

# The Value of Human-Centered Design

**“Effective  
design of  
public service  
is itself an  
essential  
public  
service.”**

**The Design  
Necessity: A  
Casebook of  
Federally  
Initiated  
Products,  
1973**

**Human-centered design (HCD) is a creative and strategic approach to solving challenging problems. The method puts people at the center of the process.**

It considers behaviors, ways of thinking, and peoples' needs and aspirations. HCD integrates academic disciplines including anthropology, psychology, economics, and other practical and theoretical design disciplines. It is a qualitative, participatory and iterative approach. This technique for creative problem-solving rapidly generates new ideas and innovative approaches to better understand and address people's real needs.

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If a customer or employee has an idea for a new or modified product or service, they can work with a design team to make a quick, low-tech prototype of what that idea expresses, and create an experiment to test it with customers ... In this way, design teams create tight loops of ideating with internal or external innovators, prototyping, and testing. The business benefits from innovation, while at the same time not committing substantial resources before an idea is tested with customers.

*Building the Veterans Experience Office: CX and the Public Sector*

DMI: Vol. 30, Issue 2

**Although it arose largely from private industry, HCD is uniquely suited to the work of government, where serving people's needs is both good policy and sound strategy.**

Excerpt from “Design for policy and public services” published by the Centre for Public Impact:

*Traditional approaches to policymaking and delivering policies have left policymakers and citizens looking for alternative solutions. Despite the best of intentions, the standard model of dispassionate expert analysis and subsequent implementation by a professional bureaucracy has, generally, led to siloed solutions and outcomes for citizens that fall short of what might be possible.*

*The discipline of design may well provide an answer to this problem by offering a collection of methods which allow civil servants to generate insights based on citizens' needs, aspirations and behaviors. In doing so, it changes the view of citizens from seeing them as anonymous entities to complex humans with complex needs to match.*

*Design methods are very much aligned with a rigorous focus on outcomes. In this way, design sits within the wider context of efforts to bring innovative methods to the public sector, such as behavioral insights or other evidence-based approaches. They also impose humility by recognizing how little we do indeed know about the world. Accordingly, all these approaches share a bias towards iterative experimentation and empirical testing.*

Although design is not new to the US Federal Government, human-centered design (and the use of innovation labs) and the application of design beyond public spaces and printed materials, is a growing trend across federal, state and local governments in the US.

European governments have applied service design and behavioral economics to improve services and products that serve the public for over 10 years. In several countries, design has had such a valuable impact that national government units the size of small ministries have been established to focus solely on design efforts. In the UK and the United States principles for good user-centered design have been written into law.

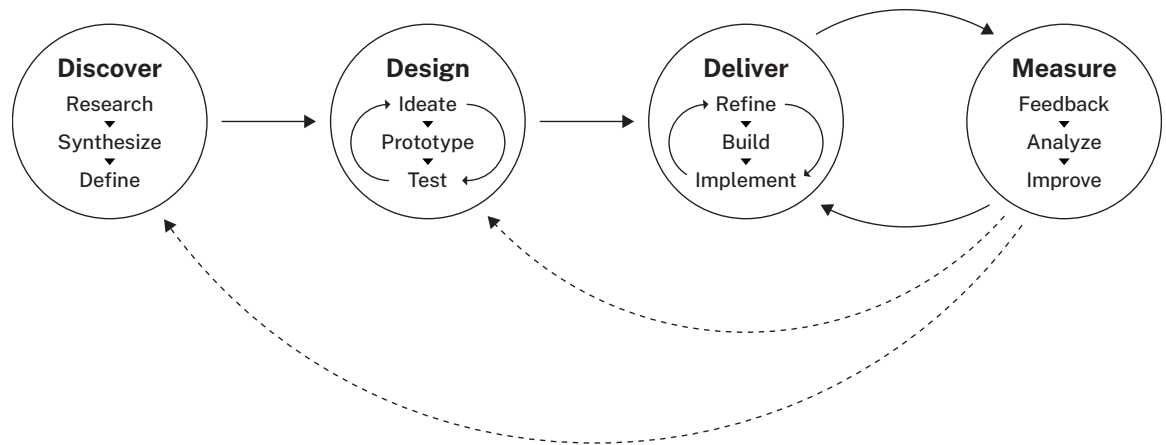
*Design-led  
innovation units  
across Europe*

