



IBM Consulting

G-Cloud 15 IBM - Design Systems as a Service

Service Definition Document

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Design Systems as a Service (DSaaS)

- Design Systems as a Service (DSaaS) provides a scalable, standards-aligned approach to improving consistency, accessibility, and efficiency across all digital and service touchpoints. Our approach is rooted in actionable insights from analytics, AI-assisted accelerators, and user research. We create and manage the entire life cycle of a unified design system, aligned to the GOV.UK design systems and service standards.
- Our service places user experience and accessibility at the core of your organisation. Combining expertise in experience strategy, inclusive design, data and insight, and platform implementation, we help you accelerate transformation across the full service lifecycle, from discovery and design to delivery and continuous improvement. This enables teams to build faster, increase consistency, and maintain high-quality accessible experiences at scale.

01. Design with insight and value

IBM Design Thinking

We think the systems of the world should work in service of people. At the heart of our human-centred mission is Enterprise Design Thinking: a framework to solve our users' problems at the speed and scale of the modern enterprise.

When we shift the conversation from features and functions to users and user outcomes, we deliver more useful, usable, and desirable solutions.

02. Experience Strategy and Design

Experience design & development

We co-create and co-execute the experience strategy vision through detailed design, front-end development and original content creation, leveraging the latest in AI technology to accelerate time to value.

03. Deliver with agility and scale

IBM Garage™

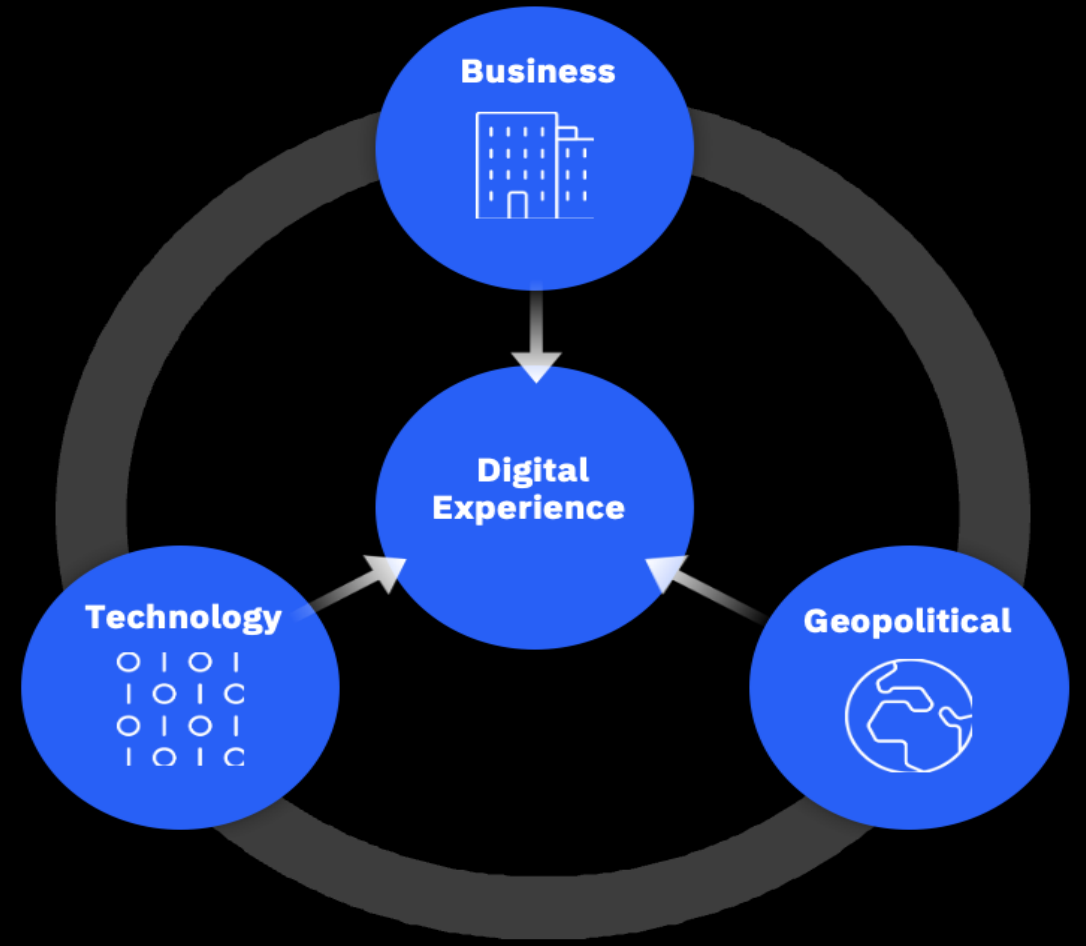
IBM Garage™ is an end-to-end model for accelerating digital transformation. It helps you generate innovative ideas and equips you with the experts, practices and technologies to rapidly turn those ideas into business value.

When you work with IBM Garage, you bring customer pain points into focus. You empower your team to take manageable risks. You adopt leading technologies, accelerate product development, and measure the value of everything you do.

Design Systems as a Service (DSaaS)

Companies are redefining the way they interact with consumers, partners, employees and stakeholders, **digitally**.

