



No Code is the Future of Digital Transformation

WHITE PAPER

PREPARED BY



UDPaas

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Acronyms

API	Application Programming Interface	IT	Information Technology
ATO	Authority-to-Operate	PaaS	Platform-as-a-Service
ATS	Applicant Tracking System	RBAC	Role-Based Access Control
CIO	Chief Information Officer	SaaS	Software-as-a-Service
CMS	Case Management System	SAML	Security Assertion Markup Language
FedRAMP	Federal Risk and Authorization Management Program	SSO	Single Sign On
FMS	Forecast Management System	UDPaaS	Universal Design Platform as a Service
GMS	Grants Management System		

Executive Summary

In the past, agencies have invested heavily in software solutions to support their day-to-day operations, including hiring outside consultants and highly specialized computer scientists to code software to manage even the simplest tasks. Information technology (IT) departments are under immense pressure to modernize the existing IT infrastructure and advance their agency's digital agenda by building new business-critical applications. They face challenges that are difficult to overcome primarily because of an agency's inability to scale, huge IT backlogs, and cost and aversion to adopting change.

Currently, agencies are optimizing their current business models for today's environment and maintaining the status quo, rather than preparing for the next turn, leaving them exposed when crisis hits. **No code / low code capable platforms address these needs and the current environment.**





[The Universal Design Platform as a Service \(UDPaaS\)](#) is our scalable, cloud-based solution that can simultaneously support multiple lines of business. UDPaaS is a no code / low code capable platform that requires no programming through which functionality can be built and delivered in weeks. UDPaaS is Federal Risk and Authorization Management Program (FedRAMP) authorized at the Moderate Level, providing continuous data protection and monitoring. UDPaaS is focused on meeting the challenges of today's ever changing business environment through digital transformation. UDPaaS is designed for the citizen designer, drastically reducing the time required to transform business ideas into applications.

UDPaaS is an intelligent business automation platform that brings together an agency's digital transformation strategy, end-to-end business processes, workforce and user experiences using any device with a web browser. UDPaaS' integrated application design and workflow automation platform enables agencies to create high-impact solutions for their most complex business challenges. UDPaaS provides a robust set of design tools to build and change forms, workflows, documents, reports, dashboards, and back-end automations. The design tools allow pre-built capabilities to be extended to meet current and future business needs. Solutions in UDPaaS consist of configurable software modules that can be designed, customized, and interconnected to meet business requirements.

As a result, UDPaaS improves process automation, provides rapid implementation, visualizes real-time insights, and improves the overall user experience.

Problem Statement

Software has evolved over the years from punch cards and early languages such as COBOL, to web-based solutions and mobile applications. Agencies have invested heavily in software solutions to support their day-to-day operations, including hiring outside consultants and highly specialized computer scientists to code software to manage even the simplest tasks. These tasks take too long and require specialized training, leaving little time to address the core business functions, business rules, and workflows. Long time-lines for delivered capabilities and solutions are commonplace. **There are three areas that we address: inefficient business workflows, inconvenient data access, and aging legacy systems.**

Inefficient Business Workflow

A contributing factor to the issue of slow execution of business processes is that business workflows are often constrained by manual handoff between staff. This leads to data anomalies when information is not transferred properly due to a manual business process. When processes are not automated or are complex to use, frustration builds among users. Today's users are accustomed to the latest technology that carries on business and other life activities in the most convenient way possible. **Business systems that do not provide a more automated and user-friendly interface will experience slow business execution, data anomalies, and a frustrated user base.**

Inconvenient Data Access

Data is dispersed making it difficult and inefficient to pull the data sources into a single repository to which users can learn, evaluate, identify, and use the data for decision making. **Data is everywhere, data is needed by everyone, but data is hard to get to and even harder to analyze.** These problems are amplified by data stored in multiple locations, embedded in legacy systems, and an inability to consolidate and analyze. It is vital to use data to learn, evaluate, and analyze to make important decisions, highlight issues, alert users, to refine an agency's programs, services, and products, as well as the agency itself.

Aging Legacy Systems

Legacy systems are critical to operations but are fragile and continue to age. They lack the capabilities needed for today's requirements so many business users' craft workarounds using spreadsheets, documents, and other office tools to accomplish their goals. These inefficiencies have left the business community in a situation where they are not able to respond and keep up with competitors and are missing strategic targets. Modernization appears to be insurmountable.

