



Turning **VISION** into **ACTION**®

CHAIRMAN'S NOTE

Dear Friends:

We continue to improve the way we interact with technology while enhancing the security posture of the environments we support. The Emerging User Experience (UX) and User Interface (UI) trends completely change the way we authenticate, interact and communicate, leveraging a combination of Biometrics, Virtual Reality (VR) and Augmented Reality (AR).

ServiceNow has evolved from an IT Service Management (ITSM) Platform to an all-encompassing Business Workflow Platform with an important focus on Human Capital Management (HCM). The HCM capability helps with the management of people, process and technology, keeping for customers, employees and IT aligned.

CMMC Version 2.0 provides a model aligned with the NIST SP 800-171 controls that provides a roadmap for securing your infrastructure.

Have a great Summer and be well!

Ashley W. Chen
Chairman & CEO

IN THIS ISSUE

- Emerging UX/UI1
- ServiceNow Spotlight .3
- CMMC 2.0 4

Emerging UX/UI Engineering Trends: New Dimensions and Zero UI

By David Hoff, UX/UI Designer

User Experience (UX) and User Interface (UI) design impacts how humans interact with a product or services. Both require a human-first approach to be successful. UX design deals with the overall user journey interacting with a product and UI design deals with the touch points the user might encounter along the journey. If analogies help your understanding, then this one from Dain Miller sums up the relationship nicely:

“UI is the saddle, the stirrups, and the reins. UX is the feeling you get being able to ride the horse.” Dain Miller, Web Developer

When considering UX/UI engineering trends, we should not limit our thinking to devices we commonly use (desktop computer, laptop, mobile phone) or how we commonly interact with them (keyboards, mouse, touchscreen).

Emerging trends are meeting user needs for:

- Easy and secure access (Password-less Login and Biometric Authentication)
- Speed and convenience along with more natural interactions (voice, movements, glances)
- Relevant, contextual, and inclusive experiences (Personalization and Localization)

Technologies like Virtual Reality (VR), Augmented Reality (AR), Zero UI products, and 3D interfaces are enhancing how that need can be met.

Designing for virtual and augmented reality. Remember when Pokemon Go's AR technology took over the world? VR/AR has moved beyond gaming to more everyday sectors like retail, travel, education, healthcare, and social media platforms. Retailers like IKEA, Target, and Home Depot are already incorporating augmented reality into their online shopping experience. And it's creeping into the workplace. You may have heard about Facebook's metaverse where users are connected to each other in a virtual environment by wearing a VR device. They are expanding that technology to a virtual reality remote work app where users can hold meetings as avatar versions of themselves.

“Technologies like Virtual Reality (VR), Augmented Reality (AR), Zero UI products, and 3D interfaces are enhancing how user needs can be met.”

Zero UI Zero UI is a coined term by Fjord Designer Andy Goodman. By his definition, “Zero UI refers to a paradigm where our movements, voice, glances, and even thoughts can all cause systems to respond to us through our environment.” No more mouse clicks, keyboard typing, or screen tapping. Internet of Things (IoT) devices like smart speakers, smart cars, smart home appliances, and smart devices at work already use Zero UI. It allows a more natural way of communicating with devices using things like your voice, glances, and one day thoughts. As





ActioNews®, the newsletter of ActioNet, Inc. is published to provide examples and applications of cutting edge IT topics and practices.

ActioNews® is published quarterly (March, June, September and December) as a service to its staff, customers, and potential customers.

ActioNews Staff

Lead Designer

Karen Tepera

Contributing Authors

David Hoff

John S Johnson

Andrew Stevenson

ActioNet grants permission to educators and academic libraries to use ActioNews® for classroom purposes. There is no charge to these institutions provided they give credit to the author, ActioNews®, and ActioNet. All others must request permission at actionews@actionet.com.

ActioNet, Inc.

2600 Park Tower Drive
Suite 1000
Vienna, VA 22180

www.actionet.com
info@actionet.com

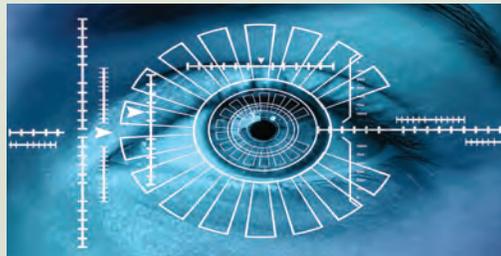
Copyright © 2022 by ActioNet, Inc.