- Technology changing at an unprecedented rate and scope
- New competitors challenge status quo
- Growing emphasis on open platforms and experience ecosystems
- Technology empowered consumers redefine engagement and brand



Design Systems as a Service (DSaaS)

They orientate
towards offering
**holistic
experiences**, that
enable true and
long-lasting
engagement with
users

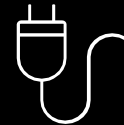
Automobile



Vehicle production

Mobility
experience

Electronics



Products

Being connected
experience

Healthcare



“Sick-care” system

“Well care”
experience

Insurance



Claims
services

Safety
Experience

Telecommunications

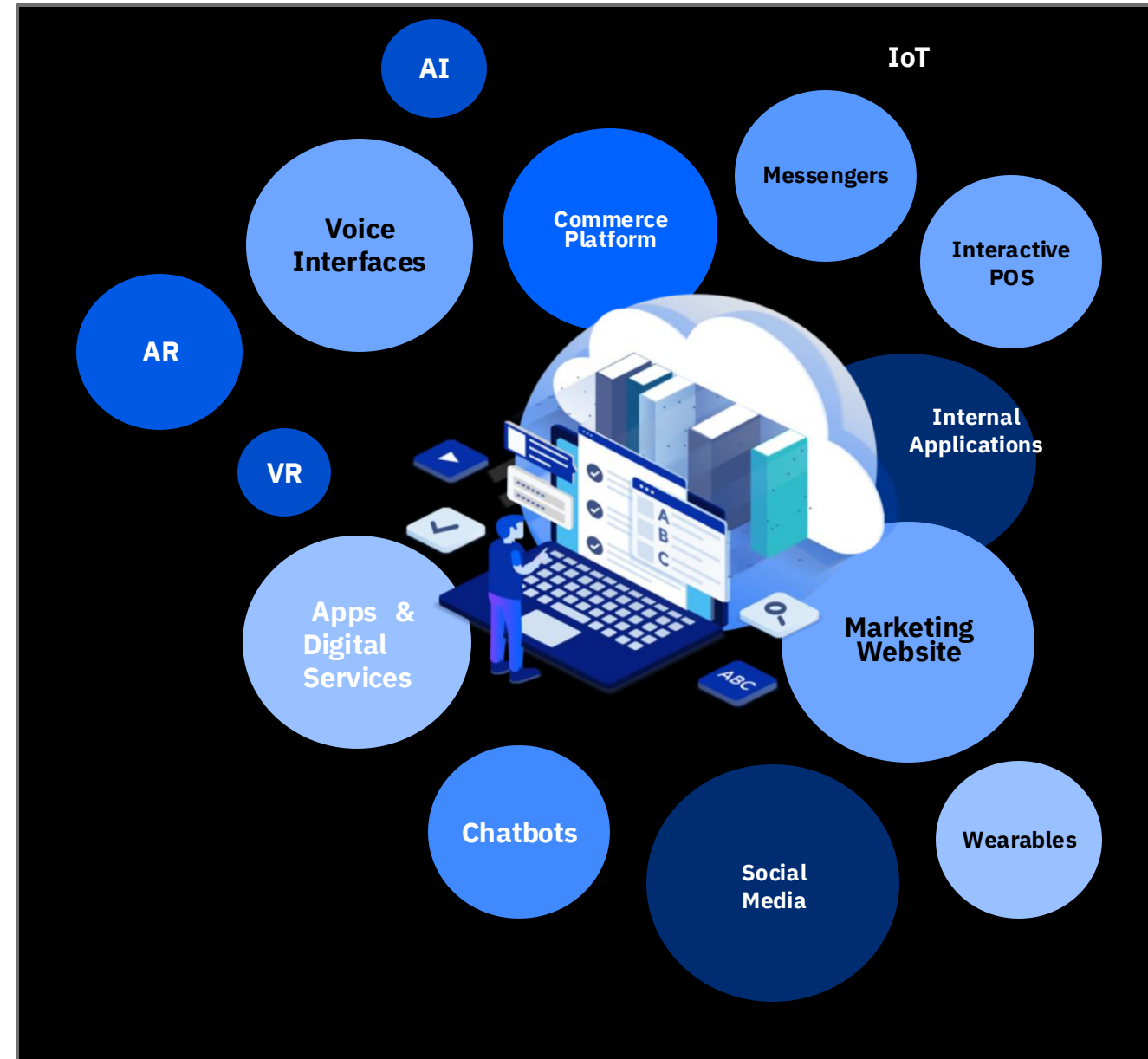


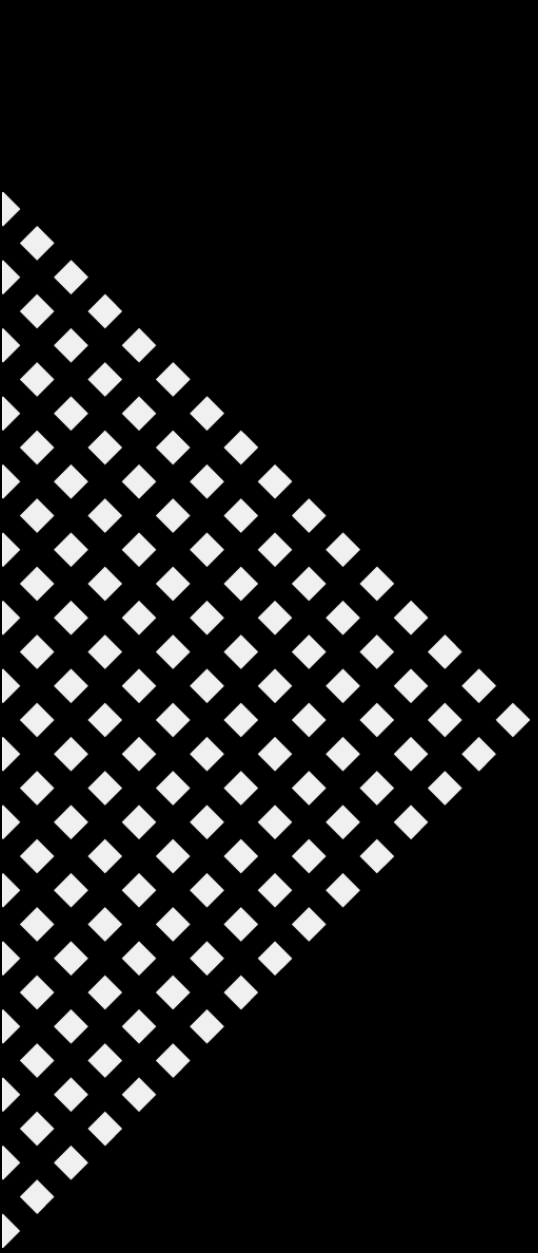
Engineering and
infrastructure

Communication
experience

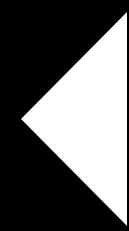
But designing experiences has become a complex task

