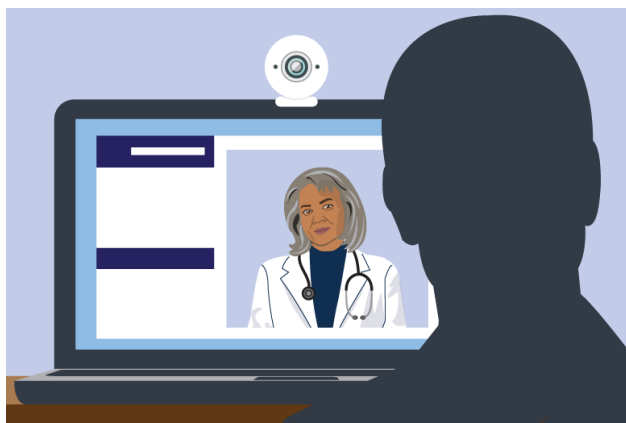


# Our Vision for Digital Transformation

*Getting back to basics to make the Office of Information and Technology the best IT organization in government*

## Setting the stage for continued Digital Transformation at VA

As the Department of Veterans Affairs (VA) continues its drive toward Digital Transformation, early investments in this transformation have paid dividends to the Veterans and caregivers that VA is charged with serving. For example, our work to improve performance monitoring helped us know when and where to boost capacity to support an influx of Veterans needing video telehealth appointments, and our investment in the cloud provided an ultimate solution for ensuring VA could support an exponential increase in telehealth usage during the early days of the COVID-19 pandemic.



Similarly, early in the pandemic when the Veterans Health Administration sought to compress and accelerate their eight-year deployment vision for tele-critical care because

of the pandemic, The Office of Information and Technology (OIT) configured and helped deploy 250 mobile tele-critical care carts across 139 locations in just four months, leveraging an existing solution we had already begun deploying as part of our cybersecurity approach.

Additionally, when VA shifted a large portion of the workforce to remote work, the investments we had made into remote access, teleconferencing, and employee computing equipment meant that employees were logged in remotely and accomplishing VA's mission from Day 1.

A large part of this success was due to the unique environment during the early pandemic; we had a shared vision, we had stretch goals, we had priorities that everyone agreed on, and we received critical resources mapped to those goals. It also showed us the true capabilities and talents of our teams.

But VA's Digital Transformation is much broader than investments in the cloud, in equipment, and in new services. It's an acknowledgment that, today, many Veterans are already accustomed to a digital experience—whether that's depositing a check from their phone, accessing their auto insurance card from an app, or chatting with a customer service rep via text—and they expect the same options from VA.



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It's also an acknowledgement that for Veterans who physically interact with VA—whether coming into one of VA's more than 1,200 health care facilities to receive care, or visiting a Vet Center to sign up for benefits, or meeting with a Veteran Service Organization for support representing their claim to VA—they expect the VA or VSO employee to be able to provide those services reliably, and that the complex, nationwide information systems that enable that service will work, every time. Limited IT resources, myriad federal mandates, and inadequate prioritization have created technical debt that impedes our ability to deploy new digital product offerings.

To meet Veterans where they are, with reliability and with consistency, OIT must be single-minded in our focus on developing a clear vision for our work, creating priority-driven roadmaps, and executing with excellence, with rigor, and with consistency over time at every level.

*At OIT, our only mission is to deliver IT products and services to VA and our Nation's Veterans. We must ensure that every ounce of energy we expend and every resource we deploy is focused on this essential mission.*

## Becoming the best IT organization in government

Public service is a noble calling, and for all of its associated opportunities and rewards, there are real challenges to operating on such a large scale with so many mandates and categories of stakeholders. Often, we lose sight of the opportunities before us because we are juggling so many requirements not directly related to our mission. We become less vision-driven as we're forced to re-prioritize our work and redirect scarce resources to respond to all of these external requirements.

For OIT to transform into an example of what the best IT organizations can do to further government agency missions, we need to renew focus on several critical areas that, unless addressed, will prevent VA from offering the seamless, secure experience our Veterans deserve.

There is no great IT organization that is not great at execution in all respects. We simply cannot be great unless we are all experts at the fundamentals, from the IT specialist to the budget analyst, from the product



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developer to the human capital specialist, from the cybersecurity program manager to the administrative assistant.