Nearly all agencies are experiencing this situation. There is a major focus in the business community on reducing time to deployment and becoming more efficient. The need to reduce and eliminate the mundane, low-level coding and laborious processes that we have become accustomed to becomes more important as technology adoption grows in other parts of our lives. The focus of technology solutions is shifting toward the application of business rules, policies, and procedures through configuration rather than coding.

Background

Agencies need to drive productivity in their business processes by operating more efficiently, minimizing operating costs, and increasing quality while doing more with less. Agencies are faced with a user community that is demanding improved user experiences. Agencies understand the need for data analytics but are resorting to manual methods to collect and aggregate data. These inefficiencies are preventing agencies from completing intelligent and prompt analysis to help make informed decisions.

These challenges are difficult to overcome primarily because of an agency's inability to scale, a huge IT backlog, and its aversion to adopting change. According to Gartner analysts, more than 85% of organizations will adopt a cloud-first principle by 2025 and will not be able to fully deliver on their digital strategies without the use of cloud-based platforms ([Source: Gartner "Gartner Says Cloud Will Be the Centerpiece of New Digital Experiences"](#)). IT departments are under immense pressure to modernize the existing IT infrastructure and advance their agency's digital agenda by building new business-critical applications. Many IT departments are having trouble maintaining the status quo.

Being digital is no longer enough to manage changing business conditions. Currently, agencies are optimizing existing business models for today's environment, rather than thinking about preparing for the next turn, leaving them exposed when crisis hits. The Chief Information Officer (CIO) needs to take specific actions now to increase their agencies' fitness if they want to grow stronger and more competitive in today's environment. Agencies need to be able to better handle severe operating pressures, political upheavals, leadership turnover, adverse regulatory intervention, and other unexpected changes. The COVID pandemic is an example of one such unexpected change that has impacted businesses. In truly short order, workers stopped going to the office and were forced to work remotely using virtual meetings and collaboration tools to continue to be productive. Many agencies struggled with the change in work routine and the need for technology to support remote work.

"More than 85% of organizations will adopt a cloud-first principle by 2025 and will not be able to fully deliver on their digital strategies without the use of cloud-based platforms"

Gartner: "Gartner Says Cloud Will Be the Centerpiece of New Digital Experiences", 10 Nov 2021, Lauren Goasduff

No code / low code capable platforms address these needs and the current environment. According to Gartner, 61% of organizations either have or plan to have active initiatives, where non-technical staff can utilize no code / low code capable platforms ([Source: Gartner "The Importance of Citizen Development and Citizen IT"](#)). These platforms reduce dependence on professional software developers and deliver a robust set of design tools to effectively design, develop, and deploy solutions. They are deployed on the cloud as a Platform-as-a-Service (PaaS) and are often supported by Software-as-a-Service (SaaS). SaaS platforms provide robust functionality out-of-the-box but can be customized by a robust set of design tools.

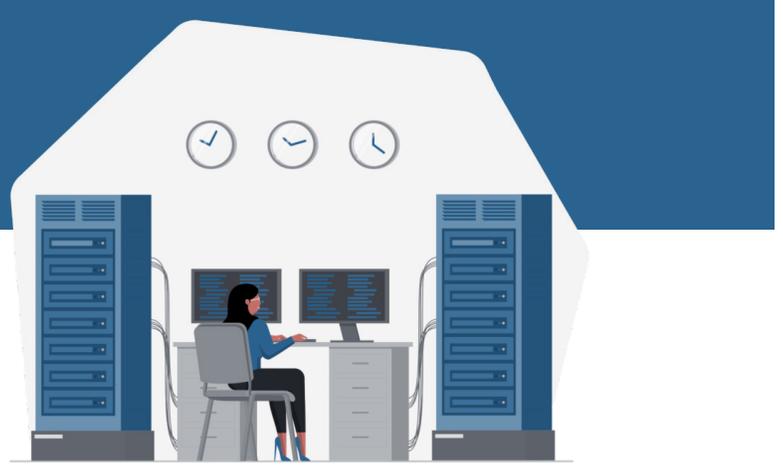
Higher productivity from no code / low code platforms will yield more efficient operations, improved user experience, and many other benefits.



Diagram 1 – Cloud Service Benefits

One benefit is the real-time insight that can be gained to meet strategic key targets by accessing dashboards and data visualizations as soon as data is captured. No code / low code platforms can provide situational awareness to key stakeholders through alarms and warnings via email notifications or dashboards. Workflows can be automated to ease hand-offs where applications, invoices, or other items are processed through multiple levels of approval. Finally, with no code / low code platforms, agencies can consolidate and integrate data from numerous sources, allowing agencies to learn, evaluate, visualize, and then make informed decisions.