Innovation Labs			
<b>Denmark</b> <ul style="list-style-type: none"> <li>- MindLab, Danish Ministries of Business and Growth, Education and Employment</li> </ul>	<b>Sweden</b> <ul style="list-style-type: none"> <li>- Experio Lab, Värmland County Council</li> </ul>	<b>Finland</b> <ul style="list-style-type: none"> <li>- Helsinki Design Lab (2009-13), Finnish Innovation Fund SITRA</li> <li>- Lahti Design Lab, Lahti City Council</li> </ul>	
<b>United Kingdom</b> <ul style="list-style-type: none"> <li>- Policy Lab, Cabinet Office</li> <li>- Government Digital Service, Cabinet Office</li> <li>- Creativity Team, Scottish Government</li> <li>- Northern Ireland Innovation Lab, NI Executive</li> <li>- Service Design Shropshire, Shropshire County Council</li> <li>- Social Innovation Lab, Kent County Council</li> <li>- Innovation Lab, Monmouthshire County Council</li> </ul>	<b>Poland</b> <ul style="list-style-type: none"> <li>- Design Silesia, Silesia Government</li> </ul>	<b>France</b> <ul style="list-style-type: none"> <li>- Design Creative City Living Lab, Saint-Étienne</li> </ul>	
	<b>Spain</b> <ul style="list-style-type: none"> <li>- Barcelona Urban Lab, Barcelona City Council</li> </ul>	<b>Ireland</b> <ul style="list-style-type: none"> <li>- The Studio, Dublin City Council</li> <li>- Northern Ireland Innovation Lab, Northern Ireland Executive</li> </ul>	

In 2017, the UK Government Digital Service established the international design in government community. A community of international designers working in, for and with governments across the world.

The international design in government community has grown to over 1200 members from over 58 countries over the past two years. These members share best practices on designing within the context of government.

## Human-centered design is a process.



HCD involves four phases of sequential work: discovery, design, delivery, and measurement. HCD is also cyclical. Once a design solution is launched, we measure its effectiveness against initial aims, and then we continually tweak it, thus improving the solution over time. HCD recognizes that people and their needs are dynamic and changing, and so our solutions must be dynamic and changing.

HCD offers a (relatively) new orientation towards design characterized less by its products than its processes. It's not about predefined material outcomes; it's about solving problems, creating opportunities, and meeting needs.

### Beyond designing services and products.

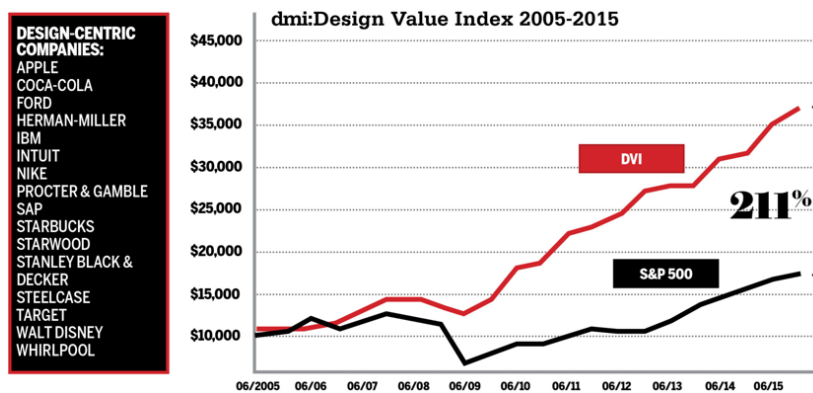
Design's contribution in the public sector is currently best understood when it comes to specific public-facing government services. However, The Lab at OPM and several other organizations have worked to expand the application of design methods beyond discrete services and products. The Lab's portfolio includes the application of HCD in:

- Strategy & Planning
- Contextual Understanding and Communities
- Designing Policy
- Program Design
- Operations and Business Systems
- Culture and Employee Engagement

## Design adoption correlates with business value.

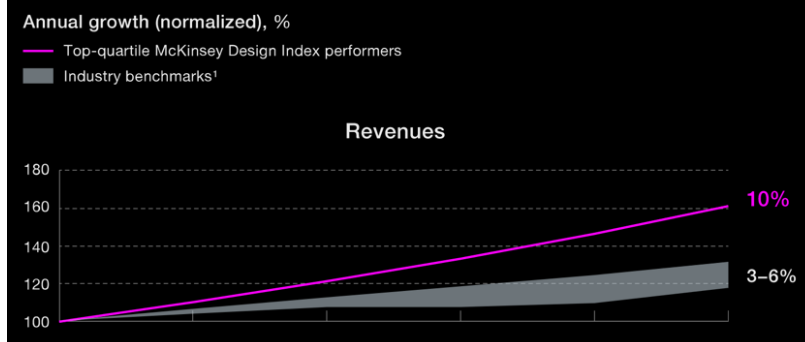
Organizations have conducted numerous studies to better understand the value of design to an organization. Many of these studies have focused on measuring the financial impact of in-house design practices. There is a growing library of stories and case studies about the positive impact of design in the public sector. Research is emerging that provides evidence supporting the value of design with regards to outcomes that can be more challenging and abstract to measure such as employee engagement, culture change and strategic planning.