We have to get back to basics and pursue excellence in organizational strategic planning, bringing rigorous discipline to how we prioritize requirements and allocate funding. We must examine how we engineer and maintain key IT products and services, avoid downtime, service our VA customers, and support top VA priorities such as Electronic Health Record Modernization (EHRM). We must also clearly articulate and deploy a strategy to secure and protect VA's vital infrastructure and our Veterans' information.

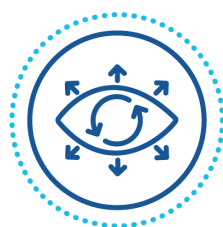
While we do this, we must never lose sight of the exceptional customer experiences we're trying to create with our products and services. And finally, we should be the government leader in promoting diversity and inclusion among our team, so that we can represent the diversity

of our customers, create a workplace where people feel welcome and supported, and be a destination that attracts the very best talent.

*To accomplish this, we must lead with vision, connect the vision to clear plans with measures of success, and achieve those through relentless execution.*

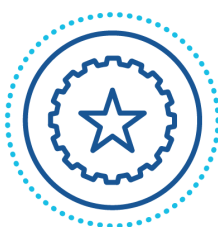
The following priorities outline our vision for making the Office of Information and Technology the leading government IT organization:

- » Vision-driven Execution
- » Operational Excellence
- » Delightful End User Experience
- » People Excellence



#### Vision-driven Execution

- Vision connected to plans connected to execution
- Clear vision and roadmap at each Portfolio and Product Line



#### Operational Excellence

- Engineering excellence
- Resource allocation
- Security Excellence



#### Delightful End User Experience

- Products and services that people love, are a joy to use, and enable them to be the most effective in their role



#### People Excellence

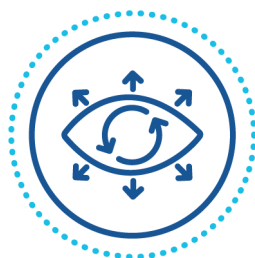
- Provide fulfilling career pathways and improve recruitment
- Celebrate diversity, inclusivity, and accessibility



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## Vision-driven Execution



*We will pursue excellence in the way we envision, plan, prioritize, resource, and execute the services OIT provides to VA—Vision, connected to plans, connected to execution.*

Executing against myriad daily deliverables that are not connected to comprehensive plans, which in turn lack clearly articulated vision, wastes time, money, and the good faith of our stakeholders. Every dollar not spent on the mission is detracting from our ability to deliver services to Veterans. We must be trustworthy stewards of resources and advocate for mission-driven decisions.

Each team will have a clearly articulated vision for the products and services they deliver. That vision will connect with an explicit multi-year roadmap and outcomes-based progress metrics, aligned with stakeholder expectations and consistent with current resource constraints.



- » Each OIT portfolio area and product line will have a forward-looking vision, strategy, 2- to 3-year roadmap, and clear measures of success. We will continue and strengthen our agile development approach while making sure that each deliverable is informed by the portfolio and product line's vision and roadmap.
- » Each of these roadmaps will articulate concise, clear priorities, highlighting what we are and are not delivering, in order to determine any potential dependencies or organization impacts. We will iterate on these priorities over time, keeping them up to date, so we can prioritize new requirements in the context of all the work we have to do, improving the quality of our trade-off discussions with stakeholders.
- » The priorities and roadmaps will be connected to clear resource allocation plans. We will look for places that are chronically under-resourced and seek solutions through moving resources from other places or soliciting more investment from our administration and legislatures.



We will establish OIT-wide performance scorecards that measure key, outcome-impacting operational metrics that enable continuous improvement, **and we will codify our operating model**—how we work—across the entire organization. This will include systems development, organization operation and employee roles, and support systems.

We will continue to deliver the technical capabilities necessary to implement VA's strategic plan, including far-reaching and highly visible efforts including:

- » Electronic Health Record Modernization (EHRM)
- » Financial management systems (Integrated Financial and Acquisition Management System (iFAMS) and Financial Management Business Transformation (FMBT))
- » Human capital management systems
- » Defense Medical Logistics Standard Support (DMLSS) and VA supply chain transformation
- » Asset and Infrastructure Review (AIR) Commission to realign and modernize health care system.



