# Supplement 1

## Enterprise Web Design and User Experience
### Design, Creative and Implementation Expertise

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# 1. Business Background and Overview

## 1.1. Background and Introduction

The State maintains several solutions that have been implemented to serve the core needs of the State Enterprise by way of common platforms that most, if not all, State Agencies, boards and commissions utilize on a daily basis in performing the "business of the State" – delivery of services, support and value to Ohioans and Ohio Businesses. Over the past six years, the State – via the IT Optimization Program - has consolidated many core IT business functions and as part of the program has included several essential IT Innovation Platforms in the Optimization Roadmap. They include the State's digital engagement platform known as the **Ohio Digital eXperience ("ODX")**, currently under development that once implemented will be the "bridge" between the State and our constituents (customers) in a modern, digital and mobile world.

The State seeks, via this competitive solicitation, to identify one or more Offerors that have the requisite skills, experience and capabilities to support the State in the design and creation of unique branding, user interface and navigation elements of State Enterprise and Agency websites that foster better relationships between the State and citizens, businesses, service providers and suppliers that interact with or depend upon the State.

Projects and additional work will be solicited competitively via structured statements of work (SOW) to pre-qualified Contractors awarded Contracts as a result of this RFP. Details including specific Service Level Agreements (SLAs) and additional terms and conditions will be part of each solicitation.

## 1.2. State Applications and Public Technology Overview

The State applications portfolio, at the highest level, is characterized as follows:

- State developed / custom applications;
- State purchased software applications (commercial off the shelf software (COTS));
- State "as a Service" solutions provided by State suppliers in support of the State mission; and
- Emerging Cloud-Based Solutions (e.g., Salesforce, ServiceNow, Office365, collaboration and workgroup enablement applications).

In total, the State maintains more than 2,600 applications in its portfolio. Many of these applications regularly are presented to the public (via State websites) to support Agency missions. These applications are under regular review for update, upgrade, replacement, "mobile enablement" and retirement.

## 1.3. State Standard Development Environment and Portal Technology (ODX Toolkit)

The State maintains a highly functional web design, development and integration environment that is aligned and compatible with underlying State applications and is based on the following software elements:

### 1.3.1. General Standards

- CSS, Java, Bootstrap, Java Script, Framework/Libraries such as VUE, NODE, ANGULAR

### 1.3.2. State Customer Experience Suite

- IBM WebSphere Portal Server V8.5
- IBM WebSphere Portal Personalization V8.5

- IBM WebSphere Portal Search V8.5

- IBM WebSphere Application Server Network Deployment V8.5.5

- IBM DB2 Workgroup Server Edition V10.5

- IBM Watson Content Analytics V3.5

- IBM Tivoli Directory Integrator Identity Edition V7.1

- IBM Security Directory Server V6.3

- IBM Web Experience Factory Designer V8.5

- IBM Web Experience Factory V8.5

- IBM Connections Content Manager Extranet V5.0

- IBM Connections for Extranet V5.0

- IBM Web Content Manager V8.5

### 1.3.3.  Collaboration and Interaction

- IBM Sametime Limited Use V9.0

- IBM Sametime Proxy Server V9.0

- IBM Sametime System Console V9.0

- IBM Sametime SDK V9.0

### 1.3.4.  Forms and Designs

- IBM Forms Viewer V8.2

- IBM Forms Server V8.2

- IBM Forms Designer V8.2

- IBM Forms Experience Builder V8.6.1

- IBM MobileFirst Platform Foundation Enterprise Express V7.0

### 1.3.5.  Integration Elements

- IBM DB2 with BLU Acceleration Pattern 1.2.2

- IBM Web Content Manager

- Oracle SOA and BPM Suite with Oracle Integration Cloud Services

- Tableau

It is essential that Offerors demonstrate prior experience with, and expertise in these technology elements as part of their Proposal. Section 3. contains specific response requirements pertaining to these technologies.

