

# PROPOSAL FOR A 21ST

# CENTURY

# VA



January 2014

Office of the Chief Technology Officer



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## INTRODUCTION

Today's VA provides a myriad of benefits and services to improve the lives of Veterans and their families. Hundreds of medical centers and clinics provide access to healthcare, affordable loans make it possible for Veterans to become homeowners, and the Post-9/11 GI Bill just recently enabled the millionth Veteran to attend college. Every day, Veterans and their families benefit from VA programs, which also promotes a stronger middle class for the nation.

Yet while the benefits and services available are excellent, the process to obtain benefits is often long, complex, and confusing—the very people VA aims to help often feel frustrated, alienated, and ignored. No Veteran should feel this way.

Across the public and private sectors, digital technologies have become the standard for service delivery and engagement. The VA has an opportunity to enthusiastically adopt these standards and transform itself into a 21st Century organization.

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A 21st Century VA embraces technology best practices and leads the field in digital service delivery.

Every product, decision, and policy — **everything the VA does — is driven by the needs of users: Veterans and their families.**

A 21st Century VA is within our grasp. It requires a commitment to creating a modern, unified VA experience that is digital by default, driven by a deep understanding of users, and powered by an innovative workforce.

This document lays out the plan for creating a 21st Century VA, encompassing three areas of VA: Veteran Experience, Benefits Delivery and Agency Transformation.



# 1/

## 21ST CENTURY VETERAN EXPERIENCE

A Veteran's experience with VA is the benchmark by which we measure ourselves. Are Veterans and their families aware of all the benefits and services for which they qualify? Can they navigate VA processes easily and with confidence? Do they experience customer service that keeps them informed and empowered? Do they trust VA to take care of them?

A 21st Century VA leverages user-centered design, modern technology, and data-driven approaches to provide a best-in-class experience for Veterans every single time.

### OBJECTIVES

- i / A Veteran experience that is digital by default.
- ii / Build every Veteran experience with real users at every step.
- iii / A single digital platform where a Veteran and anyone else interacting with VA can address all his or her needs.
- iv / Promote health and well-being with data-driven best practices.
- v / Empower Veterans with the information and capabilities to meet their own needs.
- vi / An extensible digital platform that can be built on top of and enhanced by multiple stakeholders.
- vi / Centralize information collection and dissemination within VA.

## 2 /

### 21ST CENTURY BENEFITS DELIVERY

Customers today expect information to be available at their fingertips and answers in an instant. Today's most popular service companies like Google and Amazon are constantly testing and tailoring their offerings to ensure customers have the clearest, most relevant information and features.

In this spirit, 21st Century benefits delivery re-imagines VA's "duty to assist" Veterans for the digital age, simplifying complex processes and implementing technologies that evaluate and accurately award claims in a real-time manner.

#### OBJECTIVES

- i / End-to-end automated, automatic award decisions.
- ii / Efficient, standardized, and objective medical information collection.
- iii / Objective, transparent criteria and processes that are easily understood by all Veterans.
- iv / Directly connect benefits to restoring a healthy Veteran.

## 3 /

### 21ST CENTURY AGENCY

Delivering a 21st Century experience requires a 21st Century agency: one with an empowered, accountable, tech-savvy workforce with world-class internal technical capacity, and rooted in core values that recognize Veterans' service and sacrifice. This agency protects Veterans' data, privacy, and rights.

Modernizing policies and adopting new habits allows the entire agency to better execute its mission: serving Veterans.

#### OBJECTIVES

- i / Increase VA's internal technical capacity.
- ii / Increase the technical literacy of VA's existing workforce.
- iii / Adopt modern technical development practices and standards.
- iv / Be more proactive than reactive.
- v / Cultivate an engaged, collaborative workforce.
- vi / Become a more data-driven, accountable organization.
- vii / Make it easy for innovative new and small businesses to do business with VA.
- viii / Engage customers personally like a modern service organization.
- vii / Behave transparently.

# STORIES

## OF A 21ST CENTURY VA

Our nation's Veterans are diverse.  
They have different needs and varying  
entry points into the VA system.

A 21st Century VA will provide productive  
experiences for all Veterans,  
at every point of interaction with VA.

Imagine a VA that can make the following  
stories possible ...





1/

**Greg, a Gulf War Veteran, logs into the VA system for the first time and is prompted to answer a few questions about himself and his time in service.** He answers the questions, hits “submit,” and is instantly presented with a list of the benefits for which he is qualified.