Lastly, we will build and deploy a plan for a common VA data architecture and strategy, treating data as a strategic asset. We will ensure that VA employees such as clinicians, benefits administrators, technicians, and researchers have access to the right data and insights, in the right place, and at the right

time, to make data-driven decision in the best interest of VA and the Veterans VA serves. This work includes:

- » Standing up a modern cloud-based Data Analytics environment, and scaling this to an enterprise data platform
- » Enhancing our Data and Analytics Product Line with oversight of all IT investment in Data, and governance by key stakeholders
- » Standing up the Center of Excellence for Data Science
- » Building and deploying a DOD—VA data strategy.

## Operational Excellence



*We must return to the basics and refocus on our mission, building IT products and services for VA and the Veterans we serve, while being effective stewards of the*

*resources we have and vocal advocates for resources we need.*

Our priority number one in achieving operational excellence is implementing a discipline of *engineering* excellence at VA. We need to get the basics right.

*Fundamentally, the primary reason the Office of Information and Technology exists is to build and operate IT products that are highly available with world-class reliability and uptime.*



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This is the value proposition we bring to VA, it is the service we provide. When we lose sight of that primary responsibility, we lose the faith of our customers.

As a result, offices pursue their own information and technology services, often referred to as “shadow IT,” which creates additional complexities in the engineering landscape, exponentially increases technical debt, introduces security vulnerabilities, and ultimately creates a dysfunctional experience for VA employees, and for the Veterans who rely on a seamless, secure technological backbone at VA to access the care and services they have earned.



The foundation of true operational excellence includes three components: **Engineering Excellence, Security Excellence, and effective Resource Allocation.**

## 1. Engineering Excellence

To institute an environment of Engineering Excellence, we will establish a process of continuous improvement in how we execute our engineering processes, including redundancy, failover, monitoring, modern design patterns, etc. Our goals for

implementing the discipline of Engineering Excellence at VA include:

***We will drive toward reducing avoidable major incidents to zero.***

Over 17% of the major incidents we experience are the result of software and configuration changes. We can reduce this to near-zero through more careful testing, release management, and adherence to change management processes.

***We will target 100% of incidents or outages to be caught via monitoring and alerting rather than end user reports of an outage.***



While OIT has established monitoring for many services and applications, the percentage of incidents that are currently caught via alerting is in the single digits. We will strive to catch 100% of system issues through early-warning monitoring, so that we can identify a problem before our users do.

***We will establish a world-class level of systems and infrastructure uptime by:***

- » Identifying our key systems and infrastructure components, identifying those that aren't meeting resiliency needs, and driving action plans to improve.

- » Ensuring the highest priority systems and infrastructure components have tested failover capabilities.
- » Upgrading key infrastructure and systems where current configurations are negatively impacting our resiliency and reliability.
- » Improving our change management and adherence to Standard Operating Procedures (SOPs) to aggressively reduce avoidable downtime.

***We will invest in critical infrastructure capabilities that enable a more agile, resilient IT environment at VA, including:***

- » Modernization and consistent enforcement of a technical refresh schedule for the endpoints and devices our VA customers use to perform their work and provide care and services to Veterans
- » Modernization of our network infrastructure to improve reliability, availability, and capacity of network resources for on-premises traffic, as well as more emphasis on moving customer traffic to cloud infrastructure to reduce VA network congestion and simplify and streamline the customer's experience.

***Customers also appreciate proactive, timely communication.***

So it is imperative that we communicate to our VA customers when there's an outage that impacts them. This includes off-premises dashboards where customers can check on the availability of VA applications and services.

## **2. Security Excellence**

Today's computing environment is increasingly complex with more sophisticated bad actors attempting to take over an organization's computing resources and compromising sensitive information.



Guarding against this necessitates developing a holistic approach that can protect the organization on an ongoing basis.

Being excellent across all the dimensions of this approach is essential to increasing VA's security preparedness and minimizing the risk of a major security incident.

***We will establish a clear security strategy founded around the Zero Trust Architecture and will identify and execute on a clear, risk-based roadmap that implements the key pillars of that strategy.***

We will further strengthen our procedures that enable us to identify and respond rapidly and decisively to new security threats and incidents.