Solution Introduction



To meet the needs of businesses facing the challenges of IT backlog, non-consolidated data, and manual business workflows, no code / low code platforms were developed. With their focus on design rather than development, these cloud-based application platforms ease the transition from custom software development to design-based business solutions. The UDPaaS platform is part of a new generation of no code / low code platforms that are focused on meeting the challenges of today's ever-changing business environment.

UDPaaS is a cloud-based no code / low code capable platform that can support multiple lines of business simultaneously. The platform focuses on design by configuration and security through FedRAMP compliance. Applications designed in UDPaaS can be created quickly through configuration and automatically meet 100% of the FedRAMP security requirements. The UDPaaS platform enables agencies to design scalable business solutions rapidly and in a safe, secure FedRAMP authorized environment.

UDPaaS Platform Description

The UDPaaS platform consists of a browser-based user interface that allows clients to view, edit, and search data. The user interface can be configured to offer custom portals, role-specific dashboards, interactive charts, and reports to view data.

Data can be edited in customized forms using a large array of field types and validations to ensure data is captured and is of high quality. Configurable list views and custom reports allow users to search existing records based on any criteria providing the end user with insight and easy access to data.

Business solutions in UDPaaS consist of configurable modules that meet specific business requirements. Modules consist of data fields, record types, statuses, permissions, and automations. They can be configured to present a form to a user for data entry, store the data as the form moves through various statuses, and provide email notification via workflow automation.

The UDPaaS Design Suite provides the tools to configure, customize, and extend, when building solutions from a blank canvas or utilizing a SaaS offering. Tools including building and changing forms, workflows, reports, and dashboards to which are governed and secured by the UDPaaS infrastructure.