- Fragmented touchpoints
- Fragmented digital ecosystems
- More design stakeholders
- More active users
- Emerging sub-brands
- International markets & teams
- Diverse screen sizes & resolutions
- Hardware with fast product lifecycles
- Operating systems, controls, browsers/platforms
- New ways of interacting (VR/AR/voice)
- Complex brand systems
- Emerging communication channels/platforms





A Design System is
an accelerator to
create better
experiences while
saving time and
money.



Design Systems: principles and patterns that enable teams to craft consistent experiences faster and at scale

Foundation

Guidelines set forth for all iterations of the system



Brand
Missions
and Values



Design
Principles



Brand
Guides

Design/Experience

Continuous growth and evolution



Global
Patterns



Components



Product
Style Guides

Digital Technology Kit

Applied Design Systems



Atomized
Structures



Illustrative Digital
Experiences



Prototypes

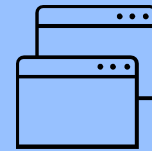
We take a human-centered and value-driven approach to engineering how an enterprise works and is experienced in the world.



Principles
Colors
Typography
Iconography



Patterns
Buttons
Drop-downs
Text fields



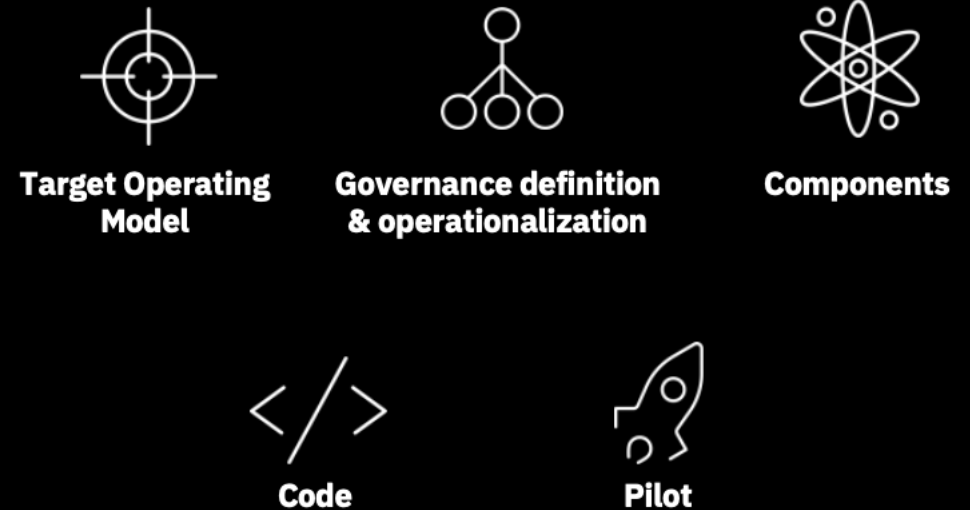
Login screens
Forms
Spreadsheets
Templates



