

Upgrade path for a Monolithic Developer to a Composable Developer

SUGCON EUROPE 202

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#sugcon

Why we chose this topic?



Legacy

MVC

XSLT Renderings?

Web Forms?



SXA

OOTB Components

Custom Components

SXA Headless

Headless

Sitecore ASP.NET Rendering SDK

Sitecore JavaScript Rendering SDKs (ISS)

- Angular
- React
- •React-Native [Experimental]
- •Vue.js
- Next.js [Recommended]





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Group Director, Technology
11x Sitecore MVP



Sheetal Jain
VP, Technology
11x Sitecore MVP

SUGCON EUROPE 2023 Who are we? Horizontal Digital is a global digital consultancy specializing in delivering connected digital experiences exclusively on our platform of choice Sitecore.

Let's talk about you



- Go to www.menti.com
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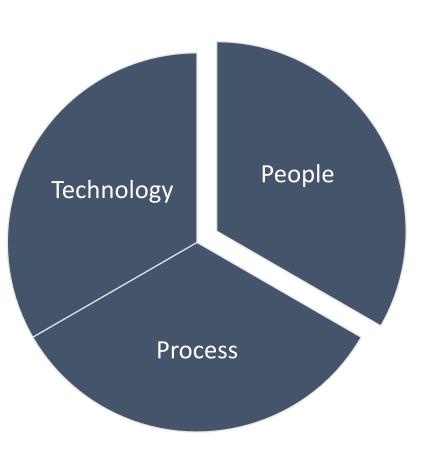






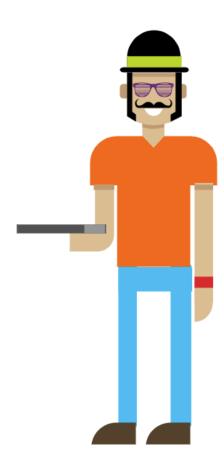
People - Monolithic







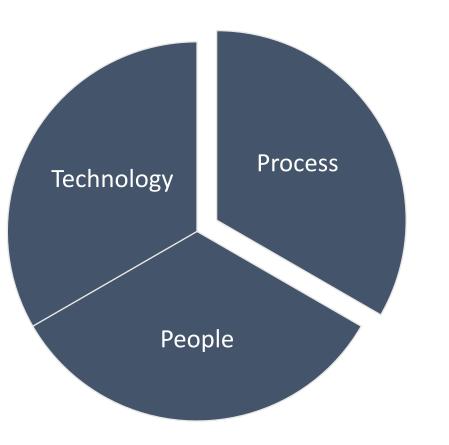
Back-End Developer

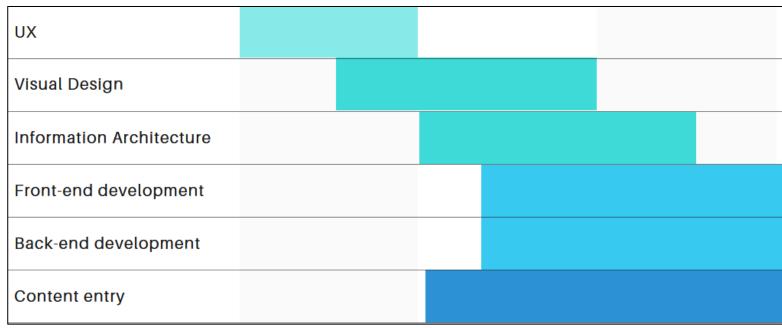


Front-End Developer

Process - Monolithic

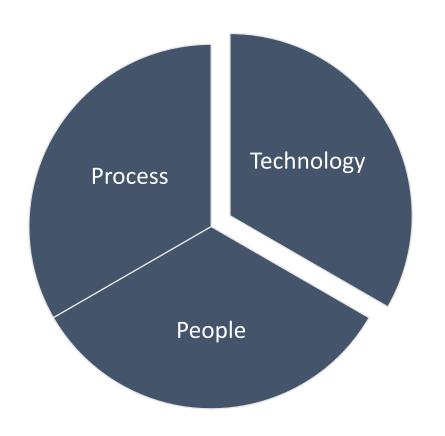






Technology – Monolithic





Core Technologies	Sitecore Products
XSLT [Legacy]	XM, XP, XC
C#	Item Web API
Web Forms [Legacy]	xDB and xConnect
MVC	FXM / PXM/ EXM
AWS	SXA
Azure	Sitecore Forms
Solr	SIF
PowerShell	Data Exchange Framework
ARM Templates	Sitecore Modules
Containers	Federated Authentication

