I think you could argue that. I think it's interesting on how we see Al evolve from how models are being trained, especially with LLMs, large language models and the type of tolerance that you are willing to, as a business, create or allow for in that kind of content generation.

Vinnie

So Gaby, in your research, did you come across any differences in Al generation as it relates to either multiple languages and how well they do it, or even inclusivity? I know one of the things that we talked about before was even if Al is generating the content, is it doing it in a way that's respecting gender pronouns for instance? What is your research informed you of?

Gaby

I definitely believe that AI generation has helped advance or speed up the process of creating content things, creating chatbot chat type of tech. But you always require, again, emphasize a human touch, a human designer behind it who's in tune with say the language or the slang, the terminology, the culture of the moment to help review all that. I will say you need a combination of both when it comes to gender pronouns and gender-neutral language. There's a lot of discourse on that in the English front, but how does that translate to say romantic language with Spanish or so where everything's heavily grammatically gendered? How do you introduce that when your bot introduces that, like what are your pronouns or et cetera?

Vinnie

There's also different social expectations in different countries.

Gaby

Yes. So you definitely need to navigate that once you approach that and you introduce that into your experience.

Vinnie

Speaking of that, one of the things I'd mentioned earlier was that the importance of this seems to wax and wane throughout time, and one of the bits that came up when I was researching that phenomenon was globalization versus localization trends. So if I were to put it to you, I'm a smaller regional supplier of something in the Mid-Atlantic region. Is it as important to me to be multilingual as it would be for a national brand or an international brand? CapTech

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Gaby

Yes, I think so. Be in tune with your customer base. It may surprise you. It's very sumptuous to believe that it is solely an English-dominant customer base. There's so many cultures and languages and groups of people in the Mid-Atlantic region alone. One brand comes to mind that was a meat-pork industry a few years ago in the mid-twenty-tens. They simply did a website translation. They realized they were surprised to find after some UX research that their customer base was strongly from the Hispanic Latino community. And just by switching all their content to Spanish and introducing that, it's only increased and profited that business overall.

Vinnie

I go back to accessibility as well, because it may be more expected if you're an international company to be multilingual and highly accessible, and you may expect it less from a smaller, more regional company, but the surprise and delight factor would therefore be even higher because you expect you're not expecting it, then you get it. Your brand loyalty's even doubled.

Gaby

Yeah. It'll only benefit you increasing brand loyalty, brand authenticity, and just really brand support overall. You may grow a certain customer base.

Reid

I think that's right. You think about just that word of mouth of, oh yeah, hey, I went to that site and I'm a Spanish-speaking person, and my first experience was, hey, they supported my language and I could either shop there or whatever. I'm going to spread that word of mouth. Meeting that customer where they want to be met. And Vinnie, to your point, pulling on the accessibility parallel, it's no different, right?

Vinnie

Well, I think about affinity as the word. So if I like a particular hiking boot and you go to the site or mountain bike or whatever, and you go to the site, their branding clearly is trying to make you feel like you belong to their community. That's brand affinity. These are my people. They understand me, they understand my wants and needs. How can you do that if you're not speaking their language? And I mean that broadly speaking their language, not just the words, but the tone, color choices, all those little tiny details of speaking their language. If you want to get that affinity, you need to be able to do that in more than just one way.

Reid

experience that you are trying to understand your customer?

Gaby

Yeah. Do you prioritize us? Do you value us as customers essentially. In many cases, in different industries, in healthcare, banking, the financial institution, by prioritizing multilingualism and this type of communication through all forefronts call centers, right, chatbots, et cetera, you're only empowering that user and just building on that brand loyalty.

Vinnie

Yeah, it is funny. It is a stickiness too, right? I remember years ago we were doing a highly accessible site, and one of the numbers I remember is something like eight to 15% of users are in some way visually impaired, but if you accommodate for that, then their loyalty is much higher than the common user loyalty, the average user loyalty. I would imagine this, I mean, you had said Gaby in the beginning, that was definitely true in your family. So it's not like you're getting parody when you reach out and do these things. You're actually getting loyalty above and beyond what the average level would be because you're making that effort.

Reid

It's a differentiator. It makes a difference. The affinity is strong there, I think, for sure. It's something you've got to consider.

Vinnie

So key things I've been hearing through this, and yes, this waxes and wanes throughout time and it becomes more important typically when there's new technology like Al. Also, it becomes more important when people get sued. We're not going to dive into regulation and all that, but just know that that's a part of it, that there are some expectations, especially for state, federal government, quasi government, and even with large companies, there is a growing expectation that these sites will be accessible and as well as multilingual. And so you'll get some landmark cases once in a while that also throws some dust up.

But what I want people to really take away from this is I don't want it to be like A, oh, you could get in trouble if you don't do this. People don't like spending money on that aspect. People like spending money on things where they know they're going to get a return on their investment, when they know it's going to increase brand loyalty, when it's going to have a positive impact on their bottom line, on the revenue side, not the risk side. So whether or not this is becoming more or less popular over time, we know that brand loyalty increases and it's significant. The numbers are out there. We also know that doing it right up front the first time has those unexpected dividends of making so many other things in your architecture easy to do. So it really is the concept of doing it well and correctly the first time while not over-engineering it. That's the balance. CapTech.

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Reid

I think that's right. And there's tools to help with both. And there's that human element though I think that's, Gaby, you touched on a little bit. You can't overlook that on internationalization or accessibility. And I think that helps get to the nuances that the tools and the technology, and we're going to continue to see how AI affects both accessibility and internationalization. But I think it definitely helps having both, but making sure we're communicating that up front.

Vinnie

How much of this is hand-wired versus handled by tools. So what's WordPress? I think you told me earlier today is 43% of all content managed websites are WordPress.