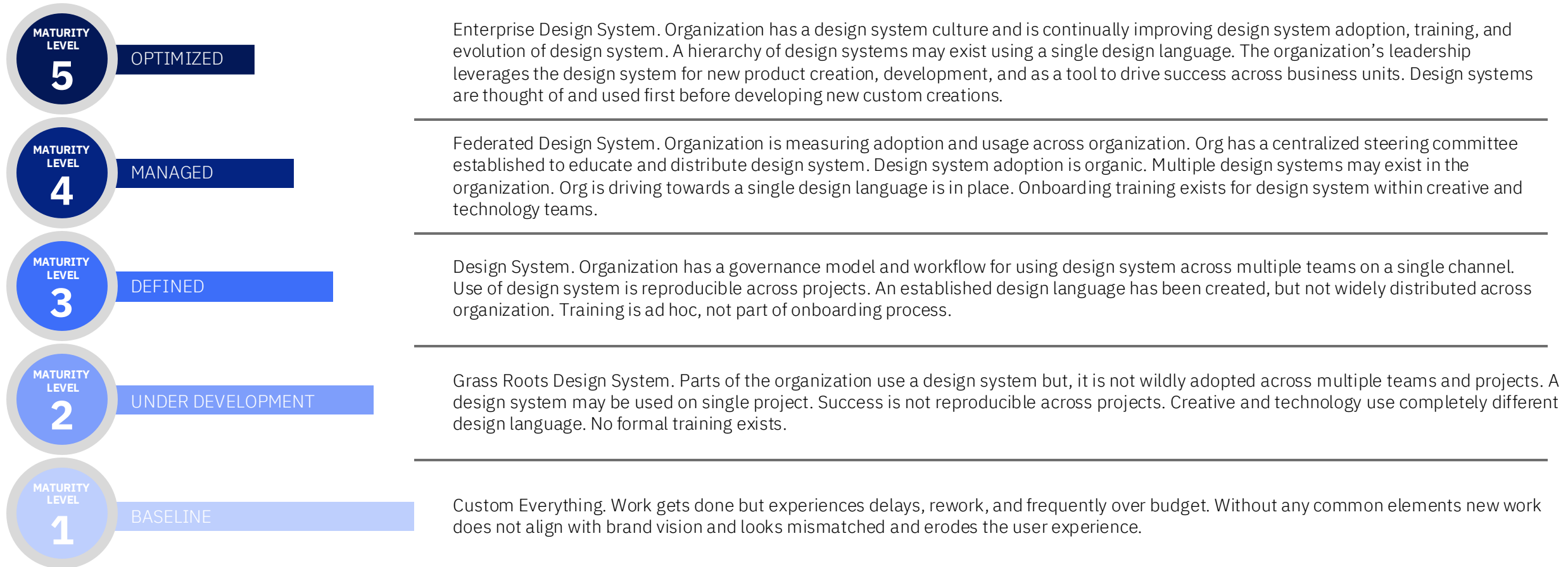
MVPs
Pilots
Best Practices
Governance

Governance –the key to success

- A Design System needs to evolve over time
- Iteration and constant development is key
- Design operations (DesignOps) need to be designed, too
- Think of a governance model for the maintenance and evolution of the Design System
- Set up a central design management team
- Ensure top-level attention, understanding and support



The Enterprise Design System Maturity Model

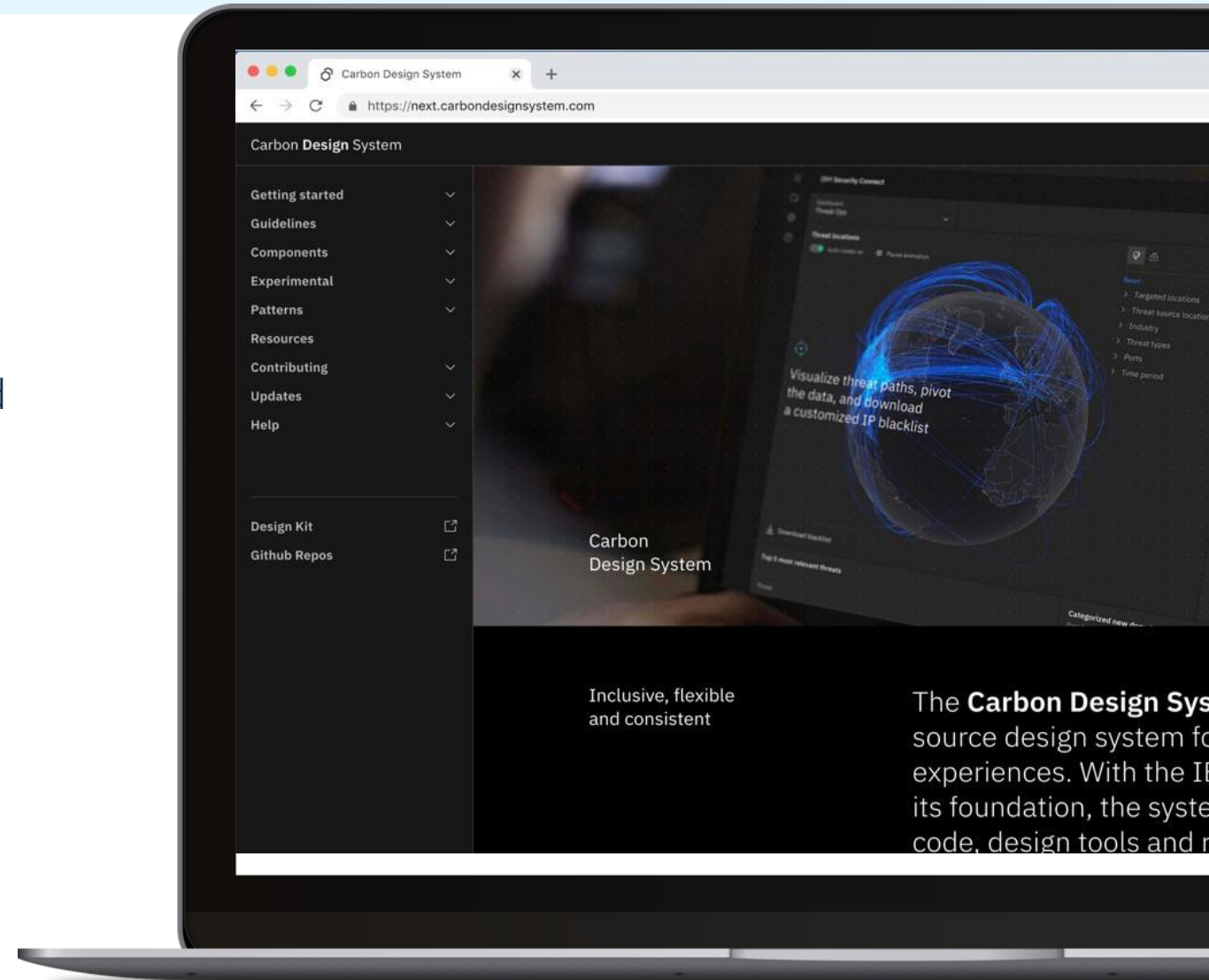


Carbon is IBM's own enterprise Design System

- Carbon is IBM's [open-source solution](#) to accelerate design and development for all IBM products
- Established by IBM in 2015, Carbon is currently used by [more than 100 IBM products](#)

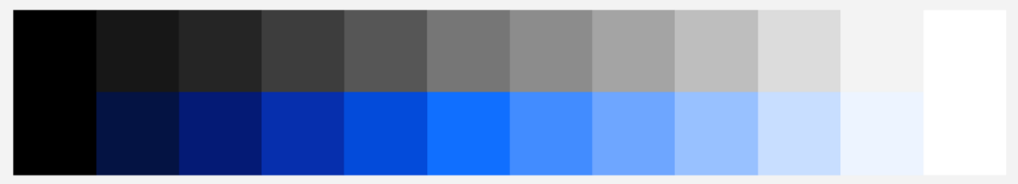
Carbon has won design awards, including HOW In-house design awards Best in Show