Technology Landscape – Monolithic

Current **Delivery** Integration Data Exchange Framework **Commerce Experience** Content

On Prem/laaS / PaaS

Technology Landscape – Monolithic vs Composable

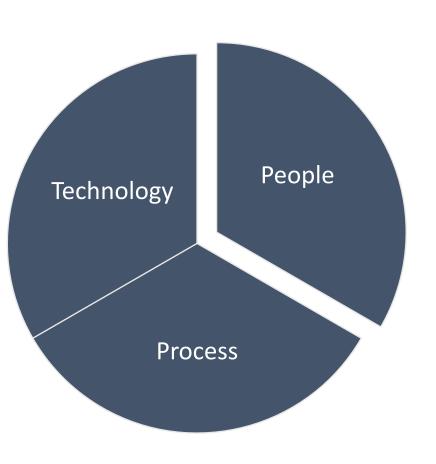
Composable Monolith Azure / AWS / CDNs **Vercel Platform – Static Site Generation & Hosting** MVC / SXA **Delivery** Frontend Applications (Next.js) - Deploy/deliver sites and experiences Sitecore Experience Edge - Content/layout & global delivery (Self / Sitecore Managed) **Sitecore Connect** Sitecore Modules Integration and workflow automation framework Integration Data Exchange Framework Discover **Order Cloud** Al Powered Commerce Search, headless, API-first commerce platform **Commerce** Merchandising and recommendations Sitecore Personalize **Sitecore CDP Sitecore Search Experience** Personalization & Testing **Unify Customer Data** Intelligent Search Experience Platform & (XP) Content Hub Ops XM Cloud Content Hub One Content SaaS based Content Ops & Enterprise SaaS based CMS Light Weight SaaS based CMS DAM