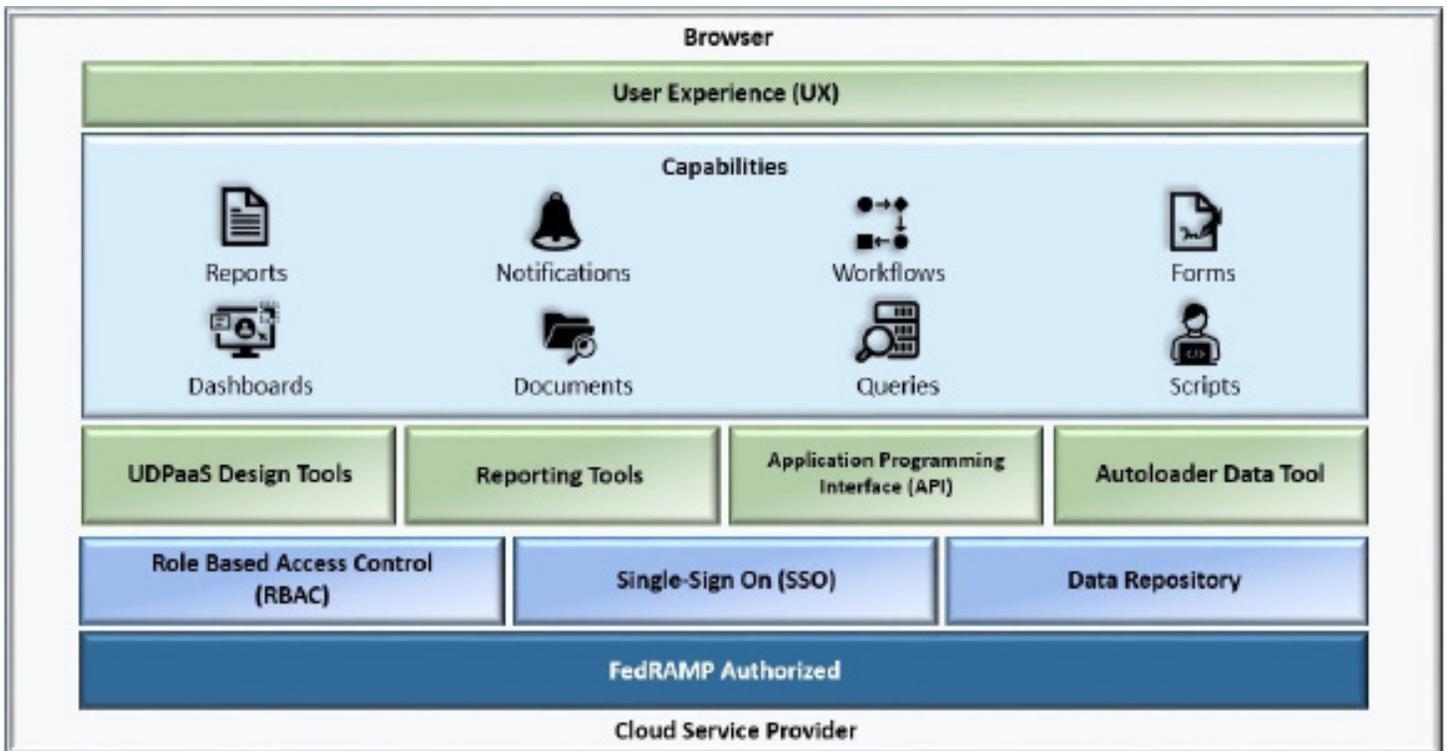


Diagram 2 – UDPaaS Platform

The UDPaaS platform comes with many features that help transfer data into and out of the system. Report Builder is a feature that can build reports on any data set in the UDPaaS system for manual or scheduled export. The Autoloader feature can import data into the UDPaaS system in bulk from legacy systems or create new records. Finally, the Application Programming Interface (API) can be used to import and export data automatically to and from other external systems.

Security is a major focus of the UDPaaS platform. UDPaaS employs Role-Based Access Controls (RBAC) to control visibility to data, functions, and features. RBAC allows data and settings to be viewed, deleted, or edited based on custom created system roles for internal and external users. Single Sign On (SSO) is an authentication method that enables users to securely validate with multiple applications and websites by using just one set of credentials. SSO can be enabled to allow a more secure and convenient method for users to log in based on Security Assertion Markup Language (SAML 2.0).

UDPaaS Benefits

- ✓ FedRAMP-Authorized Environment
- ✓ No Code / Low Code Capability
- ✓ Customization and Extensibility
- ✓ Deployment

FedRAMP-Authorized Environment



One of the main benefits of UDPaaS is that it is a cloud-based platform hosted in a FedRAMP-Authorized environment. FedRAMP authorization provides the credibility and confidence that data is secure and meets federal security requirements. Because UDPaaS requires no code, applications can be built without an elongated authority-to-operate (ATO) process as each application inherits the security features and characteristics that have already been authorized.

FedRAMP is a mandatory government-wide program for Federal Agency cloud deployments. The FedRAMP program provides a standardized approach to security assessment, authorization, and continuous monitoring for cloud products and services. The UDPaaS platform and its server environment are annually audited for FedRAMP compliance. These standards ensure that valuable investments regarding technology and information made by the government are protected and secure. FedRAMP authorization assures a credible cloud-based platform. State and local agencies are also beginning to seek this higher standard of protection.

Customization and Extensibility

A module is a highly customizable component that enables design thinking, where we empathize, define, ideate, prototype, and test. The module is a highly focused, task-based capability that delivers the targeted business automation functionality, outcomes and user experience desired by the citizen designer. With UDPaaS, the user can create custom forms and workflows that can address many diverse and complex business needs. Forms and workflows that exist within a module can be tailored to manage any agency's business needs, such as applications, users, payments, reviews, meetings, inventory, and many other use cases.

Multiple modules can be created and linked to each other to represent complex relationships that exist between real world concepts that formulate an application. UDPaaS API contains existing integrated features such as e-signature and document generation, as well as integration to external applications and systems.