As a result, Greg decides to apply for compensation benefits for a knee injury he sustained in combat. He fills out an online application, which instantly verifies his Veteran status and lets him know everything that is required for him to apply.

Greg instantly sees his estimated monthly payment, along with clear instructions to sign a private medical provider release form and a link to schedule his two necessary exams.

Once his claim has been processed he receives an email with his disability rating and his actual monthly compensation amount. Below the rating is a clear description of how the rating was calculated—information that eliminates the urge to reapply with slightly different answers to see if he could get a higher rating. Next to his rating is a list of all physical rehabilitation options that can improve his knee condition, with links to facility locations and contact information.

The next day, his first payment is deposited directly into his bank account.



2 /

**Caroline, a recently discharged Vet, makes her first visit to a VA hospital.** Dr. Sheu examines her, and records the elbow disability exam on her computer. VBMS automatically calculates the disability benefit, and emails Caroline her disability rating, monthly compensation, and a list of physical therapists for her to choose from.

While meeting with Dr. Sheu, Caroline mentions that she's considering getting her college degree but is short on cash. Dr. Sheu encourages her to apply for Post-9/11 GI Bill benefits and directs her to a center within the hospital where VA employees can help her file an application on the spot.

Years later, when Caroline is three months away from finishing her Bachelor's degree, she receives an email from VA reminding her that she qualifies for Veteran's preference when she starts applying for new jobs.



3 /

**Jordan, who recently returned home from his deployment to Afghanistan, has been diagnosed with PTSD.** He receives an email from VA reminding him about treatment options, along with information for making an appointment. The email also includes compelling data that will incent him to action: "85% of Veterans near you attend mental health counseling at least twice per week." It also includes links to the three mental health organizations closest to him that have been well-rated by Veterans.

As he makes progress with treatment, Jordan receives an email from VA alerting him to a new benefit that has become available to him through the GI Bill. As a result, Jordan speaks with his counselor about his options, and decides to pursue a degree in the fall.

The email notification he received was sent to all eligible Veterans within the VA system.



4 /

**Ana takes her husband Jorge, a Vietnam War Vet, to a VA regional office to attend an appointment to apply for pension benefits, which she scheduled from her phone that morning.** After signing in at the kiosk, the VA employee walks them through the application on one of the on-site computers, scanning Jorge's paperwork into the computer. His records are immediately visible on the screen and processed by the application.

At the end of the visit, the VA employee reminds Jorge that he has an upcoming appointment at the nearby VA hospital and that his prescription is ready to be picked up.

