

## Self-assessment by Victor Udoewa

SUBMITTED ON 18 OCT 2021



### A summary about me:

Victor Udoewa is CXO and Service Design Lead in the NASA SBIR/STTR Program. Earlier, he served as Director of Strategy at 18F, a civic consultancy for and inside the federal government. He started the education business unit, developed a line of educational products and services, directed strategy, managed the group of digital strategists and the digital strategy practice, and served as a designer and strategist on partner projects. Previously, as a Global Education Instructional Designer and Training Development Specialist at Google, he designed learning experiences and learning software for people in low-to-middle-income countries around the world

### I currently work as a/at:

Chief Experience Officer and Service Design Lead, NASA SBIR/STTR

<https://nasa.gov/>

<https://sbir.nasa.gov/>

### My LinkedIn profile:

<https://linkedin.com/in/udoewa/>

### My educational background:

SB, Mechanical Engineering

Engineer-in-Training Certification

PhD, Aerospace and Mechanical Engineering

### The following theories are the key components of my approach to service design:

Radical Participatory Design

Systems Practice

Futures Design

### These are the most relevant resources I base my work on and I recommend them as a body of knowledge in service design:

- Dark Matter & Trojan. Horses

- Systems Thinking for Social Change

- Design Justice

### I have X years of working experience in service design:



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My working experience in service design includes involvement in:

- Service design projects
- Service design consultancy
- Service design training

I have particular experience in the following service sectors:

- Global Education, education
- Global health, public health
- Labor, employment
- Economic development
- Space economy
- Digital acquisitions

I have conducted X service design projects that aim at creating improvements or innovations within organisations:

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These are the service design projects I have successfully delivered:

Digital Literacy Service Project

- 01/2014 - 01/2015

- Google

- Digital Literacy Educational Service

- Redesign of failing Digital Literacy Service for northern and central India and then recustomized service throughout the world

- Increased digital literacy around the world measured by 250,000 certificates of completion of Google Online Basics course in French, Spanish, and English; Google Bus Bangladesh curriculum led to 500,000 Bangladeshi university and college students trained in digital literacy in one year; 5 million Indian women in 45,000 Indian villages trained in digital literacy via Internet Saathi program based on digital literacy work; Trained INKTalks fellows and ambassadors trained hundreds of thousands of students in digital literacy

- <https://ojs.library.queensu.ca/index.php/ijsle/article/view/6393>

- <https://ojs.library.queensu.ca/index.php/ijsle/article/view/6665>

AdClass Service

- 06/2013 - 11/2014

- Google

- Educational service teaching university students online marketing skills for entrepreneurship

- Trained 1000 students in three countries using zero budget

- 5 startups created, and dozens of teams competing in the Global Online Marketing Challenge for the first time from 12 countries that never had representation

Google Educator Group Service

- 12/2013 - 06/2015

- Google

- Design of Global Community groups of educators to increase the use of technology in improving teaching and learning

- Launched GEG program and support, Increased digital literacy of teachers around the world focusing in low-to-middle income countries by 500,000 certificates of completion of GEG Curriculum

- Grew the number of Google Educator Groups from 0 to now 249 global groups

- <https://www.googleeducator.group/home>

18F Learn



-12/2015 - 01/2017

- 18F
- EdTech, New educational service & Educational Business Unit
- Developed a robust menu of educational products according to needs surfaced during government-wide discovery research; Launched 12 experiments on courses and model
- Surpassing \$1 million goal, grew education business portfolio from \$0 to \$2.3 million in first year; Grew team from 0 to 5 people reaching 166% of targeted 3-person minimum viable education business team
- <https://docs.google.com/document/d/1UKZg2ZetYsZrUwpo57KUwl3fs2JFjLfyZocjVgl2ueg/edit#heading=h.kp1boir49afn>

#### PubMed Service

- January 2016 - March 2016 (phase 1); April 2016 - July 2016 (phase 2)
- 18F & NIH
- Redesigning PubMed, flagship product of NIH and world's largest biomedical journal citation database
- Product was redesigned and version 2.0 was launched
- Improved customer experience using a dual-track transition approach; reduced customer complaints specifically from clinical and medical librarians; created the first ever designer hire - a Director of Design role which now means Design (and therefore users) would have a seat the director's table when decisions were made and the the Director would make decisions about other products and services at the National Library of Medicine in NIH; a new strategic direction, defined audience, defined vision (mission and purpose), high-level strategy, created business objectives, product user stories, product roadmap
- <https://pubmed.ncbi.nlm.nih.gov/>
- [https://docs.google.com/presentation/d/1d7Rjme9tv5sQi9PMDPMv7Cmww4T-R3luuUMmNm4iGfM/edit#slide=id.g35f5f3dfa7\\_0\\_16](https://docs.google.com/presentation/d/1d7Rjme9tv5sQi9PMDPMv7Cmww4T-R3luuUMmNm4iGfM/edit#slide=id.g35f5f3dfa7_0_16)