We will also demonstrate the security of our systems through compliance with federal regulations like Federal Information Security Modernization Act (FISMA) and Federal Information System Controls Audit Manual (FISCAM), as they represent a sound, broad set of improvement opportunities for our security discipline.



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We must articulate and implement a clear roles and responsibilities model across the organization, so we can work in unison to secure our environment and respond to threats.

At the heart of our strategy is Zero Trust. This increasingly popular approach to security provides a powerful way to frame the broad set of investments needed to secure the organization. It starts with a simple premise: there are so many different ways that a bad actor can compromise a network that we must assume our network will be breached.

If we assume this, then the next line of defense is to assure that the bad actor cannot profit from breaching our network, since no vital information or resources will be available to them if they do.

In short, there is “zero trust” conferred to the bad actor from having breached the network boundary, and because of this, they cannot access the resources they breached the network to steal.

In a Zero Trust environment, security comes not solely from protecting the perimeter but rather from the following core capabilities and investments:

### *Enforcing strong identity verification*



- » Multifactor authentication using the PIV card infrastructure
- » Access to VA resources from “non-human” end points (e.g., machine-to-machine communication) are strictly controlled through:
  - Restriction of server access to known machine endpoints
  - Trusted Internet Connections (also known as TIC) as the only gateway from outside the network boundary to inside the network boundary.

### *Ensuring all connecting devices are healthy*

- » Up-to-date end point protection on all devices accessing VA computing resources, enforced before access is granted
- » End-user computing devices are restricted from operating with administrator privileges, so that unsafe software cannot be installed.

### *Using rich telemetry and advanced algorithms to detect attacks and isolate affected systems*

- » Monitoring and alerting that rapidly identifies new attack methods
- » Impacted resources are isolated to restrict further damage
- » Impacted resources must be remediated to save vital information and return the resources to production.

### *Enforcing Least Privileged Access*

- » Implementing role-based permissions, granting access permissions based on a person’s role in the organization and their associated access requirements
- » Enforcing strong workflows that remove privileges when an employee’s role changes



- » Because doing this is complex and error prone, implementing an auditing capability that validates role-based access provisioning is being enforced.

#### *Protecting sensitive VA Information as alternative line of defense*

- » Encrypt all information at rest
- » Enable the ability to encrypt sensitive shared information
- » Policy enforcement that restricts the sharing of sensitive information



#### *Assure the health of our IT supply chain by enforcing strict security requirements on our third-party software and service providers*

- » Ensure that only approved IT products and services can be introduced into our estate.
- » Proactively manage the set of IT solution providers including desktop, cloud services, and outsourced software developers to ensure they have strong security practices
- » Deploy a security testing process for all new updates delivered to the systems and devices in the estate.

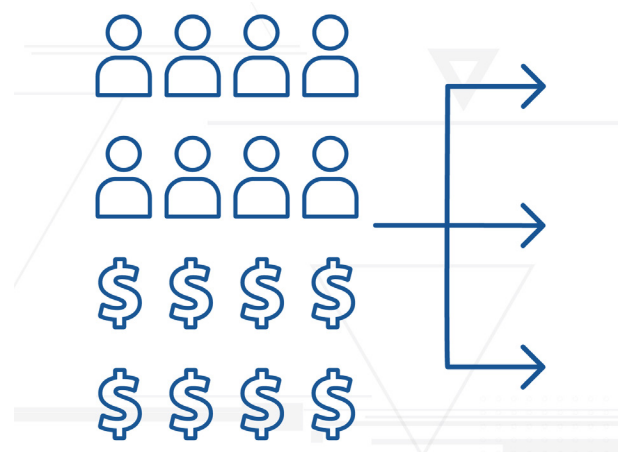
### **3. Effective Resource Allocation**

We will institute a culture of relentless prioritization so we allocate resources effectively.

Assigning resources against our top priorities and transparently reporting our resource usage to stakeholders will engender the trust of our customers while directing organization focus and speed to the building and supporting of IT services most critical to VA's mission.