[Over 500 users](#) are actively using and contributing to Carbon on GitHub



Elements

Wmv	Xml	Zip	Accessibility	Activity	AddAlt	AddComment
WMV	XML	ZIP				
Add	AlarmAdd	AlarmSubtract	Alarm	Analytics	Aperture	Api
+						
AppSwitcher	Application	Archive	Arrival	ArrowDownLeft	ArrowDownRight	ArrowDown
ArrowLeft	ArrowRight	ArrowUpLeft	ArrowUpRight	ArrowUp	ArrowsHorizontal	ArrowsVertical
←	→	↖	↗	↑	↔	↕



IBM Plex Sans
IBM Plex Serif
IBM Plex Mono

Semibold (600)
Regular (400)
Light (300)

Accordion

Breadcrumb

Crumb 1 / Crumb 2 / Crumb 3

Button

Button +

Checkbox

☐☒☐☐

Code snippet

```
const Container = style
```

Content switcher

</>

Data table

Date picker

Dropdown

File uploader

Add file

Form

Inline loading

Skinning & Dark Mode

White

On

Off

0

100

18

Check option 1

Radio option 1

Primary button

Secondary button

Search

Lists are used to present multiple items vertically as a single continuous element. They can be configured for many uses such as a contacts list, nested lists, etc.

- Tokyo, Japan

- Edinburgh, UK

- Auckland, NZ

- St. Petersburg, Russia

Gray 90

On

Off

0

100

18

Check option 1

Radio option 1

Primary button

Secondary button

Search

Lists are used to present multiple items vertically as a single continuous element. They can be configured for many uses such as a contacts list, nested lists, etc.

- Tokyo, Japan

- Edinburgh, UK

- Auckland, NZ

- St. Petersburg, Russia

Gray 10

On

Off

0

100

18

Check option 1

Radio option 1

Primary button

Secondary button

Search

Lists are used to present multiple items vertically as a single continuous element. They can be configured for many uses such as a contacts list, nested lists, etc.

- Tokyo, Japan

- Edinburgh, UK

- Auckland, NZ

- St. Petersburg, Russia

Gray 100

On

Off

0

100

18

Check option 1

Radio option 1

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- Tokyo, Japan

- Edinburgh, UK

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- St. Petersburg, Russia

UX/UI Kits for Sketch & Adobe XD

+

+

+

Insert

Data

Create Symbol

Symbols

Text Styles

Forward

Backward

Zoom

91%

Group

Ungroup

Edit

Rotate

Mask

Scale

Flatten

Union

Subtract

Intersect

Difference

PAGES

Cover

Getting Started

What's New

Elements

Grid

Accordion

Breadcrumb

Button

Checkbox

Code snippet

Content switcher

Data table

Date picker

Dropdown

File uploader

Form

Link

List

Loading

Modal

Notification

Number input

Overflow menu

Pagination

Progress indicator

Radio button

Select

Slider

Spacer

Structured list

Tabs

Tag

Text area

Text input

Tile

Carbon Design Kit

10.0.0-beta

Document structure

This document has several sketch pages* as follows:

Page	Description
Cover	Library cover image
Getting started	Instructions on how to use the kit
What's new	An overview of what's been added to the kit since the last version.
Elements	The core visual styles of Carbon, including typography and color.
Grid	Preset artboards with the grid system for responsive web design.
Components	A collection of all assets that correspond to the Carbon Design System and Component Library.

Filter

Document

Apple iOS UI

Carbon Design Kit (1)

Carbon Design System V10-beta

iOS UI Design

01 primary

02 secondary

03 tertiary

04 ghost

05 danger

01 enabled

02 hover

03 active

04 focus

05 disabled

Button

01 primary

02 secondary

03 tertiary

04 ghost

05 danger

Button default - White theme

Button default - White Theme

Primary button (height: 40px)

disabled

hover

active

focus

disabled

Secondary button (height: 40px)

disabled

hover

active

disabled

Small secondary button (height: 32px)

