Nicholas W. Pappas

Usability Researcher and Developer, Product Designer

I am an experienced usability researcher and developer, specializing in enterprise and professional systems, catering to the user with little desire to be entertained or surprised.

20 years of experience

- I have a wide range of experience across multiple user touchpoint scenarios, in both software and hardware environment, across multiple human factors disciplines.

- I define strategy, research needs, design concepts, and prototype experiences in order to test, demonstrate and communicate simple views of complex mechanisms.

- I have been an advocate and leader for the user and customer through my evolving career; leading designer and development teams, and evangelizing the user perspective across company boundaries.

Experience Summary

With such a wide range of opportunities over the last 20 years, the following is a summary in which I have had the chance to serve as the champion for the end-user.

Further details of the following, and additional, opportunities can be reviewed at: **www.linkedin.com/in/nwpappas**

F5 Networks   2013 - Present
Principal User Experience Designer

As a Principal I am responsible for mentoring and leading a group of UI developers and UX designers, working alongside our direct and second level manager to align team resources, skills, and members' professional growth interests with project needs. In addition, I serve as the Principal User Experience Designer for multiple products across several BIG-IP hardware and software feature releases.

A staunch advocate for a consistent CX across the F5 brand and product lines, in a highly silo'd development organization, I have built a reputation as someone with a passion for human-centered design thinking and am often sought out and consulted, at many levels throughout the company. I interact regularly with developers, engineers, designers, product managers, architects, and management on any number of usability related issues across all customer touchpoints.

Project Lead & Owner - Fleet Design System
Fleet is an internal design system to unify F5's product portfolio, relying on robust guidelines and reusable components to accelerate development. The system allows designers and developers to shift their focus from building UI components to building the application itself, giving them more time and energy to craft workflows and experiences for their product.

I lead an inter-disciplinary team of UX designers, researchers, developers, technical communications, and other stakeholders to build the design system, applicable across the complete range of project requirements and at a wide range of knowledge levels.

Principal Product Designer - Modular BIG-IP
As a Product Designer for the Modular BIG-IP project I have been the focusing voice around the F5 Networks' core value: "We obsess over customer needs." Working within a tight and contentious timeline for product delivery, I have worked to focus efforts around the customer in every user touchpoint - including API, CLI, and GUI.

We are creating a new customer experience around a product for a loyal and knowledgable user base, who demand a feature set requiring a certain level of complexity, while also provide a simplified work flow for users seeking straight forward configurations. Requirements were built around a series of focus groups, customer shadows, and card sort efforts.

Principal UX Designer - Dashboard & Network Map
A Flash-based system monitoring dashboard and network map of the classic system were in great need of an update. We used these opportunities as a learning opportunity to work through two iterations, first with the Dashboard and then with the Network Map, of the patterns we planned for the Modular BIG-IP overhaul.

I functioned as the principal designer for both efforts. This meant creating the overall look-and-feel, high level patterns, and work flows used. I then oversaw junior UX designers and developers to guide them in creating the more detailed elements within those flows; keeping them on task, on requirements, and focusing their design efforts around best practices.

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F5 Networks   2013 - Present
Principal User Experience Designer

Principal UX Designer - Shuttle Series Hardware
In the latest hardware appliance refresh a small (3.5cm by 4.6cm) touch screen display was added to provide initial configuration and debugging functionality. I delivered an updated configuration task flow, IA, and gray box wireframes. An ergonomic analysis was also performed to illustrate concerns with the new touchscreen inclusion on the hardware device. This analysis was also used to justify why certain design elements were used on a space constrained touchscreen.

Hardware design changes were also scrutinized during late development cycle updates. Engineering changes where focused around user needs and work flows, when otherwise detrimental design patterns were introduced.

Principal UX Designer - Traffic Management Policies
Traffic Policies allows users to create rules, executing one or more actions if a series of conditions are met, based on incoming traffic. The existing feature was built bottom-up, with a data-driven GUI placed on top of a complicated data model, resulting in properties representing the data structure rather than the user's mental model of the traffic passing through the system.

We totally abandoned the old layout, taking no context and no influence from the complex data-driven model. I created an editor in which each rule was presented in a natural language sentence, dynamically built as the user inserted nouns and adjectives. The resulting GUI could be read and immediately understood by a novice user, without losing expert functionality.