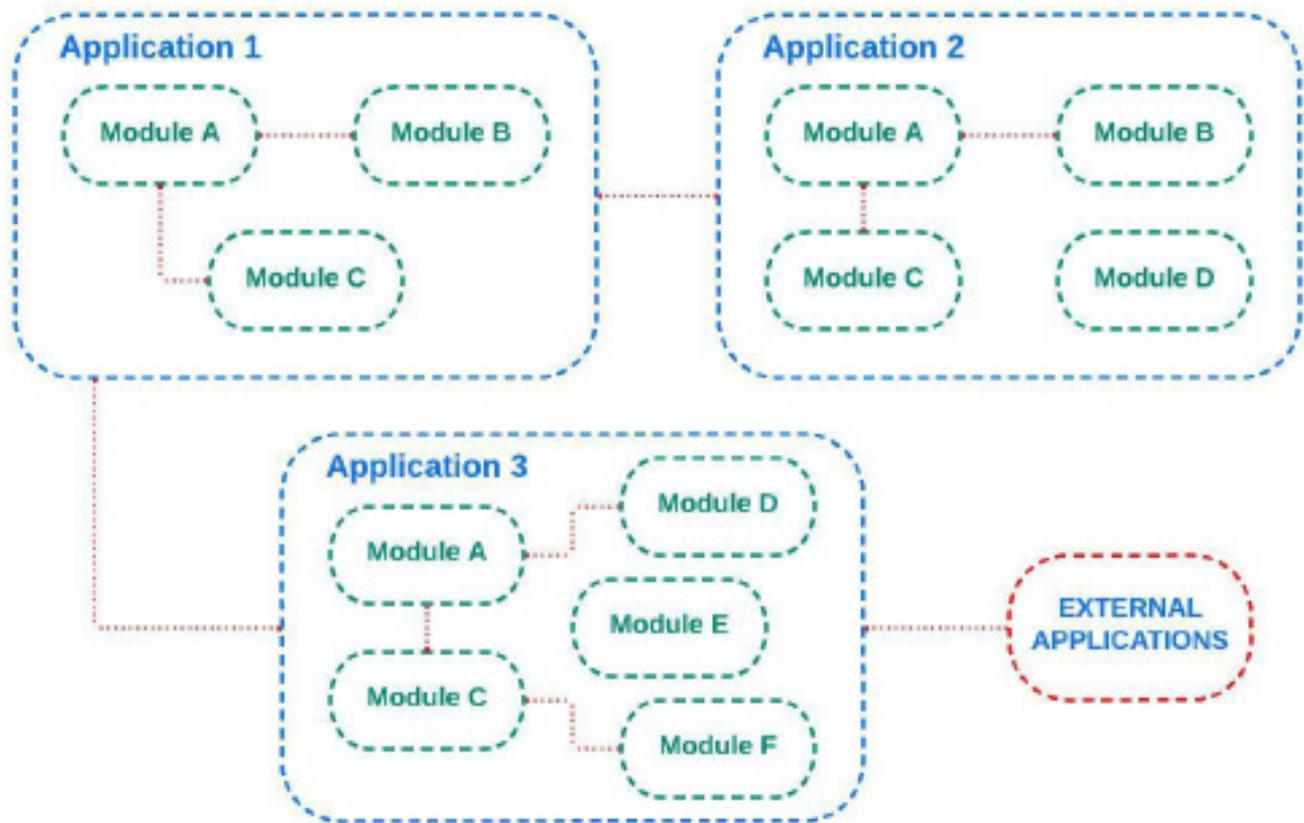
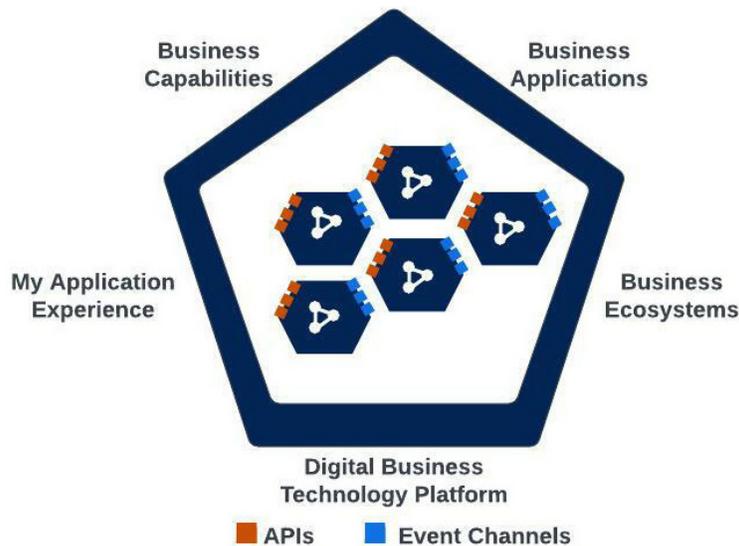


Diagram 3 – UDPaaS for the Enterprise

No Code / Low Code Capability

As a no code / low code capable platform, UDPaaS allows agencies to utilize composable pre-built modules, add new modules, connect modules, and configure components or functionality to facilitate application or enterprise solutions.

UDPaaS supports citizen designers / developers with a no code / low code design platform capable of supporting the development of composable enterprise-level business applications. The citizen users / customers increasingly expect a more contextualized and personalized application experience. Natively, UDPaaS allows citizen designers / developers to design, and customize applications based on their business processes, logic, and experiences. The UDPaaS modern no code / low code capable platform requires that the citizen designer be trained to perform application design functions with little or absolutely no coding experience unlike its competitors.