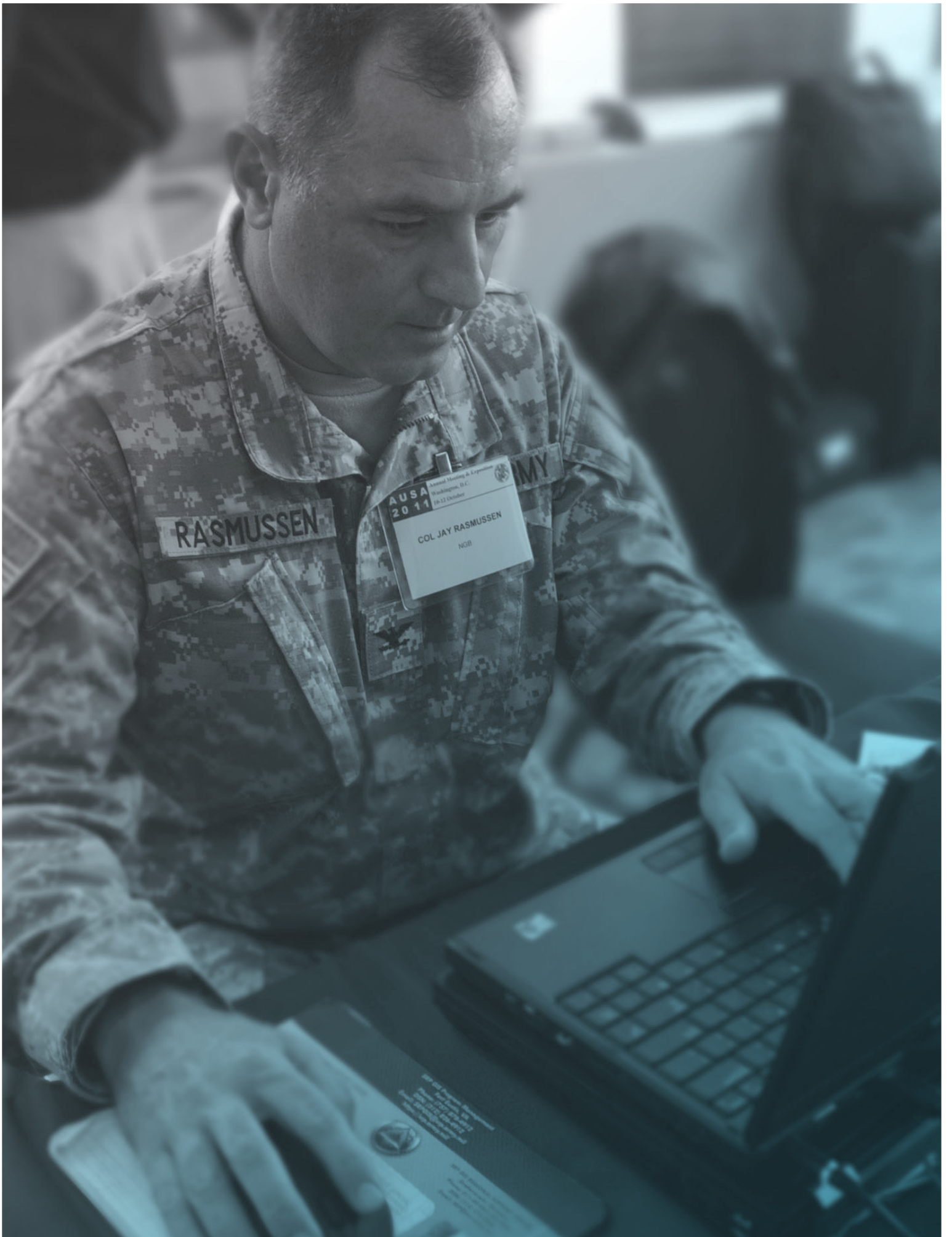


5 /

**Maria, an Iraq War Vet, is finishing her Transitional Assistance Program course and preparing to leave the service.**

On the final day of the TAP course, the class is encouraged to use the VA digital platform to set goals for their reintegration over the next few years. Maria goes online and sets her goals: graduate from college, get a good job, and buy a house.

A few years later, Maria receives her Graduate degree from George Mason University, and promptly receives a congratulatory email from VA. The email reminds her of the next two goals she made for herself—to get a good job and buy a house—and lists the VA benefits that can help her achieve those goals: employment services and home loans. It also notifies her that a new VA women's health clinic just opened in her neighborhood.



# 1 A 21ST CENTURY VETERAN EXPERIENCE



## VISION

A digital experience for Veterans so good, no one will want to interact with VA any other way.

## THE OPPORTUNITY

- ▶ Veterans today must navigate many different sites and logins to meet all their needs.
- ▶ Applying for a new benefit or service on paper means starting each new process from scratch, without reusing known data to lessen the information collection burden.
- ▶ Access to customer service is generally limited to call center and office hours.
- ▶ Actual Veterans are rarely involved in the creation and enhancement of existing online services.
- ▶ Nearly half of all support calls each day go unanswered due to volume.
- ▶ Most information from VA requires a login to view, rendering it inaccessible to search engines used by most Veterans and to non-Veterans such as family members.

OBJECTIVES

i / **A Veteran experience  
that is digital by default.**

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All VA services are designed to be world-class digital experiences by default. The 21st Century VA is high tech and high touch, effectively harnessing its people and technology to serve an ever-increasing community of digitally-savvy Veterans.

**Assisted Digital**

To ensure universal access to the digital experience, a Veteran can call VA's support center where a representative will navigate the service – using the exact same website – on her behalf.

Veterans Service Organizations, family members, and volunteers (similar to the million tax returns completed by United Way volunteers each year) can also offer assistance on an individual basis.

**Digital Customer Service**

Live online chat, secure electronic messaging, video conferencing, and text message notifications put information in the hands of Veterans where they want it most, far faster than mail, phone calls, or in-person visits.

The screenshot shows a web browser window with the address bar displaying 'va.gov'. The page header includes the VA logo and 'U.S. Department of Veterans Affairs'. The main content area features a dark blue banner with the text 'Welcome home, Josh.' and 'VA is here to help you transition back to civilian life.' Below this is a search bar with the placeholder text 'Search VA.gov'. The main body of the page is white and contains a section titled 'Connect with your VA services.' which is divided into three columns of service recommendations.