## 2. General Scope of Work

The State has created a generalized methodology to support Ohio Digital eXperience (ODX) projects as follows:

- Digital Concept and Design
- Design Prototyping / User Feedback
- Architecture / Integration
- Website, Mobility and ADA Factors
- Development and Testing
- Deployment

The State acknowledges that this is a generalized methodology as to convey to Offerors the State's general approach and orientation to the work. The State further acknowledges that different Offerors may have different approaches and development methodologies that are specific to the Offeror. Offerors must, as part of their response, either elaborate on the State's general methodology or augment/align their methodology to this general orientation as to demonstrate to the State that the work performed by the Contactor is:

- Well understood by all project participants;
- Affords all parties "early experiences" and the opportunity to comment, correct and guide the work prior to significant effort being expended on development activities;
- Is well structured and controlled to allow all parties the ability to monitor the work efforts of a project, by phase and development element to measure progress and maintain the overall project plan and delivery schedule; and
- Sufficiently integrated with State systems and platforms and allows all parties to validate and test the end-to-end result of a website ➔ application ➔ data and customer interaction / user experience.

### 2.1. Digital Concept and Design Requirements

The Contractor must collaborate with the State to plan, develop and conduct the migration of State Agency systems and websites to the ODX solution. Adoption must include the migration and/or integration of processes and data, including currently existing capabilities and locations, to the Contractors solution as required by the State.

The Contractor must:

- Establish a definitive work plan for State approval;
- Thereafter manage all Contractor resources and responsibilities as contained within the workplan and escalate any issues to the State for resolution;
- Provide a Digital Design Concept for State approval that includes all elements (e.g., look/feel, navigation, user input/presentation, application and data integration, static/dynamic content, branding and other identified elements) as agreed upon with the State;
- Include obsolete/broken/missing content and links; and
- Provide wireframes and mockups as agreed with the State.

Obtain written State approval on the aforementioned elements prior to moving to detailed design, prototyping and user feedback information sessions.

## 2.2. Design, Prototyping and User Feedback Incorporation Methodology

The State has determined that expert level web design, development and integration services is essential to conceptualize, organize, phase, specify, oversee and refine/embellish the overall roadmap for ODX-based digital solutions.

As part of performing work, the Contractor must provide leadership and communications to State Agencies in the formulation of an overall strategy for the ODX solutions that results in a "step change" in capabilities as follows:

- Ohio Agencies that utilize (or should utilize) ODX platform offerings to conduct and transact business;

- Ohio Agencies should depend on the ODX offerings for new or existing business functions;

- Develop and lead active design and user feedback sessions with Agencies and other pertinent parties that will be called upon to participate in or are required to participate in a project; and

- Collaborate with the Agency in the development of a project, phasing and execution strategy that factors in all of the aforementioned attributes.

The Contractor must, using the State ODX Toolkit, design and implement the following user experience requirements as part of any Project:

- Conform to use the current State branding conventions and styles (in general) as represented on the Ohio.gov website inclusive of headers, footers, color schemes, content placement and general navigation conventions;

- Utilize unique branding, style sheets, logos and service marks, fonts, colors, typestyles, messaging and imagery (specifically) as provided by the State or a State Agency for use with a user experience project – collectively "look and feel"; and

- Consistently apply branding, look and feel, wherever possible, throughout a user experience project to convey a consistent, professional, intuitive and coherent presentation of all functions and data.

As part of any project, the State seeks a redesign of a user experience project in a manner that conforms with the overall branding, look and feel and user interface requirements in this Supplement and leverages the State ODX toolkit, retires non-standard HTML/CSS and other presentation elements.

The Contractor must provide a graphic web style/designer as part of any project to establish fundamental branding, logos, color schemes and other pure "look and feel" elements specific to the Agency (or Agency Project) as to support the importance and consistency of a fully modernized user experience.

As part of any project, the Contractor must identify any obsolete, missing or broken links on State websites, documents or other artifacts that are no longer relevant, required or supported by the State. Upon obtaining written State approval, the Contractor must either eliminate such links or repoint links to more contemporary/appropriate content provided by the State.

The Contractor must design and implement the following requirements as part of the overall Project to allow authorized State administrators to:

- Integrate help functions within content across the site, presentation areas, transactions and transaction details as required;

- Be able to define publication and expiration dates for specific content;

- Configure content deployment for all user channels (e.g., web, mobile, tablet);

- Create and maintain content for each compliance area including drafts, drafts for approval, drafts for preview, published (displayed) and obsolete content (not displayed);

- Maintain version control for knowledge based articles or other system contents;

- Define/display business rules by functional area including the calculation rules for transactions;

- Define stylesheets, embedded links and files, media, and enriched text;

- Upload and store documents while preserving native formatting and graphics; and

- Store attached documents that will be interfaced to the respective external Agencies and application(s).