Reid

All websites out there, 43%.

Vinnie

That's amazing. How well do they do it?

Reid

So they have built-in tools to do it. They have built-in, they have an open source initiative to translate WordPress. And what I mean by that is translate the core of WordPress itself, which helps administer the site. Let's say I've got a mom-and-pop shop, and I've got a website presence and I choose WordPress. There's a lot I'm getting out of the box that if I'm not an English speaker, that how I go in and actually write content, make changes to my website, I have a translated experience. And they have a massive amount of effort gone into that. And when you think about the presentation layer, Vinnie, back to what we talked about around the architecture, they've separated the content from the presentation. So you can make sure that when you want to enable a localized language for Spanish, English, German, whatever it may be, they have that built in.

Vinnie

It feels like that's more static.

Reid

It can be dynamic though. Okay. And I think you have to understand where is your content coming from. And it may be, you mentioned this earlier, do you have third party integration type stuff, right? A lot of content though for mom and pop shop stuff can be static. But if you are, maybe you



have a retail presence and you're looking at Shopify, for example, as a e-commerce platform, they also have tools and plugins to help with some of that. Again, it's static though in small bits here and there.

Vinnie

I wish there was one place where I could handle it across all... My AI, my database calls, my static content, my fields on my forms, if that all could come from the same engine across my omnichannel and do it in one place, that would be ideal. I haven't seen that.

Reid

New product idea, Vinnie?

Vinnie

No.

Reid

Okay.

Vinnie

For somebody else, but I haven't seen that. I guess how disjointed is the implementation typically when you have a wide variety of interfaces?

Reid

Again, I think from what I've seen and experienced, I think you see a lot of that targeted per channel, whatever that may be. It's not as centralized as one might hope. I think the dynamic content, when you get into that, whatever that content may look like, you get a little bit more of that centralization 'cause I'm probably calling a content service to provide that. And maybe I'm integrating and maybe I'm doing some personalization that may tweak what's being sent back. So I think you can get a little bit more in the dynamic sector, depending on how you're consuming that content across channel. But a lot of that is presenting labels and smaller bits of content in the experience in more of a static way. And then it's a lot of, okay, I'm having my tools assist for a large part of that from a content generation standpoint and then I'm maybe checking it from some of the nuances, Gaby, that you've talked about.

Vinnie



So wrapping up, I think we're coming towards the end of our half hour here. Gaby, from a CX perspective, what would you tell your peers and other organizations to get them further down the path and getting their organizations to care more deeply about this? So you come in, you're a senior consultant, you're a manager, you're an associate somewhere at one of our clients. Does this become part of your everyday language? Do you do a lunch and learn? How do you affect change in your organization related to this?

Gaby

It all starts with a conversation. If someone's passionate about it and the organization start at a strategic standpoint, ask yourselves, have you truly evaluated our users and their needs and their current pain points and what that looks like when it comes to language in and of itself? Has that been supported? Starting those conversations strategically and seeing certain cases where inclusivity and accessibility can come into play and improve that in an existing-

Vinnie

I love how you abstracted it first, which is, do we really know our customer base? So I would start with that and say, what are our personas, what are our customer segments? Maybe even use some Al categorization to uncover customer groups we don't even know that we have. And then I guess across that portfolio of personas, are we addressing that community of users and people? And a large part of that would be multilingualism as well as accessibility, as well as other things. But I think it takes the single thing that we're talking about today and abstracts it into a portfolio of approaches to make sure that we're addressing all of our customers in the same way. That's great answer. Thank you. Reid, anything you would, from a technical perspective, advise people to look at, go after, do software architecture?

Reid

If you've never worked on an experience, whether that be mobile, whatever the medium may be, I think it's important just to get familiar with what that looks like. If you've never looked at a locale, what we talked about at the top of the podcast, I think just get familiar with it from that standpoint. Go and change your browser, change your settings on your desktop or mobile device. Just see what that looks like. And I think as you think about that from what we talked about between static and dynamic content, how would you affect your client and move the needle forward?

And again, it all comes back to, Gaby, what you're talking about. It's like, how do you know your customer? And I think if you start there, if you start with that human element first, and you think about, we're all humans here, how would you want your experience to be better? And from a multilingualism standpoint, I think it's important to start at the human element and the tools and the tech are going to follow. And I think we're seeing the advancements there. I think the Al content generation is going to be very interested to see from a dynamic content standpoint.



Vinnie
And just to be clear, I don't know that multilingualism is a word or a word that Gaby invented-
Gaby
Possibly.
Reid
Possibly.
Vinnie
But I'm going with it. The one thing I would add to that, Reid, is as developers, be intentional about where you're drawing the line between good software architecture and over-engineering.
Reid
That's right?
Vinnie
I err a bit on the software architecture side, so I really push that because if you're designing just for right now, you're going to pay the price later.
Reid
That's right.
Vinnie
And so it's less expensive to do it right the first time than it is to fix that long tail. And so without over-engineering, you can still do the right design. It's actually to decouple presentation and content isn't that hard anymore.
Reid
It's not.
Vinnie



Right. And so just doing things the right way, people have, I think, a misguided impression that it's always much more expensive and much more complicated. But with modern frameworks, it's kind of built in.

Reid

It is. It's built in. All of the major CMSs have it. We talked a little bit, Vinnie, about headless CMS, what that looks like, how you, again, separating the content from the presentation and that gives you that leg up.

Vinnie

Right. So we'll wrap up. Thanks for joining us again, and we'll catch you next time on another CapTech Trends podcast. Thanks for joining us.

Gaby

Thank you.

Reid

Thanks Vinnie.

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