disabled

hover

active

disabled

With icon

Icon size: 16 x 16px

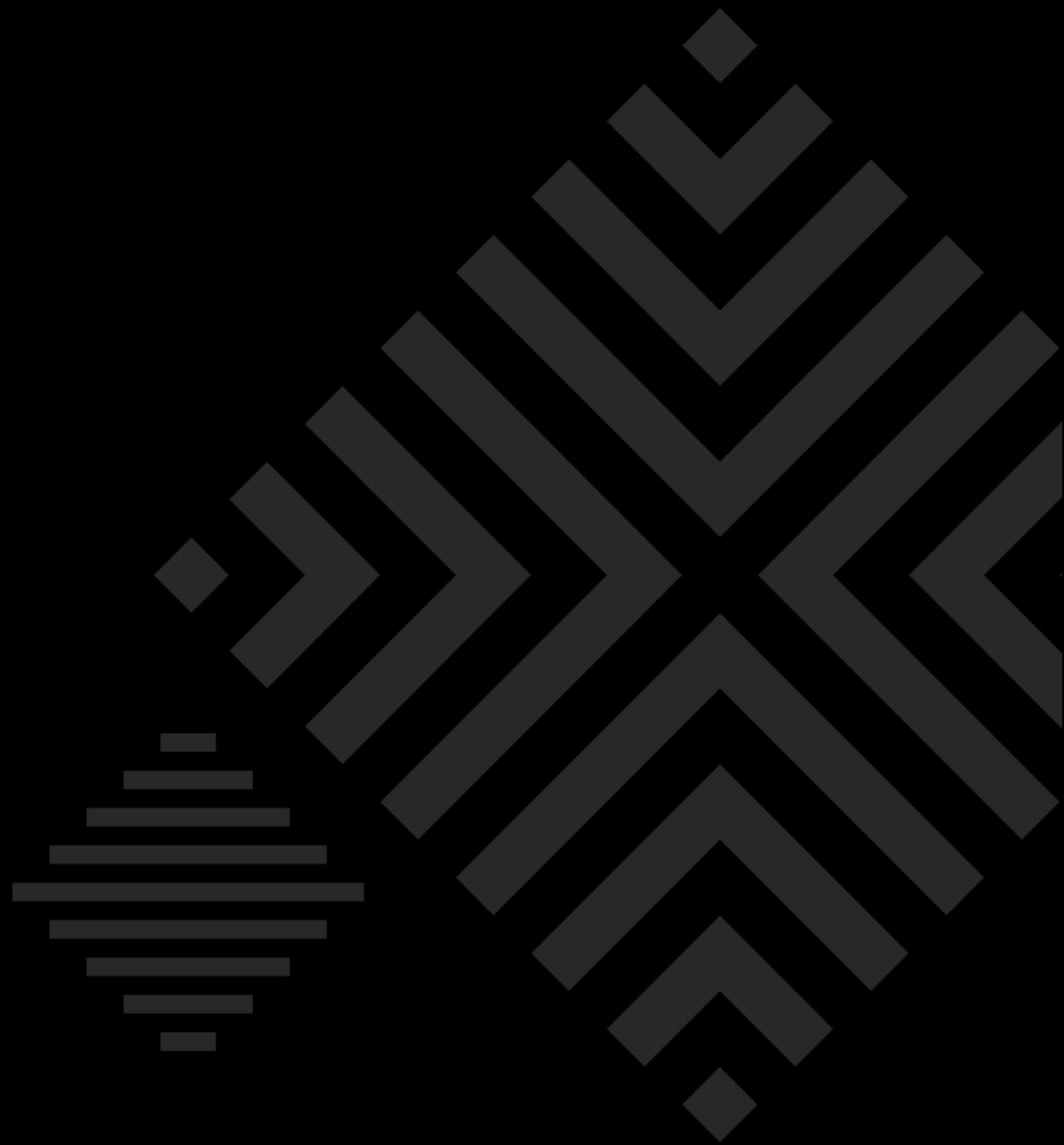
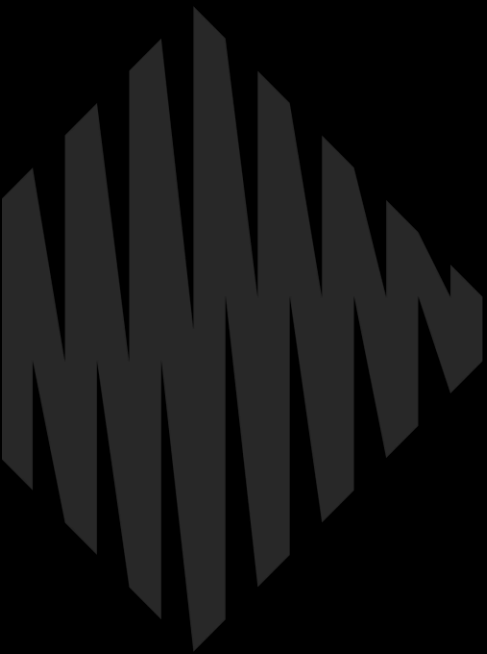
Icon color: Always white as text color

Shadows

Inner Shadows

Blurs

Our Recommended Approach



The IBM iX Approach – Overview

Design System engagement summary: UX and Design Thinking sessions will be used to align and create the blueprint needed for the evolution of a Design System that covers key business needs. The key outputs will provide recommendations on the evolution of a Design System approach, inclusive of governance recommendations for the purpose of maintaining and growing a Design System. Through this collaborative process we will build the rationale, value case, and form tooling/capabilities recommendations needed to implement the vision and transition you to a new way of working.

What you can expect (planned outcomes):

- An articulation of the vision and initial plan for implementation
- The identification of the technical ecosystem and enabling technologies for a successful deployment
- A high-level roadmap with prioritized initiatives
- Detailed requirements, business cases, technical assessments and related documents
- An initial organizational and governance structure

What we'll do (key activities)

- Review user/stakeholder research gathered to date
- Engage key SMEs
- Draft a Governance agreement
- Draft role-based problem statements
- Conduct an Enterprise Design Thinking workshop and document outcomes
- Complete a cross-brand UX inventory
- Map workflow/processes
- Produce initial DS documentation
- Assess current/future technology
- Develop value case

What you'll get (key deliverables)

- Discovery Results
includes research findings, conclusions derived from EDT/workshop activities, and narrative flows of the experience
- Governance model documentation
addressing the capabilities (technology, business/operating model, people and skills, etc.) needed to leverage and grow the Design System

Who'll be working (key IBM iX staff)

- Design/UX Craft Lead
- UX Designer
- Technical Architect
- Front-end Developer
- Business Analyst

Activity 1: Kick Off

Key Activities:

- Prioritization and download: an identification of priority experiences with a review of any existing brand documentation and key performance
- Governance: documenting the existing design & development process across the organization
- Stakeholder mapping: identifying key individuals, at both the brand and parent level who will have input and decision-making responsibilities through the process
- Assumptions and questions: a high-level group activity to document anything to be addressed or validated throughout the project