**Connect with your VA services.**

**Go to the Dentist.**  
Your service treatment record suggests you haven't had a dental exam in 18 months.  
Did you know you qualify for free dental care from the VA for the next 365 days?  
[Schedule a dental appointment.](#)

**Proof of Healthcare Coverage.**  
It's tax season! As of Jan 1, 2014, under the Affordable Care Act, every American is required to include proof of health insurance coverage.  
As a newly separated Veteran, you qualify for free VA health-care for the next 4 years and 11 months. We've got you covered.  
[Print your coverage document.](#)

**Check out VA's Mental Health Services.**  
Did you know 83% of Veterans your age take advantage of free mental health counseling from VA? VA conducts over XX mental health appointments every day.  
Sign up for a free assessment and meet a VA counselor.  
[Schedule an appointment.](#)

**Become a Homeowner.**  
Ready to put down roots?  
[VA can help you secure financing to purchase a home.](#)  
Not sure if home ownership is right for you?  
[Take this quiz.](#)

**Sign up for VA Life Insurance.**  
With a wife and two kids, we know taking care of your family is a top priority.  
Securing VA life insurance is one way you can help protect them in the case of an accident.  
[Find a life insurance plan.](#)

**Need glasses?**  
Your Purple Heart entitles you to free eyeglasses (as well as hearing aids) from the VA.  
[Fill your prescription.](#)

## ii / Build every Veteran experience with real users at every step.

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The VA serves a diverse range of customers across the spectrums of health, age, ethnicity, period of service, education level, and geographic residence. It is the VA's responsibility to learn what each demographic group needs, and to then deliver on that need.

User-centered design and usability testing drive product development — every project starts, proceeds, and ends with gathering feedback from real users.

Usability testing involves observing real, non-prepped users interacting with the system — where are they clicking? Are they lost? If given a broad task (“apply for healthcare benefits”), can they navigate that process on their own, or do they get stuck? These observations inform changes, which are then tested on users, and the cycle continues.

**Informed Design + Development**  
All products and services start by understanding the needs, painpoints, environments, and capacities of our users, whether they're public-facing tools or internal systems. This involves qualitative user research and iteratively testing prototypes with users along the way.

**Required Usability Testing**  
Self-service functionality is constantly tested on real customers to further improve the experience. Usability testing — not just user acceptance testing, in which users are given specific instructions to follow and confirm that the written process works as written — is a required component of every project proposal and of every project phase.



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### **Usability Groups**

VA has a program specifically devoted to forming usability groups that represent all user bases and demographics, conducting constant usability testing for all VA experiences, from prototypes to established services, in adherence to modern user experience practices.

A remote arm allows for nationwide participation.

### **Data-Driven Experience Improvements**

Anonymized usage data – such as flagging when a significant number of visitors search for an answer that has no results or click a help link – is a critical decision tool for making changes or enhancements to the user experience.

VA carefully monitors the search terms and queries used on the site to ensure all questions have satisfactory answers, as well as looks for activity which indicates users are spending excess time filling out forms or are stuck on specific Web pages. These analytics can point to areas for design improvement.

### **Public Feedback Tools**

VA hosts a feedback portal through which anyone can submit bug reports, ideas for new or tweaked platform features, or even ideas and tweaks for VA offerings. This portal is regularly monitored, with constant dialogue (e.g. asking for clarification on a suggestion) contributing to a sense of forward motion. The status of individual submissions is updated as ideas are planned for future releases and then actually released.

This approach has been shown to be tremendously important for engagement and feedback in the private sector. For example, Starbucks debuted a website called “mystarbucksidea.com” which led to 150,000 feedback submissions, and 277 implemented ideas. Given the volume of input, they devised a user system to vote ideas up and down with Starbucks employees responding to the most highly voted suggestions. Similarly, VA has seen outstanding internal engagement with its existing employee innovation competitions.

Best practices such as these are incorporated into the public-facing VA initiatives.

### iii/ A single digital platform where Veterans and anyone else interacting with VA can address all their needs.

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Veterans know they can meet all of their needs in one place, never having to navigate multiple offices, websites, or phone numbers. VA does the hard work necessary to make every interaction clear and simple.

#### **Guided Self-Service**

Nearly every transaction with VA can be conducted digitally end-to-end, from filing for education benefits to scheduling and conducting telehealth exams.