#### Agile Corps Service

- December 2015 - March 2017
- 18F
- Designing a service to search, find, recruit, hire, and create pathways for junior and mid-level technologists in the federal government
- Researched, designed, prototyped, tested, iterated, and eventually piloted a \$250,000 pilot at the Department of Labor
- Eventually created Digital Corps as a results, 6 years later, which is an operational service that searches, finds, recruits, and hires technologists into the government bypassing the hiring issue agencies have
- <https://ojs.library.queensu.ca/index.php/ijsle/article/view/11489>
- <https://ojs.library.queensu.ca/index.php/ijsle/article/view/14491>
- <https://digitalcorps.gsa.gov/>

#### Digital IT Acquisition Professional (DITAP) Training Service

- November 2019 - October 2020
- CivicActions & USDS
- designing a learning service to improve digital acquisitions success rate in government
- created a program with designed lessons, software service (registration, updated progress reports, reports of missing items, status, grades, etc.), cohorts, experiential learning, mentorship, shadowing, etc.
- Won full USDS certification for the educational DITAP for CivicActions; 100% passing rate and satisfaction rate of learners; increased percentage of successful digital acquisitions over \$7 million dollars for our participants over non-participants or participants with other trainers
- <https://techfarhub.cio.gov/initiatives/ditap/>
- <https://www.usds.gov/projects/ditap>
- <https://civicactions.com/services/ditap>

#### NASA SBIR/STTR Service

- October 2020 - Present
- NASA
- Improving transition rates and equity for Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program



- Built ResearchOps and DesignOps and Service Design team from scratch; created participatory design practice; Built Voice of the Customer and Voice of the Employee Programs and annual publications.; created CX, EX, and SI public metrics publishable to the website;
- Improved employee experience and customer experience (initially through the work and involving them); improved transition rates (infusion and commercialization); increased participation of underrepresented research institutions
- <https://sbir.nasa.gov/>

**I have provided service design training sessions and/or other educational experiences for X years:**

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### **My philosophy as a trainer is:**

My learning design for classroom time is based on one question: What is the best use of my classroom time. In all my work as a learning designer working with teachers and professors, not one instructor has answered that question with “lecturing.” I take a human-centered design approach to designing the course experience. That means it is student-centered, iterative, and almost always a non-linear journey.

My teaching philosophy is simple: facilitate the learning process through interactive, project-based, student-led, problem-based, inquiry-based, technology-supported experiences using data-driven instruction. Thankfully, I have had experience of teaching at all levels from primary through post-graduate education, and I have even taught teachers as an Adjunct Professor of Education at George Washington University. Because of that I do not only have specific and focused PhD training in science, engineering, and design, I also have expertise in general education, various pedagogical methodologies, and how to improve them.

I have a specific focus and love for both Service-Learning (which is different from service-Learning and Service-learning and service-learning) and expeditionary learning. I work on projects and programs with students to infuse them into the experience in a student-led way. I try to publish work, not just in the application or methodological side of my work (in the design of information and communication technologies) but also in the education side of my work.

I treat my classroom as a laboratory, constantly working to improve the way in which students learn and increase success.

**These are the service design training sessions and/or other educational experiences I’ve facilitated within the last year:**

- September 28, 2021
- 1 hr
- Introduction to Service Design
- NASA
- 8 participants
  
- September 13-17, 2021
- 6 hr
- Service Design Futures
- NASA
- 11 participants
  
- August 1 - September 30, 2021
- 5 hours
- Customer Journey Mapping
- NASA
- 9 participants
  
- January 2021
- 4 hours



- Service Prototyping
- Community
- 5 Community participants
  
- January 2021 - May 2021
- 20 hours
- Qualitative Research & Synthesis
- NASA participants
  
- March 2021
- 1.5 hours
- Participatory Design
- University of Maryland Design students
- 100 participants
  
- April 2021
- 1 hour
- Strategic Design
- Dot Gov community
- 40 participants

I mostly provide my training offerings in the following language(s):

English

I mostly provide my training offerings in the following countries/cities:

Washington, DC

virtual

I cover the following topics during my training offerings:

- Definition of service design
- Differentiation of service design to other approaches like design thinking, service marketing and service branding
- Relationship of service design to agile, scrum and lean
- User research/deep customer insights
- Designing and conducting co-creation workshops
- Creativity and ideation processes
- Visualisation techniques
- Facilitation skills for service design
- Prototyping of services
- Implementation of service design concepts
- Business model development
- Measuring impact of service design, relating it to Key Performance Indicators (KPIs)
- Leadership/management of service design projects
- Building in-house service design capabilities
- Working with complex service systems
- Exploration of systems
- Service design for cultural change
- Organisational development
- Change management



### My training participants typically have the following level of experience:

- Novice (new to service design)
- Fundamental (basic knowledge)
- Advanced (practical application)

### These are my favourite cases I use to inform participants about the impact and value of service design:

1. <https://medium.com/swlh/service-design-case-study-redesigning-the-future-of-public-transport-7454275abfa1> - It's helpful to see the entire journey of a discovery-focused project; it's pretty robust
2. <https://uxdesign.cc/part-ii-a-service-design-case-study-599ff4ba5e9d> - Because we learn from the failures of others so it's important to see some failures; secondly it's good to see case studies that make the case for why we need service design and not just UX design
3. <https://www.service-design-network.org/touchpoint/vol-11-no1-service-design-for-innovation-and-start-ups/designing-an-innovative-municipal-organisation> - This is great for people to understand the differences (and similarities) when designing government services; I work with government agencies, so it's important for them to know that these methodologies can be applied successfully.
4. [https://www.academia.edu/26869341/Service\\_Design\\_insights\\_from\\_nine\\_case\\_studies](https://www.academia.edu/26869341/Service_Design_insights_from_nine_case_studies) - This is helpful in understanding how valuable extreme users can be and that we should design for them, if we are working in the public sector.
5. - this shows the importance of other frameworks especially trauma-informed research and design; and it's a local government agency

### These are the service design methods and tools that I use during my sessions:

- Customer Journey Map - to show the journey, from which we can build metrics (what parts of the journey should we measure)
- Experience Map - to highlight the experience during the journey and pick which part of the journey we should target first or prioritize
- Service Blueprint - to show the interconnected reality of the touch points to the service layer, policy layer, organizational lead, bureaucratic layer, etc.
- Interview, dyads, triads, etc. - to uncover needs, motivations, perform throwaway prototyping for learning
- Focus Groups, Group interview - to get information from a group when there is not enough time to interview all individually
- Expert interview - to get the expert's opinion and compare it to the lived experience
- System maps - helps us highlight the highest impact-leverage point which
- User stories - this helps concretize the specific need of users and generates discussion to make sure we are on the same page
- Personas, characters - Characters help us improve the journey by focusing on service-progressing moments and service-progressing decisions
- wireframing
- wizard of oz & concierge prototyping
- mystery shopping: this helps us to experience the issue or problem of our customers
- work-along: this helps to experience the issues first hand as an employee
- etc.

### After successfully attending my training sessions, participants will typically be able to:

Participants will be able to (PWBAT)

- create a journey map
- create an experience map
- create a persona or a character
- define a design challenge
- set constraints on the challenge (as well as preferences)
- define the journey of a greenfield service design project from idea to implementation
- build an interview guide
- identify their bias



- run an interview
- conduct an observation
- build CX, EX, and Service Health (SH) or Service Index (SI) metrics

**I apply the following evaluation tools to make sure the participants have understood the content of my sessions and gained the expected competencies and skills:**

We use a completion based assessment due to the project-based nature of the training.  
This means we evaluate their portfolio, as well as homework and written assignment.

**I systematically evaluate and improve my offerings based on feedback. These are examples of feedback that have led to improvements:**

1. Please show examples of how you customize part of the service design process for different unique situations
2. How can you use a method typically completed in a particular phase of the SD process in a different phase; what would be its new purpose -->  
This insight was missing and helps people navigate the nonlinear process in a clearer way
3. Please help the students differentiate between service design, HCD, Lean, Agile, etc.