2015 Design  
Value Index  
Design Mgmt.  
Institute, 2016



The Business  
Value of Design  
McKinsey, 2018

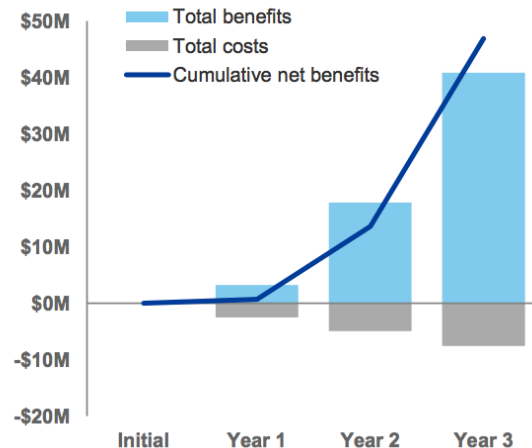
Companies with top-quartile McKinsey Design Index scores outperformed industry-benchmark growth by as much as two to one.



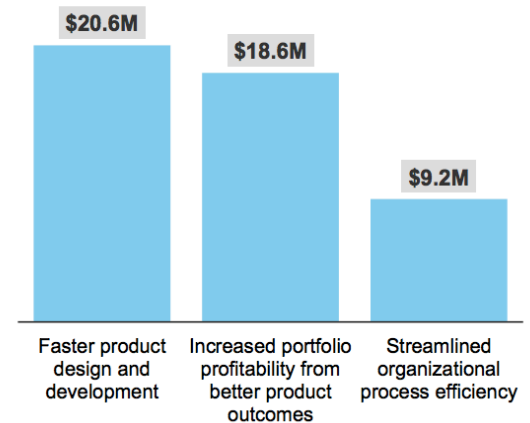
Design-centric organizations have been found to outperform industry benchmarks.

The Total Economic  
Impact Of IBM's  
Design Thinking  
Practice  
A Forrester Study,  
2018

Financial Summary (Three-Year)



Benefits (Three-Year)



In the last five years, IBM has invested significantly in design, hiring over 1000 professional designers and establishing an expansive Design Thinking Practice that embeds design approaches across a diverse portfolio of products and services with the aim of helping clients reduce costs, increasing speed, and designing better solutions.

Forrester Consulting was commissioned to study the impact of the practice at IBM. They found conclusive evidence for the financial and cultural value of design, including:

**Human-centered design improved product outcomes, reduced the risk of costly failures, and increased portfolio profitability.** Refined strategic prioritization enabled investments in solutions that were less likely to fail. Better design increased average product profits. IBM helped expand design thinking at the organization over three years to penetrate one quarter of the entire portfolio, enabling \$18.6M in increased profits.

**Cross-functional teams collaborated to share problems and find solutions, reducing costs by \$9.2M in streamlined processes.**

## Increasing design adoption means increasing impact.

The Lab at OPM's mission is to build capacity for human-centered design within government. Thus our end-goal for our design project work are 'design-infused' federal teams with the ambition of design driven offices and divisions. Design maturity – the adoption of design across an organization - is important because organizations that are design mature outperform organizations that are not.

Leah Buley just published a report with InVision titled “The New Design Frontier: The widest-ranging report to date examining design's impact on business.” In it she echoes a recent McKinsey report which detailed the profound impact design is having on businesses.



In this sweeping survey of more than 2,200 companies, most found design directly impacted product usability and customer satisfaction.

*The New Design Frontier: Findings from the world's largest study of organizational design maturity and business impact*  
Leah Buley and team at InVision, 2018



This survey of companies revealed five levels of maturity based on behavior and practice of various design activities.



**"Our design team has had  
proven impact on: "**

(Level 1 companies)



**"Our design team has had  
proven impact on: "**

(Level 2 companies)



Even a small jump from "Level 1" to "Level 2" showed a significant impact on customer experience.

For the wider organization design maturity can be measured in how well versed the organization is in the top problems facing the stakeholders they serve: community members, families, senior citizens, benefits applications, federal employees, advocacy groups, managers, and local government officials (just to name a few).

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In another study, Jeanne Liedtka of Darden School, University of Virginia examined 22 large organizations using design in their work to assess the methodology's true impact.

Liedtka identified the following five improvements to organizational innovation and performance resulting from leveraging design:

- Improved Quality of Choices
- Reduced Risk and Cost of Failure
- Enhanced likelihood of successful implementation
- Increased Adaptability
- Creation of Local Capability Sets

***"..by supplying a structure to the innovation process, design helps innovators collaborate and agree on what is essential to the outcome at every phase. It does this not only by overcoming workplace politics but by shaping the experiences of the innovators, and of their key stakeholders and implementers, at every step. That is social technology at work. "***

– Jeanne Liedtka

## What makes the Lab at OPM different?

Design School at the Lab, pictured at right, convenes participants from various agencies to learn to use HCD to work through a real-world challenge.