Wizards step customers through every process, building on collected information to ask the least amount of questions necessary to accurately complete the application. Each process, including what information is needed, the anticipated steps, and the estimated timeframe, is explained clearly ahead of time, using no jargon or abbreviations.

#### **Personalized**

VA uses data previously shared by a Veteran to deliver content and recommendations tailored for him. This ranges from a reminder to schedule an annual checkup to a note reminding an impending college graduate about Veteran employment benefits to assistance available for a Veteran that has missed a payment on their mortgage.

#### **A Single Familiar Experience**

Whether by computer, mobile phone, tablet, or kiosk, customers experience the same look, feel, and data in every interaction. The average Veteran has no idea how VA is structured, and more importantly, has no need to know, because she feels as though she is interacting with one VA, via one account with one username/password, not different services for different devices.

And much the way logging into a service like Amazon or Facebook provides a consistent seamless experience across all devices, VA designs one experience for all of its services and platforms.

#### **Multiple Account Types Available**

Anyone, not only Veterans, can sign up for an account, with some features reserved for only certain kinds of users:

- Spouses and dependents can file and access claims to which they are a party;
- Caregivers can sign on and view parts of the record to which the Veteran has granted them access, enabling them to partner in care delivery;
- VSO representatives, attorneys, and others who assist Veterans can log in and access those claims to which Veterans have granted them access;
- Active duty military can sign up early to access personalized information or begin preparing for transition;
- Everyday Americans can interact with VA to sign up for newsletters or access volunteer opportunities.

## iv / Promote health and well-being with data-driven best practices.

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Veteran interactions are thoughtfully and purposefully designed to promote positive outcomes. Outcomes data – specifically quality and quantity of life – of individual Veterans and populations as a whole are the primary and core measure of whether VA is successfully meeting its objectives.

### **Proactive Data-Driven Interventions**

We use data shared with us by Veterans, combined with other data to which we have access, to identify those at high risk and prevent potential crises before they happen.

We know to reach out to a Veteran with PTSD who indicates he is now divorced with additional counseling options. If a Veteran loses his job, we automatically ensure he's aware of benefits that can keep him from losing his housing.

### **A Supportive Transition for Newly-Separating Veterans**

Technology enables VA to take care of new Veterans in new ways. VA works closely with reintegrating Veterans to identify the best content, checklists, and resources to meet their unique needs, such as ensuring they know how to secure healthcare, housing, and employment upon release.

This information is available anytime, so a Servicemember can sign up and begin taking active steps well before her separation date.

### **Data-Driven Peer Recommendation Engine**

Veterans can (anonymously) help one another heal and become healthier by way of reviewing Veteran services. As a Veteran navigates VA services, such as mental health professionals, they can find resources that best fit their situation.

Additionally, VA's digital platform surfaces anonymized pattern data to encourage positive actions; for example, it may tell a Veteran "85% of Veterans in your area attend mental health counseling at least once a month" as a means to lessen a perceived negative stigma of therapy. VA tracks this information as part of its internal review process of internal and external providers.

### **Designed to Drive Positive Outcomes**

Beautiful design and clear calls to action encourage users to take steps towards becoming happier and healthier, such as starting treatment for depression, learning how to modify a new home to accommodate a rated disability, or signing up for his first college class. We use behavioral science insights and rigorous A/B testing to find new ways to help Veterans learn about and take advantage of the assistance they need and earned.

### **Gamification and Goal-Setting Functionality**

Veterans can set personal goals, such as "Graduate from college" or "Get a better job" and learn how VA can help them achieve these goals via automatically generated suggestions of related benefits and resources. Users can add tasks to their checklists, such as "Apply for GI Bill benefits," and/or adopt predefined goal plans.

VA peer counselors and social workers work on these goals with Veterans. Encouraging competition, badging and gamification, where Veterans earn "points" for certain activities, are integrated according to industry best practices to further encourage positive outcomes.

## ✓ Empower Veterans with the information and capabilities to meet their own needs.

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VA focuses on lowering the barrier for self-service, enabling the greatest number of Veterans to access and complete services without needing to wait on VA for assistance.

### **Real-Time Updates**

All information reflected in a Veteran's account, such as the status of a disability compensation claim, is accurate and up-to-date. Further, any status information known by VA is always reflected in the Veteran's online account. This builds trust over time that decreases both status update calls to the call center and FOIA requests for a Veteran's own file (because that full and complete file is always immediately accessible to him online), freeing up valuable VA resources.