“In tandem with personalization, localization connects with the mindset and culture of users from different parts of the world. Much more than mere text translation, the entire experience needs to be respectful and relatable.”

Emerging UX/UI continued from page 1

of 2021, around 43 percent of U.S. households say they own a smart home device (statista, <https://www.statista.com/statistics/1247351/smart-home-device-us-household-penetration/>).

Password-less Login We all struggle with devising and memorizing passwords. It’s a common pain point for users. The protocols for setting a password, like including special characters, numbers, or upper and lowercase letters, compounds the situation. Though necessary for security reasons, these requirements add to the complexity and lead to frequent password resets by users. The solution that has gain momentum of recent is transitioning to “password-less” authentication such as logging in via social media accounts, fingerprints, iris scans, or phone unlock patterns. While passwords may never go away completely, they will be increasingly replaced or supplemented by other types of authentications.



Biometric Authentication Authentication that is faster, easier, and more secure than conventional passwords. Users and businesses find benefit in this form of authentication including innovative technologies using iris scans, facial recognition, voice and even vein pattern recognition.

Personalization and Localization Personalization is not new but advancing in ways that allow for a richer user experience. Going beyond those movie recommendations from Netflix or personalized music suggestions from Spotify to hyper-personalized user interfaces that change the appearance, tone, and position of elements based on individual preferences. Experiences that not only benefits businesses but provides users the convenience of getting the information they want without having to ask for it. For example, Domino’s “Zero-click Ordering App” leverages the consumer’s personalization profile to place an order without requiring a single click. UX design must balance the business objectives with the users need for authenticity and respect.

In tandem with personalization, localization connects with the mindset and culture of users from different parts of the world. Much more than mere text

translation, the entire experience needs to be respectful and relatable. Users expect their own preferences and online culture norms to be accommodated. For example, a “Add to Cart” button might become “Add to Basket” for British users.

Voice User Interface Voice user interfaces (VUI) like Siri, Amazon Alex, and Google Nest devices are already mainstream. According to MarketsandMarkets report, the speech and voice recognition market is expected to grow to \$22 billion by 2026. People like the speed and convenience of not having to touch a device or spend time navigating to an app or typing out a message. UX/UI designers need to design visually in ways that cooperate with voice commands. Yet another example of Zero UI that also has application in biometric security systems.

Glanceability, Gestures, and Haptic Feedback Face recognition and motion detection has opened new possibilities for ease of actions and expedite feedback. Facial recognition technology allows users to securely unlock laptop and computer screens with ease. Apple’s Face ID feature takes it to a whole new level allowing you to unlock your iPhone with just a glance. Gesture-based interfacing on some smartphones allow users to turn on a phone’s camera or flashlight without unlocking the phone. Touch and air gestures provide users a wide and inclusive range of interactions with devices. Haptic feedback provides users with a motion or vibration-based feedback when interacting with a device. For example, the light vibration you feel when typing a message on your smartphone. Most smartwatches and fitness devices use haptic feedback for notifying the end user.



These emerging trends in UX/UI engineering create a wealth of opportunities to solve user problems, make their user journeys more enjoyable, and provide expedited interactions taken with greater ease. We cannot let new technology drive the UX/UI design but instead empower it. The UX/UI design foundation remains the same. Define the user problems and needs to be solved first, then determine the right technology or trend that can assist in solving the problem and deliver a solid user experience.



ServiceNow Functionality Spotlight: Human Capital Management

By John S. Johnson, Chief Technology Officer

When someone asks you what ServiceNow does, what do you tell them? If you're like most people, you tell them it's an IT Service Management (ITSM) platform, or you might say it's a trouble ticketing system used by the service desk to track incidents, problems and changes. If this is your answer, you're right and you're wrong. While ServiceNow has its origins in ITSM, the capabilities of the platform have been expanded into so much more.

ServiceNow has evolved the focus of the platform from purely IT processes to a focus on business workflows. In fact, they've changed how they reference their products, now grouping them in terms of workflows rather than specific products or processes. They are now grouped into workflow focus areas such as IT, Employee, Customer, and Creator. Today we're going to look deeper at Employee workflows, specifically Human Capital Management.