**I have participated in the following service design-related activities in order to stay up to date, share my experiences with peers and receive their supervision within the last 12 months:**

- SDN Global Conference
- SDN Chapter Activity

**I actively support the local or national service design community through:**

- I started the NASA CX community
- I founded and co-lead the Service Design in Government Community of Practice
- I have spoken at an SDN local chapter event
- I mentor 20 multiple younger service designers (who are newer to the field)
- I regularly participate in community design work as a community member, and work alongside nonprofits in doing this work

**I have participated as a speaker in the following events:**

- December 10, 2021
- Civic Design 2021
- Radical Participatory Design: Decolonizing Participatory Processes  
<https://rosenfeldmedia.com/civic-design-2021/>
- October 6, 2021
- DPunk Lecture Series
- Service Design in Government: How to work with UX Designers for Digital Transformation
- September 29, 2021
- DPunk Lecture Series
- Strategic Design in Government
- March 2, 2021
- Participatory Design: A Digital Literacy Case Study with Dr. Victor Udoewa
- Participatory Design: A Digital Literacy Case Study with Dr. Victor Udoewa  
<https://ischool.umd.edu/events/participatory-design-digital-literacy-case-study-dr-victor-udoewa>  
[https://www.youtube.com/watch?v=PLh1X1Q\\_k8](https://www.youtube.com/watch?v=PLh1X1Q_k8)
- December 9, 2020



- Service Design in Large Scale Government: Making the World a Better Place
- Panel: Service Design in Large Scale Government
- <https://www.youtube.com/watch?v=ljGoK4fcJM0>

- October 24, 2020
- Global Perspectives in UX
- Moderator
- <https://www.gpux.design/>

- May 18, 2021
- The 2021 DotGov Design Conference
- Strategic Design: Increasing the Maturity of Your Org One Project at a Time
- <https://dotgovdesign.org/>

- August 2021
- Doing Ethnography in Civic Spaces
- Panel: Doing Ethnography in Civic Spaces
- <https://www.epicpeople.org/doing-ethnography-in-civic-spaces/>

- June 2019
- Digital Strategy Roundtable, Library of Congress
- Experimentation

- April 2019
- Google Women in Cloud Event
- Challenges and Perspectives in Diversity, Equity, and Inclusion

- August 2018
- BIG National Training Institute 2018
- Introduction to Lean Startup
- <http://www.bignet.org/index.php/2021-nti-virtual>

- November 2017
- FDIC OCIO Lunch 'n' Learn
- Welcome to Agile

- August 2017
- BIG National Training Institute 2017
- Build a Strategy
- <http://www.bignet.org/index.php/2021-nti-virtual>

### **I have published the following books/articles on service design and related fields:**

Udoewa, Victor. "Five Modes of Integration between Human-centered Design and Futures Design." *Journal of Future Studies*. In Submission.

Udoewa, Victor. "Radical Participatory Design." *Artifact: Journal of Design Practice*. In Submission.

Udoewa, Victor. "Redesign of a Service-learning Social Entrepreneurship Program for High School Students Part II: Prototyping a Hybrid Expeditionary Service Learning Model." *International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship*. In submission.





Udoewa, Victor, and Andrew Maier. "Agile Corps-A Public Service-Learning Program Part II." International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship 16, no. 1 (2021): 58-89.

<https://ojs.library.queensu.ca/index.php/ijsle/article/view/14491>.

Udoewa, Victor. "Agile Corps - A Public Service-Learning Program Part I: Design Research." International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship 13, no. 2 (November 2018): 93-119.

<https://ojs.library.queensu.ca/index.php/ijsle/article/view/11489>.

Udoewa, Victor. "Redesign of a Service-learning Social Entrepreneurship Program for High School Students Part I: Design Research."

International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship 13, no. 2 (November 2018): 79-92. <https://ojs.library.queensu.ca/index.php/ijsle/article/view/11492>.

Udoewa, Victor. "YES International Summer Service Program Design for High School Students." International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship 12, no. 2 (November 2017): 34-59.

<https://ojs.library.queensu.ca/index.php/ijsle/article/view/6658>.

Udoewa, Victor, Neil Mathew, Anuranjan Gupta, Lea Bauer, Lokesh Bhog, Bhawana Prabhakar, Parivartika Patel, and Louie Al-Hafidh. "Helping the Next 4 Billion Go Online Part II: Prototyping Solutions for Digital Literacy Education." International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship 12, no. 1 (May 2017): 13-40.

<https://ojs.library.queensu.ca/index.php/ijsle/article/view/6665>.

Udoewa, Victor, Neil Mathew, Louie Al-Hafidh, Lokesh Bhog, Anuranjan Gupta, Parivartika Patel, Bhawana Prabhakar, Saumya Kaushik, Lea Bauer, and Valentina Humar. "Helping the Next 4 Billion Go Online Part I: Design Research for Digital Literacy Education." International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship 11, no. 2 (November 2016): 18-37.

<http://ojs.library.queensu.ca/index.php/ijsle/article/view/6393>.

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