Principal UX Designer - Advance Firewall Management
My first opportunity at F5 was using newer Single Page Application (SPA) techniques to update a 15-year old GUI with new interaction techniques to greatly streamline the user's workflow. An existing policy system used multiple pages to create a series of interdependent rules, forcing the user to externalize substantial information when working with individual rules - influenced by those before it, and affecting those after.

Working directly with system architects, we built an inline editor that externalized memory by leaving surrounding rules visible as new rules where creates, or existing rules modified.

Boeing   2005 - 2013
Human Factors and Systems Engineer

Aviation Services Inovation Center
As a UX Designer & Developer for the Aviation Services Innovation Center I conducted independent research and analyzed user behavior to help create the future of proactive and efficient airline operations. In this laboratory we worked to better understand operational challenges, explored possibilities, innovated solutions, and demonstrated experiential operational benefits to improve our customer's bottom line.

Virtual Console Research & Development
The virtual mission control station included a motion capture system and display system, configured to be worn on the head of an operator, presenting a virtual display to the operator. The motion capture system tracked movement of the head, providing an augmented display in all directions.

I was the primary engineer responsible for defining, maintaining, and developing the prototype hardware and software for the motion capture systems. Research included fesability studies for multiple different input devices, such as standard keyboard/mouse, virtual keyboards, and gesture recognition. I conducted testing both in-lab and, most notably, onboard an airborne JEFX10 test flight during regular military training maneuvers.

KC-46 Tanker
Human Systems Integration (HSI) was a comprehensive Systems Engineering process involving nine domains: manpower, personnel, training, human factors, habitability, personnel survivability, environment, safety, and occupational health. It was used early in the acquisition process to optimize total system performance, minimize total ownership costs, and ensure that KC-46 systems were built to accommodate the characteristics of the user population who would operate, maintain, and support the aircraft.

As part of the team I authored and contributed to multiple human factors deliverables on different topics that were required as part of the HSI validation for Military and FAA Type Certification. I was responsible for writing multiple Test Plans, describing the needs and justification for performing test cases, as well as associated Test Procedures, describing the process to which Human Engineering will carry out the test.

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Boeing   2005 - 2013
Human Factors and Systems Engineer

Flight Deck Concept Center
The increased need for multiple radios and new radio technology require the introduction of multiple dissimilar hardware interfaces, increasing complexity and weight with the cockpit. Addition of new hardware and/or "shoe-horning" new functions into existing systems result in the addition of clutter, weight and complexity when working with multiple radios; reducing the effectiveness of information presentation and increasing execution time and potential for error.

Collaborating with the Flight Deck Concept Center, I researched and designed a multi-touch software based communication interface, removing the need for rigid per-radio hardware controls and displays. Dynamic layouts of information and intuitive input gestures on a multi-touch display allowed for a more seamless interaction with communication hardware.

P-8A Poseidon
It was the responsibility of the Human Engineering group to carry out a User Centered Design process to define, design, and validate the Operator Machine Interface (OMI) used by the operators. As part of the P-8A Human Engineering group I delivered the following:

- Authored Design Description Document, defining usability standards, goals and guidelines for program and family of products.
- Design and development of advanced rapid iterative prototypes for hardware and software operator machine interface.
- Conducted user interviews, focus groups and multidisciplinary design teams in creating user task analysis, needs analysis and user experience designs.
- Conducted multi-day immersive usability testing, observing operators run realistic scenarios in prototype lab environment.
- Conducted research on performance differences between multiple control touchpoints - including, mouse, keyboard, trackball, and touchscreen.

Lucent Technologies
UI/UX Developer

As a UI/UX Developer for the Traffic Managment System group I led the design and development of multiple components to a brand new web-based user interface for telephony network management. I was the secondary architect to the development framework used by the entire team, giving me the unique opportunity to explore interaction methodologies during the early years of enterprise web-based applications, using a combination of technologies including HTML, JavaScript, Perl and Java.

I also served as a customer facing representative of the company and product during conferences, providing demonstrations of product during multiple development phases.

Education

Ohio State University   2002 - 2004
Masters of Science, Cognitive Systems Engineering
- Teaching Assistent for 'Introduction to Cognitive Engineering'
- Research Thesis: Asynchronous Multi-Participant Collaborative Communication

Purdue University   1994 - 1998
Bachelors of Science, Computer Science
- Teaching Assistent for 'Introduction to Computers'

When you do things right, people won't be sure you've done anything at all.