What is Human Capital Management?

Human Capital Management (HCM) refers to the entirety of investing in people and talent management to enable organizations to manage the full lifecycle of an employee from onboarding, management of skills and time, and eventual offboarding. HCM focuses on the strategic level of human management, whereas the more common Human Resource Management (HRM) focuses on the administrative activities of maintaining records and overseeing benefits.

HCM as a practice covers:

- Performance and Talent Management – Manage performance processes and data, competencies, and contingent workforce management
- HR and People Analytics – Gather and aggregate information to drive business decisions and address the employee experience
- Talent Acquisition – Recruiting, hiring, and workforce planning
- People Management – Onboarding and training
- Attendance and Leave Management – Time and attendance tracking
- Payroll, Compensation and Benefits – Payroll, benefits, expense management, and compensation planning

All companies have to manage HCM processes, no matter how large or small. While startup companies might be able to manage this manually or use spreadsheets, it can quickly get overwhelming to try to manage these functions without using some kind of software. This is where ServiceNow comes in.

Enter ServiceNow HR Service Delivery

Leveraging their cloud hosted, FedRAMP approved platform that consists of a powerful workflow engine and flexible, extensible database schema, ServiceNow has created a set of out of the box capabilities for addressing a variety of HR workflows. Building on existing platform functionality such as mobile access, Single Sign On, virtual agent, performance analytics, and integrations, the HRSD application is easy to introduce to your workforce, since they are already familiar with the interface and navigation of a ServiceNow environment.

Designed to provide an easy to use interface for both employees as well as HR service professionals, ServiceNow can be leveraged to provide a unified portal for HR services for employees to access information about benefits, submit service requests and find FAQs and knowledge articles, enabling a self-servicing workforce to find information quickly and efficiently. This also enables a hybrid workforce by providing web-based access to employees regardless of location. Another employee-centric feature is the ability to create an Anonymous Report Center, allowing employees to submit issues and concerns in a safe space.

Building upon the workflow capabilities of the platform, employee journeys can be created to help guide them to the information they need based on factors such as role, location, or job type. Processes can be automated to create and fulfill requests as part of these journeys to speed the onboarding process and free up typically constrained management and HR resources to focus on more human centered tasks as opposed to rote, repetitive, system-based tasks. Employees receive a more consistent HR experience and receive services quickly, reducing lost work time.

Expanding upon the concept of workspaces recently introduced by ServiceNow, there is an HR workspace enabling HR teams to access, in a single interface, cases and service requests, dashboards, and other pertinent information to enable them to address employee needs more efficiently.

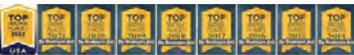
ServiceNow is of course not the first software package to play in the HR Service Delivery space. There are a host of other tools in use by HR departments, and any new tool must be integrated with them to provide HR professionals with the ability to serve employees seamlessly. The ServiceNow platform is purpose built with integration capabilities utilizing standards-based methodologies such as SOAP/REST and JDBC while also having capability for custom integration methods. An advantage of the wide adoption of ServiceNow is that

“Leveraging existing investments in ServiceNow can provide employers with an easy to use, familiar employee interface, and help them to realize significant increases in employee engagement, reduced costs, and greater flexibility to meet the demands of a varied hybrid workforce.”



continued on page 4

- Founded in 1998, 500+ ActioNeters
 - Overall Customer Retention Rate > 98%
 - Annualized Professional Staff Retention Rate > 92%
 - Woman Owned Small Business under NAICS 517311
- CMMI®-DEV Level 4 Externally Assessed
- CMMI®-SVC Level 4 Externally Assessed
- HDI Certified Support Center
- ISO 20000 (ITSM), ISO 27001 (Information Security) and ISO 9001 (Quality) Registered
- GWAC and IDIQ Contract Vehicles
 - GSA Alliant 2
 - GSA MAS
 - GSA IT Schedule 70
 - GSA OASIS Pool 1
 - CIO-SP3 SB OTSB
 - CIO-SP3 WOSB OTSB
 - DISA Encore III
 - Air Force NETCENTS-2
 - ARMY ITES-3S
 - HHS SPARC
 - NAVY Seaport-NxG
 - GSA 8a STARS III (JV)
- "92 out of 100" Rating from Open Ratings
- "Exceeds Customer Expectations" from D&B
- "5A1" the Highest Financial Rating from D&B
- DCAA-Compliant Accounting and EVM System
- Approved Purchasing and Cost Estimating System



"Protecting your competitive information and intellectual property, as well as the sensitive information of your clients, should be your foremost concern. Compliance will happen if protection is put in place now."