On Prem/laaS / PaaS

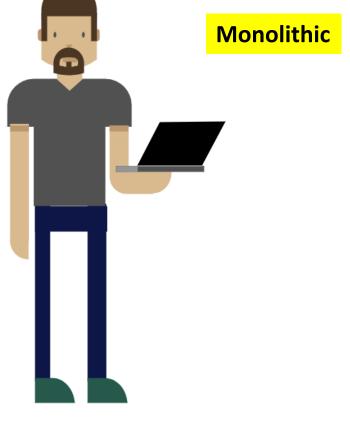
SaaS

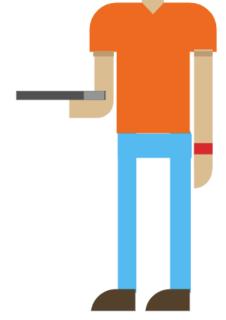
People - Composable









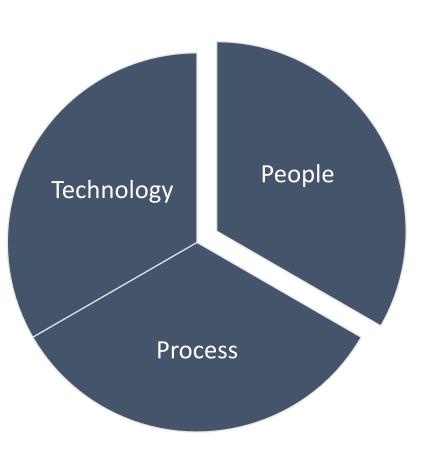


Back-End Developer

Front-End Developer

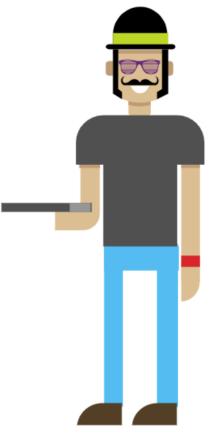
People - Composable







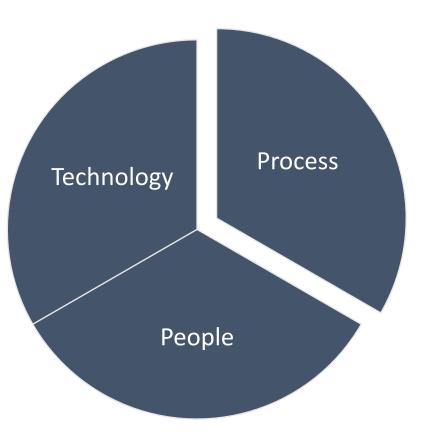


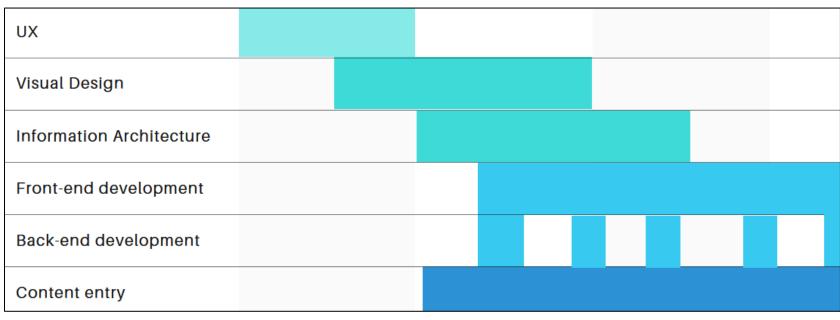


Front-End Developer

Process - Composable

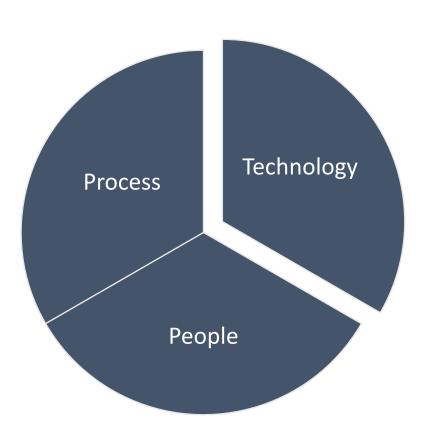






Technology - Composable

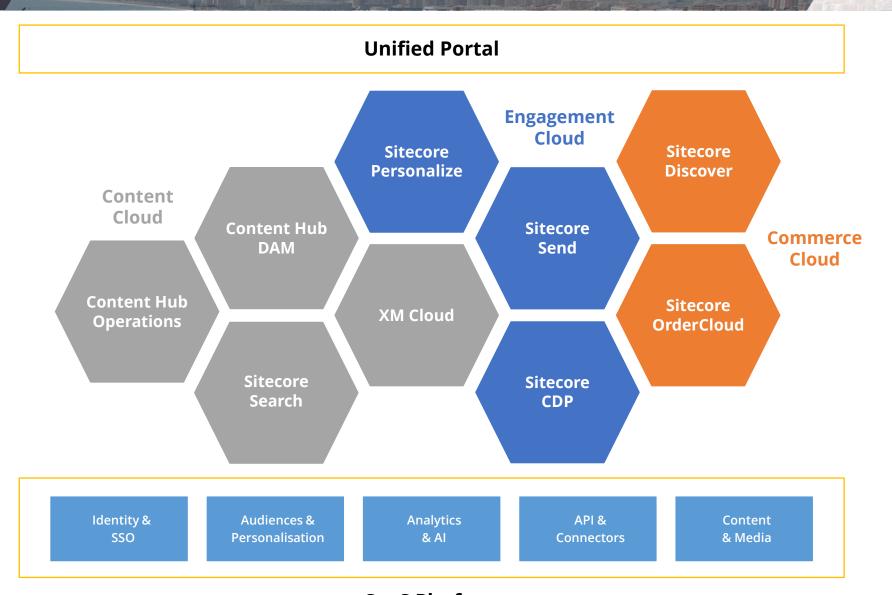




Core Technologies	Sitecore Products
Next.JS	XM Cloud
TypeScript	Experience Edge
C#	Sitecore Pages & Authoring API
React	Headless SXA
Tailwind CSS	Sitecore CLI
Vercel	Sitecore Search
CDNs	Sitecore Connect
Storybook	Order Cloud
Node	Discover
Java Script ES6	Sitecore Personalize and CDP
	Sitecore Send
	Content Hub One
	Content Hub Ops / DAM
This reconned https://ourope.curson.events/	

Composable DXP Architecture



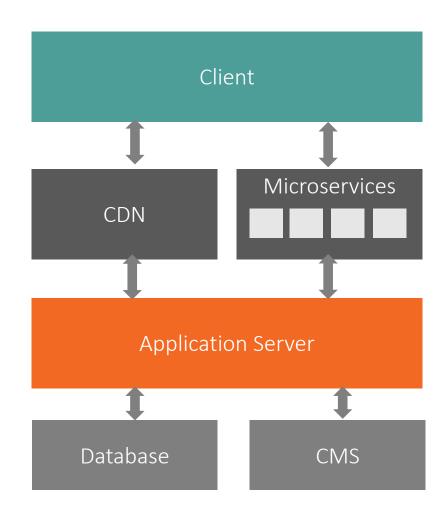




Jamstack



- Stands for Javascript, API, and Markup
- Jamstack is an architectural approach that decouples the web experience layer from data and business logic, improving flexibility, scalability, performance, and maintainability.
- It enables a composable architecture for the web where custom logic and 3rd party services are consumed through APIs.
- Benefits
 - § Performance
 - § Security
 - § Scalability
- Resources:
 - § https://jamstack.org/
 - § https://www.netlify.com/oreilly-jamstack/



Typescript



- TypeScript is a syntactic superset of JavaScript that adds static typing.
- Based on ES6 proposal (Let, Arrow, etc.)
- TypeScript is a language from Microsoft that builds on JavaScript.
- Benefits
 - § Type safety
 - § Benefits of OOPS concepts Maintainability, Reusability
 - § Better DevEx
- Resources:
 - § https://www.typescriptlang.org/
 - § https://www.typescriptlang.org/cheatsheets
 - § https://www.typescriptlang.org/docs/handbook/intro.html