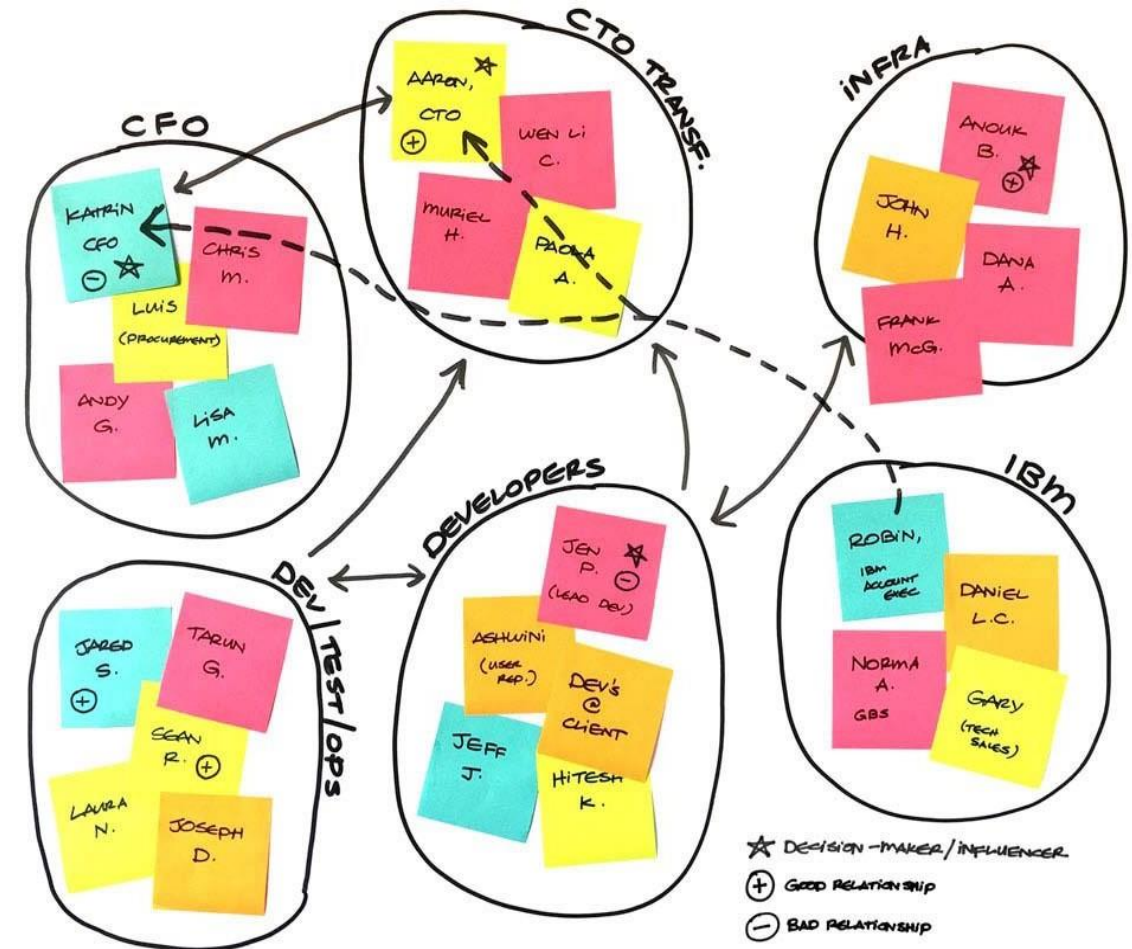
Key Outputs:

- Project plan
- Stakeholder maps – by prioritized brand
- Governance workbook – an initial model and process for maintaining and growing the system
- Initial role-based workflows – this will form the basis for user research as we start to understand current processes by brand

Getting started now:

- Select initial experiences to focus on
- Identify key SMEs/Stakeholders for project participation
- Gather brand and governance documentation and key performance metrics
- Gather any current brand level workflow process documentation

Stakeholder Map



Activity 2: DS Work Session

Key Activities:

- Play back of initial workflows/stakeholder maps: validation and or refinement across prioritized brands
- Hopes and fears: identify concerns and or issues that may need to be addressed within the process
- Identification of brand level cross-disciplinary resources for UX audit exercise
- Alignment on UX inventory audit process and documentation of up to 4 experiences

Key Outputs:

- Refined role-based workflows
- Refined stakeholder maps
- Documented hopes and fears
- Role-based need statements

Key Accelerator:

- Enterprise Design Thinking workshop

Activity 2.5: Design & DevOps Workshop

Key Activities:

- Map current standard operating procedures—process mapping and value stream from concept to live production experience
- Document current creative/marketing/content creation process
- List technologies, systems of records and measure lead times
- Document current technology code repositories and standardized development practices

Key Outputs:

- Current state process map
- Current state value stream
- Current state system of records map

Key Accelerator:

- Enterprise Design Thinking workshop

Activity 3 : DS Work Session

Key Activities:

- UX inventory review
- Alignment on core versus extended elements across brands
- Gap analysis against current system documentation
- Component mapping
- Prioritization grid against outlying elements
- Creative tooling and process alignment

Key Outputs:

- UX audit/component map
- Alignment documentation
- Gap analysis to inform the DS backlog

Key Accelerator:

- Enterprise Design Thinking workshop

Ways of Working

On-Site or Remote

We will primarily work remotely, in as connected a way as possible. Leveraging multiple collaboration tools (Mural, Webex, Slack, etc.) and proven IBM best practices for remote co-creation to break down physical distance issues.

Accelerators

We will leverage accelerators as much as possible. Adapting processes, techniques and IBM resources (EDT, the IBM Carbon Design System model and documentation, etc.) to increase efficiencies across the engagement.