We not only help find solutions, we teach people the skills needed to sustain changes. We do this through an integrated blend of classroom-based learning and project-based, hands-on experiences. Individuals can simply attend classes to learn specific skills and the application of design concepts. We also develop long-term partnerships that include a diverse portfolio of projects to advance specific objectives while also developing the capacity at the individual, team, program and organizational levels.

A broad array of opportunities exists for government organizations to work with the Lab. We focus on building problem solving approaches that are effective, scalable and sustainable over the long term. Our partners become advocates, teachers and practitioners of human-centered design. Our return on investment is not only quantified by the measurable positive effects of our work, but by how our partners value and sustain it.

## Partnering with The Lab.

The Lab is a group of designers helping the federal government solve complex challenges. Across all of our services, we strive to build human-centered design capacity across the federal government.

Design partnerships with the Lab build capacity for design at agencies in various overlapping ways:

**Design projects** | The Lab's experienced designers, with a complementary mix of skills and expertise, work with agency partners on real projects. On top of project-based services, we provide instruction, coaching, and other support as needed.

**Design capacity building programs** | We use our work across government to inform our educational content and approach. In some instances, we bring a cohort of partners through a customized series of educational offerings to build capacity more deeply across a team.

**Design program development** | We connect our partners to each other and the broader design community in government to share best practices and experiences. We also advise our more mature partners as they hire designers and build design into their program.

## How we work.

With a government-wide mission and as a revolving fund in the federal government, the Lab works with other agencies on a fee-for-service basis. We work with a wide variety of agencies that approach us, seeking to have a conversation about our work and how it might align with their current needs. Some engagements are very small and short-term, others are substantial and partnerships last for extended periods of time.

## We are proud to be building design capacity with a range of Federal agencies.

Active projects and collaborations at the Lab include individuals and teams from the following government agencies:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Education
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of Labor
- Department of the Interior
- Department of Veterans Affairs
- General Services Administration
- Millennium Challenge Corporation
- National Aeronautics and Space Administration
- National Geospatial-Intelligence Agency
- Office of Personnel Management
- U.S. Patent and Trademark Office

We would be pleased to introduce to you to some of our current partners. They are doing exciting and important work.

**Anahita Reilly**

Chief Customer Officer  
General Services Administration

**Shannon Roberts**

Senior Advisor, RAO,  
Citizen and Immigration Services

**Michelle Earley**

Director, USAJOBS  
Office of Personnel Management

**Juliana K. Cyril**

Director, Office of Technology and Innovation  
Centers for Disease Control and Prevention

**Erin Siminiero**

Lead, Insight + Design,  
Veterans Experience Office  
Department of Veterans Affairs

**Garth Jensen**

Director of Innovation, Carderock Division  
Navy Surface Warfare

## If you are interested in reading more.

**Designing good government services: an introduction**

*UK Digital Service*

<https://www.gov.uk/service-manual/design/introduction-designing-government-services>

**Why design thinking works?**

*Jeanne Liedtka - Harvard Business Review*

<https://hbr.org/2018/09/why-design-thinking-works>

**Exploring the impact of design thinking in action**

*Jeanne Liedtka*

<https://designatdarden.org/app/uploads/2018/01/Working-paper-Liedtka-Evaluating-the-Impact-of-Design-Thinking.pdf>

**Service Design Impact Report: Public Sector**

*Service Design Network*

<https://www.service-design-network.org/books-and-reports/impact-report-public-sector>

**Design for Public Good**

*UK Design Council*

<https://www.designcouncil.org.uk/resources/report/design-public-good>

**Briefing Bulletin: Design for policy and public services**

*Centre for Public Impact*

<https://s3-eu-west-1.amazonaws.com/funct-cpi-wordpress/assets/uploads/2016/02/Briefing-Bulletin-design-for-policy-and-public-services.pdf>

**Design revolution in government**

*Dr Katrin Dribbisch & Martin Jordan*

<https://medium.com/the-service-gazette/design-revolution-in-government-6e19be95f49a>

**The Total Economic Impact™ Of IBM's Design Thinking Practice**

*Forrester*

<https://www.ibm.com/design/thinking/static/media/Enterprise-Design-Thinking-Report.8ab1e9e1.pdf>

**2015 dmi : Design Value Index Results and Commentary**

*Design Management Institute*

<https://www.dmi.org/page/2015DVlandOTW>

**The business value of design**

*McKinsey & Company*

<https://www.mckinsey.com/business-functions/mckinsey-design/our-insights/the-business-value-of-design>