- § https://www.w3schools.com/typescript/

```
Editor Checks Auto-complete Interfaces JSX

const user = {
  firstName: "Angela",
  lastName: "Davis",
  role: "Professor",
}

console.log(user.name)

Property 'name' does not exist on type '{ firstName:
  string; lastName: string; role: string; }'.
```

React



- React is an open-source front-end JavaScript library for building user interfaces based on components. It is maintained by Meta and community at large
- React lets you build user interfaces out of individual pieces called components. Create your own React components like Image, Card and Video. Then combine them into entire screens, pages, and apps.
- React is a library that lets you put components together, but it doesn't prescribe how to do routing and data fetching.
- https://reactjs.org/tutorial/tutorial.html
- https://beta.reactjs.org/
- https://www.w3schools.com/react/default.asp

Next.js

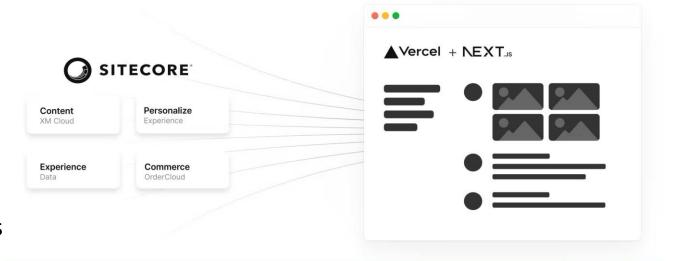


- Next.js is a React-based framework that builds server-side rendered apps. React is still the app's foundation, but the structure and navigational mechanisms the architecture are defined by Next.js.
- Next.js moves the rendering aspect to the server (Rendering at build time), so the client doesn't have to
 process that information. This improves performance and SEO because the server pre-renders the pages and
 then sends the final HTML to the client, resulting in minimal JS, which means less code to load.
- Pre-rendering has two approaches: Static Site Generation (SSG) and Server-side rendering (SSR). Static Generation is and will always be the best performance-wise. Pre-rendering means the page is generated at build time and re-used for every request. In practice, static pages are usually served over a content delivery network (CDN), making it super fast.
- Created by Vercel
- https://nextjs.org/docs/getting-started
- https://beta.nextjs.org/docs