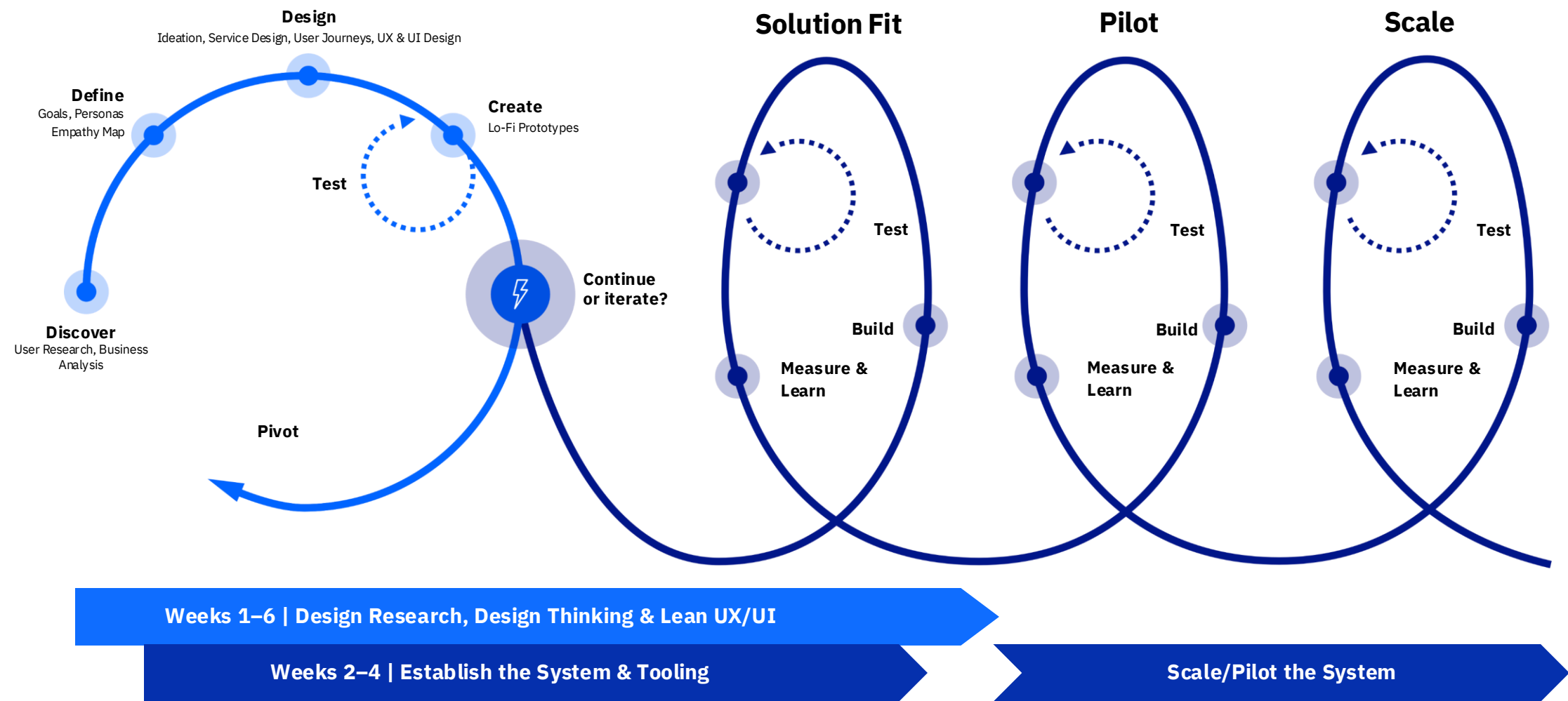
Artifacts

We will use our artifacts to gain and maintain alignment through the process. This works best when those artifacts are fully accessible to the team, either physically or digitally, dependent on the team's location.

Playbacks

On a normal weekly cadence we strongly recommend playbacks to walk through the team's progress in order to keep everyone aligned on status, while providing ample opportunities for the broader team's feedback.

Iterate & Optimize



Key Roles and Resources

Organization	SME	IBM Contribution
IBM	Technical Architect	Architect responsible for all pieces and parts that comprise the presentation layer of the experience. Responsible to priorities and directives set forth by solution architect.
	Front-end Developer	Front-end developers across the syntax and skillset of technologies in place. These individuals are responsible to delivery managers and architects and are able to effectively execute tasks that have complete requirements gathered as a pre-requisite to development.
	Design/UX Craft Lead	The Design/UX Craft Lead is responsible for the leadership of UX, Ui, and copy resources throughout the process, ensuring that the deliverables are aligned with overarching brand design principles while acting as a primary point of escalation.
	UX Designer	The UX Designer's primary role is to translate the brand and brand's design principles into brand/experience UI patterns working with the front-end development team. They are also responsible for the creation of any necessary design libraries to be used as a primary tool of any designer who consumes the Design System.
	Business Analyst	Documentation specialists who can write requirements across any number of applications based on the fact that systems are well documented to begin with.
Your resources	Product Owner	Liaison to the business owner and stakeholders on business requirements being met through implementation.
	Design System Architect	Centralized UX Lead who is responsible for decisions, workflows and Design System evangelism. Works with experience architect and design teams to establish the patterns and usage of design system
	Design/UX Craft Lead	The Design/UX Craft Lead is responsible for the leadership of UX, Ui, and copy resources throughout the process, ensuring that the deliverables are aligned with overarching brand design principles while acting as a primary point of escalation.
	UX Design	The day to day Brand UX Lead plays a pivotal role in the development of a Design System. They assist in leading UX work sessions, participate in the overall UX inventory to assess key system deltas, and align the initial component mapping exercise.
	UX/UI Designer	Representing the team that will ultimately take advantage of the system, the day to day Brand UX/UI Designer's primary role is to assist with an understanding of the current work process and ensure that the system ultimately meets the teams needs.
	Front-end Developer	These individuals are responsible to delivery managers and architects and participate to ensure there is understanding an alignment on meeting the daily needs of the front-end dev team.
	Enterprise Architect	Architects with focus on specific capabilities or applications within the ecosystem. Many architects focused on the components that make up the core commerce solution ecosystem.