ServiceNow continued from page 3

many integrations with common HR platforms have already been built and are available for easy implementation into your existing ServiceNow instance. A list of these integrations is provided in the ServiceNow Store.

Conclusion HR Service Delivery can be a complex combination of people, process, and technology, and the stakes are high due to the impact that they can have on the employee experience and their lives. It is a challenge that every employer, regardless of size, must address and those that can provide a superior employee experience have a significant advantage in the market, particularly given the current shift in employee expectations. Leveraging existing investments in ServiceNow can provide employers with an easy to use, familiar

employee interface, and help them to realize significant increases in employee engagement, reduced costs, and greater flexibility to meet the demands of a varied hybrid workforce.

If you still think ServiceNow is only for IT, can only address technical processes, and doesn't have a place outside of technical support areas, it's time for you to learn more about the advances ServiceNow has made in areas such as HR Service Delivery. ActioNet, as a Premier partner, can help you learn more about how ServiceNow can be leveraged to solve your business problems, whether they be in the traditional IT areas of ITSM, ITOM, and ITBM, or the continually updated and evolving areas of Employee and Customer workflows.

CMMC 2.0 - Don't Wait. Get Secure

By Andrew Stevenson VP, Civilian Programs

In November of 2021, the Department of Defense released the Cybersecurity Maturity Model Certification (CMMC) 2.0 standards. The first version of CMMC had some issues that had put industry in a difficult position. Among them being the lack of flexibility around Plans of Action and Milestones (POA&Ms) and the need to be compliant with both CMMC and NIST Special Publication (SP) 800-171, which was very similar, but still had enough differences to cause concern. Additionally, shortly after the November release, DoD clarified third-party vs. self-assessment requirements. CMMC 2.0 served to clarify and simplify these long-standing industry questions but left some uncertainty around implementation timeframe.

Specifically, CMMC 2.0 made the following clarifications:

- It simplified the different levels of CMMC compliance, reducing from five to three.
- Removed the differences between CMMC Level 2 and NIST SP 800-171 compliance.
- Delayed the required implementation date until the completion of both the title 32 CFR and title 48 CFR rulemaking processes.
- Allows for self-certification for programs that do not information critical to national security.
- Instituted a Plan of Actions and Milestones (POA&M) system with a time-bound waiver process.

While the first two points served to clarify security control requirements and clear up confusion around the DFARS NIST SP 800-171 compliance, the last three points gave industry the feeling that it had some breathing room and didn't need to move as quickly in securing IT environments. The urgency around getting industry to a more secure and CMMC compliant state abated somewhat, knowing that the rulemaking process could take two years or more. However, the Pentagon announced it will start the rulemaking process in July and DOD expects the rules to be published by May 2023. This could lead to CMMC requirements being included in contracts 60 days later – i.e. July 2023. If this schedule holds CMMC requirements could be in place in just over a year.

Although there will be a forthcoming compliance requirement, that should not be what is driving your infrastructure to a secure state. Good security should result in compliance, not the other way around. Protecting your competitive information and intellectual property, as well as the sensitive information of your clients should be your foremost concern. Compliance will happen if protection is put in place now.

In addition, NIST SP 800-171 outlines compliance requirements for DFARS that have been required since November 2020. Now that CMMC Level 2 and NIST SP 800-171 are identical, getting to a high confidence level with NIST SP 800-171 will also serve to get compliant with CMMC.

Early certification also gets you in line for third-party certification as early as possible, should you need it for contracts involving national security information. There are only a few third-party assessors at this point, and their schedules are full. Getting in line early creates a competitive advantage when CMMC becomes an acquisition requirement.

The short version of this is simple – don't wait. Move forward to secure your infrastructure and get compliant early.