Vercel

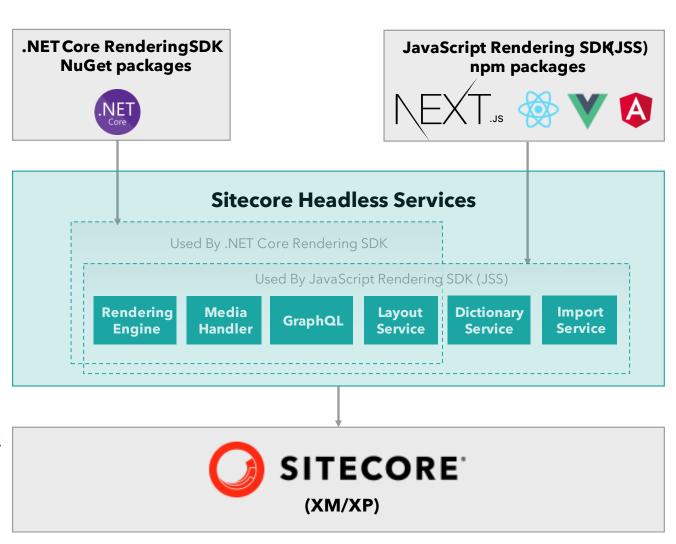


- Vercel is a cloud platform for building, deploying, and scaling serverless applications and static websites.
- Deployments run on Vercel's edge network, which reduces the load times of your web application, adds a caching layer, and even implements backend functionality via serverless functions.
- Built on cutting-edge serverless technology,
 Vercel can withstand any traffic spike, with automatic failover and global replication of assets.
- https://vercel.com/docs





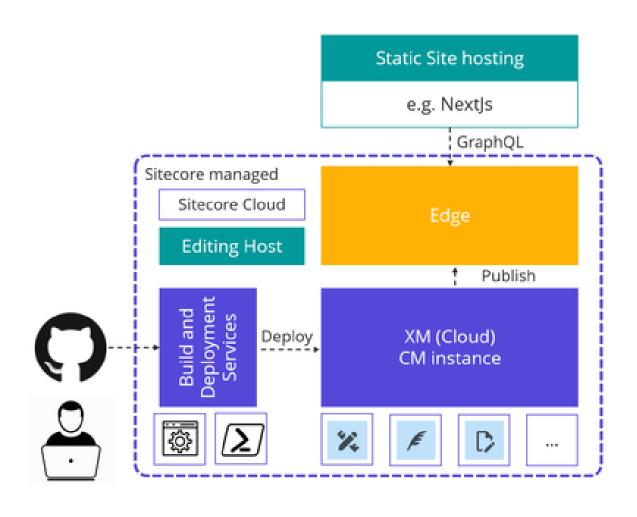
- A set of JavaScript packages and sample applications that add first-class support for JavaScript frameworks and enable the development of modern applications that consume Sitecore data.
- Benefits
 - § Abstractions
 - § Utility functions
 - § Support of advanced editors
- Resources:
 - § https://doc.sitecore.com/xp/en/developers/hd/211 /sitecore-headless-development/sitecore-javascript-rendering-sdks--jss-.html
 - § https://tothecore.sk/2020/08/28/sitecore-jss-learning-resources-getting-started-with-jss/