Source: Gartner
ID: 464148_C

Diagram 4 – Composable Enterprise

UDPaaS focuses on configuration to realize solutions so users familiar with the business process can apply their subject matter expertise to create solutions, accelerating the implementation process. No code / low code capability allows solutions built within UDPaaS to be deployed in weeks instead of the months and years associated with traditional software solutions.

Ready Deployment

UDPaaS offers two deployment options. The first option is to deploy UDPaaS starting with a blank canvas. This allows an agency to customize UDPaaS to their specifications and build solutions where requirements are unique to the organization. The second option is to utilize one of our UDPaaS Products as an out-of-the-box solution requiring configuration and/or minimal customization to meet unique needs. Setup involves branding pages, documents, and reports as well as populating various templates so that forms take on the look and feel of the agency. UDPaaS Products contain interconnected, pre-built modules that provide business capabilities.



Diagram 5 – Library of SaaS Offerings

UDPaaS product also includes a robust set of design tools to build and change forms, workflows, documents, reports, dashboards, and other automation to configure and customize. The design tools also allow the pre-built capabilities to be extended to meet current and future business needs.

UDPaaS Product Offerings

As discussed, UDPaaS can be deployed as a blank canvas, allowing the agency to customize a UDPaaS product to their specifications and build solutions from scratch. The UDPaaS Professional Designer Track training is available to provide guidance and training for an agency's staff to build their own applications or change existing applications. UDPaaS is also supported by several SaaS offerings that provide robust capabilities that can be configured, customized, and extended.



Applicant Tracking System

The UDPaaS Applicant Tracking System (ATS) is a full-featured product that provides functionality for drafting and managing job requisitions, candidate resumes, interview scheduling, and skills matching.

- Manage and support job requisitions, candidate information capture, interviews, and other administrative tasks through workflows and portals.
- Report on key applicant tracking metrics such as open versus fulfilled job requisitions, candidate queues, and number of hires.
- Requires only branding, the definition of policies and procedures, and a population of templates to customize to the candidate experience and internal staff experience.



Case Management System

The UDPaaS Case Management System (CMS) is a full-featured product that manages cases such as insurance cases, disability claims, employee complaints, legal cases, medical claims, investigations and all the activities that surround a case such as approvals, investigation, and ongoing monitoring.

- Customize case management information and activities such as approvals, reimbursement, or other activity in a single repository.
- Utilize automated workflows to keep data updated and accurate in real time.
- Capture, filter, and search case data by data field or document for easy management and retrieval.
- View and analyze outcomes for case performance and key metrics via data visualizations to keep key stakeholders and administrators informed in real-time.



Forecast Management System

The UDPaaS Forecast Management System (FMS) is a solution for agencies to manage all current, past, and awarded contracting forecast opportunities for various products and services and procurement methods in real-time.

- Improved visibility of forecast for all opportunities in a single repository.
- Improved collaboration with program managers and contracting staff.
- Streamlined forecast workflow (creation, management, review, approval, & publishing).
- Ingest opportunities from data sources as well as export opportunities to websites, web services, and other systems.



Grants Management System

The UDPaaS Grants Management System (GMS) is a full-featured product that provides support for the entire grant lifecycle. This includes program definition, application intake, grant review, award, grant payment, grant monitoring, and impact analysis.

- Allows for open cycles and targeted invitations for potential grantees and partners via portals.
- Supports compliance and auditing, such as Single Audit through data capture forms, dashboards, and reporting through a variety of parameters so societal impact can be measured.
- Grantmaking process is customizable and configurable to suit your grantmaking needs and specific business processes.

Conclusion

In the modern digital business world, the increased need to keep up with competitors and user expectations creates the demand for business solutions that are easier to use, quicker to implement, and secure for sensitive data. No code / low code platforms were developed to meet these needs with a focus on configuration rather than specialized code development, which allows business to concentrate on the business solution rather than the details of the implementation. The UDPaaS platform is a no code / low code capable platform with an emphasis on design through configuration tools and security through FedRAMP compliance and infrastructure. UDPaaS includes a suite of tools including reports, dashboards, notifications, document generation, workflows, and forms. As a result, UDPaaS improves process automation, provides rapid implementation, visualizes real-time insights, and improves the overall user experience.

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Contact Us

Have questions or want to learn more about UDPaaS & how it can help your organization?



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