## 2.3. Information Architecture / Integration Requirements

The Contractor must design and implement State integration requirements as part of the overall Project. In general the websites must be designed and implemented to:

- Obtain and present data from Agency systems in real time including integration with various Agency systems as per defined scope of business transactions;

- Integrate and validate data with any respective interfacing applications and/or State systems;

- Integrate with Agencies for content alerts and notifications that need to be displayed to users, as a group or as individuals;

- Provide a centralized way to monitor, manage and log all integration transactions from an Agency application;

- Allow all authorized administrators to generate an integration error summary report that includes, but is not limited to a list of integration errors between the website and Agency/Enterprise application;

- Display and generate reports of transactions that were successfully or unsuccessfully completed;

- Include audit capabilities and be able to produce transactional reports, as per the State's audit needs;

- Provide integration logs of all activities that capture and report on transactional statistics in a readable and reportable format;

- Integrate with eSignature/Digital Signature software as required by Agencies. When an Enterprise eSignature Standard is defined at a future date, integrate with the State's eSignature/Digital Signature platform standard (note: Offerors may assume a web-services based integration for purposes of their Proposal);

- Support real-time address validation using the State's address validation and geo-location services;

- Integrate to store and retrieve structured documents (e.g., PDF, Common Microsoft formats) with the State's Enterprise Document Platform based on Hyland OnBase™; and

- Define integration transactions with State PCI compliant Service Providers, to allow users to transact with their saved credit card and banking information without storing this information in a State system.

## 2.4. General Website, Mobility and ADA Requirements

The Contractor must provide, design, implement, test and support State acceptance of website(s) or website elements that meet the following requirements:

- The website, once established, must be submitted to the Search Engine Optimization (SEO) sites to assist members of the public in finding the site(s) within the State using relevant search terms from leading search engines (e.g., Google, Bing, Yahoo) using various combinations of State provided business terms as search key term fragments.

- The website must not include any 3rd party advertising, nor trigger the display of advertising as "pop-ups", "pop-unders", floating text or other means.

- The website must not include any proprietary or service marks of the Contractor (e.g., copyrights, trademarks, branding or other elements) visually or within provided code or web elements.

- The website must not collect, or be used to harvest identifying details pertinent to non-authenticated / anonymous access (e.g., "general browsing sessions") that are unique to a member of the public or business. General browsing and navigation tracking is permissible as to be used to optimize site navigation and display from common browsers (e.g., Mozilla Firefox, Chrome, Internet Explorer, Edge and Safari).

- The website must be designed and implemented to ensure that all external user facing components are compliant with the Americans with Disabilities Act (ADA) Section 508.

- The website must be Mobile-responsive to allow browsing from mobile devices (e.g., Android, Apple smartphones and tablets) based on the display capabilities of the device using contemporary mobile browsers (e.g., Safari, Chrome, Internet Explorer, Edge and Firefox).

- The website may not use, disclose or otherwise make available to any party any registered user data, banking information, contact details including email addresses or physical address information for purposes of marketing, advertising, soliciting or requesting information from any user except as part of participation and completion of State Business.

## 2.5. Development and Testing Requirements

**Development**

Based upon State approved designs, the Contractor must perform the Development/Build of interactive content for State Enterprise and Agency portals and sites on a portal platform supported by and integrated with Enterprise or Agency applications including:

- Portal and Website on ODX (IBM Customer Experience Suite)

- CSS, Java, Bootstrap, Java Script, Frameworks/Libraries such as VUE, NODE, ANGULAR

- Enterprise Application and Front-end

- Leverage and Extend the ODX Digital Toolkit with a Ohio specific Bootstrap implementation

- System integration using webservices while leveraging the State's Service Oriented Architecture / Enterprise Service Bus (SOA/ES)

All build designs must include, where applicable based on the size, complexity and requirements of the system(s), supported server(s) or Application(s), design of files, databases, forms, user interfaces, reports, security, system performance and availability instrumentation, audit trails of the transactions processed, provision for parallel testing, development and provision for on-line viewing of reports.

As part of the development process, the Contractor must:

- Assess current Agency processes and system solution gaps and dependencies;
- Implement user experience solution requirements as follows:
  - Design the user interaction model which defines applicable standards, workflows, and Ohio-specific designs;
  - Design the State worker interaction model which defines applicable standards, workflows, and Ohio-specific designs;
  - Design reports and forms;
  - Design integrated solution components and interfaces or data exchange method(s) to State systems; and

- Design logical environment, data and code conversions / migrations, processes and procedures as agreed necessary.