XM Cloud



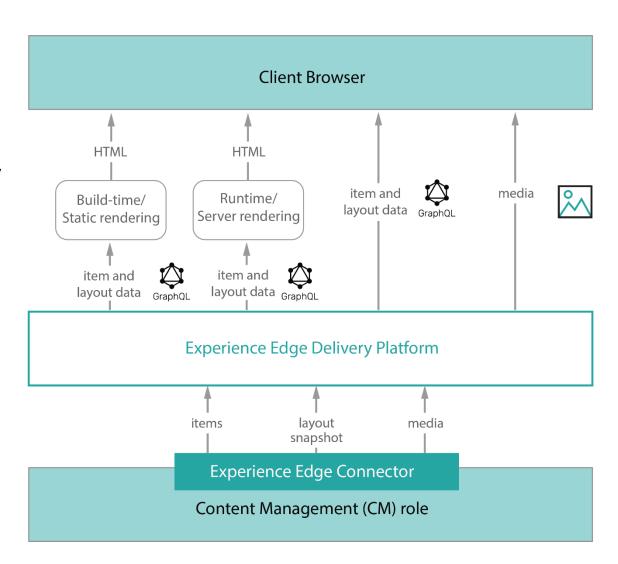
- Modern Headless CMS
- Fully SaaS
- Advanced tools Sitecore Pages, Explorer
- Benefits
 - § No Upgrades
 - § Lower Total Cost of Ownership (TCO)
 - § Performance
 - § Scalability
- Resources
 - § https://doc.sitecore.com/xmc/en/developers/xm-cloud/sitecore-experience-manager-cloud.html
 - § https://www.youtube.com/playlist?list=PL1jJVFm IGnzqYagW1Uah IBeqTIYSBQMc
 - § https://learning.sitecore.com/learn/learning plan/view/51/xm-cloud-for-net-headless-developers
 - § https://learning.sitecore.com/learn/learning_plan/view/50/xm-cloud-for-jss-headless-developers



Sitecore Experience Edge



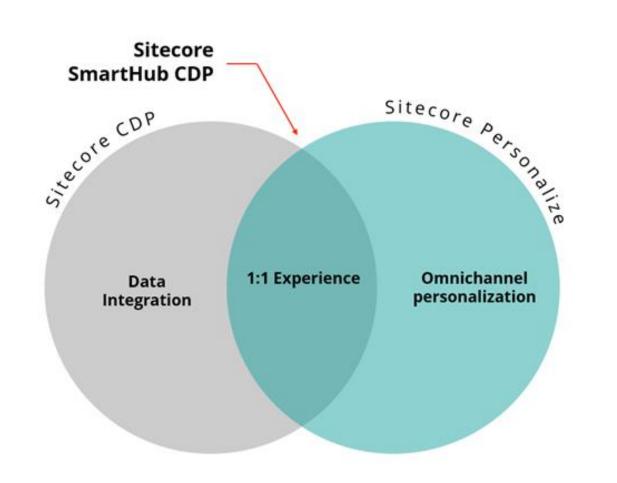
- It is Content as a Service (CaaS) platform that enables headless content delivery by utilizing the GraphQL API to offer high-performing content to any channel
- Sitecore Experience Edge allows you to more easily scale your content delivery needs, effectively replacing the need for your presentation layer to directly call the Sitecore Headless Services that traditionally run on a content delivery instance.
- For XM, XM Cloud and Content Hub
- https://doc.sitecore.com/xp/en/developers/101/d eveloper-tools/sitecore-experience-edge-forxm.html
- https://developers.sitecore.com/contentmanagement/edge-content-hub



Sitecore CDP and Personalize



- **CDP**: Unify and activate customer data to fuel your experience ecosystem
- **Personalize**: Create relevance in every moment with a/b testing and personalization
- https://youtube.com/playlist?list=PL1jJVFm IG nx-VFtQBFiOscKJhddMpp2s
- https://doc.sitecore.com/cdp/
- https://learning.sitecore.com/learn/learning_pl an/view/46/cdp-for-technical-users
- https://learning.sitecore.com/learn/lp/22/Pers onalize%2520for%2520Technical%2520Users



Would you like to share your learnings?



- Sitecore Human Upgrade
- Github repo (Slides will be available on this repo!)

https://github.com/klpatil/schumanupgrade