This includes:

- » Analysis of where our resources are allocated, to ensure that they are applied against our top priorities
- » Analysis of efficiencies we can drive across the organization with existing resources, such as a more effective use of government employees and contractors and a tight embrace of our Federal Information Technology Acquisition Reform Act (FITARA) responsibilities
- » Aggressive prioritization and re-prioritization of how we spend those dollars, including decisions on what we are funding versus not funding, what the portfolio-level "cut" lines are, and where funding gaps exist for critical requirements—all while promoting continuous transparency and candor with our business partners.



## Delightful End User Experiences



*We are committed to creating user experiences that people love, are a joy to use, and enable them to be the most effective in their role.*

We will continue to pursue nothing less than an exceptional customer experience for the end users of our products and services at VA, as well as the Veterans and caregivers that VA serves. We will help VA deliver self-service tools on par with top private sector companies and that will provide the best online experience in the Federal Government.

This means developing Veteran-facing products with their early input, so we can deploy apps and services that are accessible and accomplish what Veterans need, and it means developing VA employee-facing products that work as expected, help make their time more productive, and bring new capabilities that help VA reimagine the Future of Work.



We must also innovate around different delivery models for providing VA IT support—both to make our operations more efficient, and also to make getting IT support a more seamless experience for employees.

This could include more kiosk support rather than at-desk support, which would encourage more teachable moments, speed access to pre-positioned replacement devices and equipment in a centralized way, and reduce the time and resources required to enable more efficient IT support.

We should strive to make VA a government-best example of Accessibility-First. While every government organization is required by law to create and deploy fully accessible products to the citizens they serve, the citizens VA serves are Veterans—many of whom have differing abilities as a result of their service. Accessibility should be personal for us at VA.

## People Excellence



*Our executives and hiring managers will focus on developing systems that deliver excellence in how we recruit and develop our teams.*

We will renew our commitment to our workforce because our people are the core of our operations, and our operations advance VA's mission to serve our Nation's Veterans. While public service at VA is a noble and rewarding pursuit on its own, we know we have much more to do to make our organization a more attractive place for industry talent to come work—as well as a more fulfilling career for our existing employees.

**VA**



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We will advance a compelling and competitive workforce development program that can attract and retain some of the best industry talent, and we will celebrate the diversity of our workforce and pursue a more inclusive, accessible workplace. This includes:

- » A more accurate understanding of industry IT career pathways, a more accurate articulation of current career trajectories in OIT, and clarity around where OIT's career pathways do not currently reflect those available at other IT organizations
- » Creating energizing career progression plans that can move employees along a competitive, fulfilling career pathway, where staff are focusing most of their time on leading strategic vision versus task management
- » Improving recruiting of highly talented technical team members by establishing clear job descriptions consistent with world-class tech teams, as well as pursuing more flexibility to offer competitive salaries and more flexibility across grades so we have the right people at the right level in the right position
- » Creating an environment where all team members feel supported and included, and striving to create a diverse team that represents the diversity of the Veterans we serve.

## In Conclusion: Realizing, Optimizing, and Sustaining our Transformation

*Everything we do must be mission-driven, focused on the IT products and services we deliver to VA and the Veterans we serve, and making them a delight to use.*



We must lead with vision, connected to plans, connected to execution. We must return to a focus on the fundamentals and become better at providing reliable, consistent IT products and services that build trust among our stakeholders. We must institute a culture of continuous prioritization, efficient resource allocation, and stewardship. We must implement a rigorous security strategy to safeguard vital VA infrastructure and sensitive Veteran information. And we must celebrate and promote the talent and diversity of our workforce, while reciprocating our employees' commitment to public service with fulfilling career pathways.

While these priorities reflect the fundamentals that we need to focus on today to transform into the organization VA and our Veterans need, getting this right does not mean we'll be able to say, 'We have completed the transformation.' Transformation is a journey. Noted earlier, the harder work of any

transformation is to execute it with excellence, with rigor, and *with consistency*.

Early wins must be sustained. We must be able to communicate these wins to stakeholders and tell our story, with transparency and authenticity. We must be able to demonstrate our responsible stewardship of the resources we have, so we can effectively advocate for the additional resources we need.

At OIT, our only mission is to deliver IT products and services to VA and our Nation's Veterans. If we focus everything we do on that purpose, not only will the Office of Information and Technology become the best IT organization in government, but we will have honored the faith and trust that VA staff, our Veterans, and their caregivers place in VA—delivering them the exceptional customer experiences they deserve.



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