- Document design specifications and work with Agencies to create applicable completion criteria in accordance with meeting system go-live requirements;

- Conduct quality and progress reviews with appropriate State personnel;

- Establish configuration and user acceptance test plans;

- Coordinate and confirm with the State the solution design specifications and applicable completion criteria; and

- Provide the State with weekly reports tracking the progress of the Contractor's design work. In addition, the Contractor must provide timely responses to requests for information and reports necessary to provide updates to stakeholders.

**Testing**

The Contractor, as part of supporting unit testing and subsequently the State's acceptance of work must:

- Conduct quality and progress reviews with appropriate State / Agency personnel;

- Document State and Agency approval of project components and verification of applicable completion criteria for transition into deployment and production;

- Provide the State with reports on a weekly basis tracking the progress of the Contractor's execution of unit testing work, or in the case of State acceptance testing; and

- Provide timely responses to State and Agency requests for information and reports necessary to provide updates to Agency users and State stakeholders.

## 3. Required Offeror Proposal Submissions

After each of the following four sections (3.1-3.4), provide all of the requested detailed information that will be evaluated as part of the Offeror's Proposal.

### 3.1. Representative Websites (Overview)

The Offeror or proposed subcontractor(s), must provide a portfolio of websites developed within the past five years that are representative of the full capabilities of the Offeror or proposed subcontractor(s) including, but not limited to: concept, design, branding, user interface, user/experience, mobile responsiveness and other unique, innovative or novel creative elements.

For each provided example, the Offeror must provide a summary of:

- Client Objectives as a Result of Engaging the Offeror;

- Implementation Timescales / Time Periods in light of the State general methodology:

    - Digital Concept and Design

    - Design Prototyping / User Feedback

    - Architecture / Integration

    - Website, Mobility and ADA Factors

    - Development and Testing

    - Deployment

- Innovative features, functions and capabilities; and

- Technologies Utilized (design, prototyping, development, integration, etc.).

## 3.2. Specific Websites using ODX and Integration Suite Tools

Specific to the ODX and Integration Suite Tools, the Offeror or proposed subcontractor(s) must provide a detailed description of experiences with the State specific tools listed in Supplement 1, Section 1.3. as it relates to:

- Customers who the Offeror has implemented these tools;

- Unique advantages, challenges and obstacles overcome by the Offeror in performing the work (e.g., "what works" and "what's a challenge or to be avoided");

- Integration with Customer-specific applications, databases and web service elements;

- Integration with public web service providers (e.g., payment engines, document management systems, workflow/productivity, advertising platforms, campaign and customer acquisition and management tools, etc.);

- Companion "outreach" materials to gain new customers, and solicit feedback from existing customers; and

- Other elements that the Offeror chooses to share with the State as to showcase the Offeror's capabilities with the State specific toolset.

## 3.3. Contractor (Individuals/Teams) Design Portfolios and Resumes

The Offeror or proposed subcontractor(s) must provide resumes of professional staff (2-3 pages) that summarize applicable experience, education and capabilities of staff who are available to perform work on State projects under this Contract. In addition to these resumes, for each team member, provide design portfolios that highlight the unique or specialized capabilities of the team member in light of the State requirements contained in this Supplement. Particularly those that spotlight:

- Usage of State specific ODX development and integration tools;

- Work performed for Governmental (Federal, State, Local, Municipal, Higher Ed. etc.) clients;

- Work performed on Mobile, ADA compliant websites; and

- Work performed that resulted in higher customer penetration, usage or adoption of client products and services.

## 3.4. Customer Engagement, Design, Development and Implementation Approach/Methodology

The Offeror or proposed subcontractor(s) must demonstrate how it will implement projects using the State's general engagement and development framework (i.e., Digital Concept and Design; Design Prototyping / User Feedback; Architecture / Integration; Website, Mobility and ADA Factors; Development and Testing; and Deployment) that:

- The Offeror maintains a methodology, and follows it on customer engagements;

- This methodology results in successful implementations and is adaptable to the circumstances of a State engagement or project; and

- Projects that follow this methodology and are well controlled, predictable from a time, cost and quality perspective and result in a superior customer experience.

Offerors may elaborate on the aforementioned response elements as to highlight the unique or specialized capabilities of the Offeror, proposed subcontractors and team members.