### **Actionable Information**

When a Veteran receives information from VA, it's accompanied by resources to help him understand it and, where applicable, what to do about it. From cholesterol levels to disability ratings, Veterans are always clearly told what it means and what to do next.

### **Veteran-Controlled Sharing**

A Veteran can share, or revoke, access to particular parts of his account at any time directly from his own account, similar to most popular websites. For example, he may choose to share his disability compensation claim with his VSO representative on a read-only basis, his VA medical record with his private physician on a read-only basis, and his entire account with his spouse with read/write access. While VA provides an optional online training course on making smart sharing choices, it puts this sharing power in the hands of Veterans directly. A detailed audit trail keeps track of exactly which user completed each action for security and integrity purposes.

### **Veteran-Controlled Privacy**

VA is at the forefront of providing new ways for Veterans to protect their privacy while maximizing their benefits and care delivery, while adhering to all industry standard privacy controls and precautions.

For example, a Veteran can sign up for text message reminders of upcoming VA appointments, setting the message content online. The text may say "Remember to pick up milk and eggs," reminding the Veteran of his appointment in a way that seems innocuous to anyone else who sees it.

### **Veteran Verification Service**

Veterans frequently have a need to prove their Veteran status, whether to show eligibility for Veteran hiring preference or to take advantage of discounts and opportunities American businesses make available to Veterans to show their appreciation.

Every Veteran gets a unique lifetime email address; confirming they can access this address (such as by clicking an emailed verification link) is the only proof required to verify their Veteran status. We adopt practices from industry such as educational institutions that need to verify student status.

### **Needs-Driven Knowledgebase**

Veterans and their caregivers can find and understand the information they need 24/7 in VA's expansive, public-facing knowledgebase.

Every piece of information a Veteran could receive from VA in person or over the phone is available online. Articles are optimized in order to appear in the greatest number of searched items. Content is delivered at an accessible reading level with supplementary graphics.

When VA receives a question from a Veteran on a topic not yet covered in the site content, the top priority is to add that information for the benefit of future Veterans.

## vi / **An extensible digital platform that can be built on top of and enhanced by multiple stakeholders.**

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Instead of a single point of failure or a long line of stakeholders waiting for their turn at bat, VA's platform allows every line of business, and in some cases third party services, to build their own "apps" that seamlessly integrate into the experience. This builds on industry approaches such as the Apple or Google store.

### **Re-Usable Information**

The Veteran digital experience is built in a manner that maximizes the reusability of its content.

All written information, such as articles and FAQs, are available via Web services, so a state VA or VSO can include that content on their own websites in a way that always immediately reflects any changes we make to the original content. This ensures maximum dissemination of accurate information, and means VA never has to write or update the same content more than once.

### **Search Engine Friendly**

VA describes service offerings using open data standards so search engines can immediately recognize and surface the right information for searching Veterans. Just as Google or Bing recognizes you are searching for a recipe and displays nutritional information and cook time right in the search results, they can recognize a Veteran in Idaho seeking unemployment assistance and immediately serve him the best content and link.

### **Fully Web-Service-Enabled**

VA celebrates private sector innovation that competes to provide even better service for Veterans. Approved third-party tools can connect to the VA platform using a complete range of APIs (Web services) to submit info or add feature enhancements. For example, custom software used by a VSO can submit a disability compensation claim on behalf of a Veteran directly using the API. A Veteran can choose to securely share medical data with his private doctor's Electronic Health Records using the Blue Button Direct API.

VA "drinks its own champagne" by consuming and using its own APIs for all internal service connections, similar to private sector leaders like Amazon.

### **Single Sign-on**

VA uses industry standard credentialing as part of a government-wide federation initiative to allow Veterans to re-use their VA logins on other government websites, and vice versa. For example, a Veteran could use the exact same credentials to access the VA platform, his retirement pay account, and his Social Security account.

### **National Resource Directory 2.0**

Nearly every service for Veterans has to re-invent the wheel of inventorying VA and non-VA services for Veterans, from identifying the thousands of individual services to keeping contact details up to date. VA helps avoid this, and by extension, helps surface the most accurate single directory of Veteran resources, with a revamped version of the National Resource Directory (NRD).

A single open source database, anyone can publish or update service listings in the database, and correspondingly pull out all or some listings to integrate into their own apps and services. The NRD enables location-based search allowing Veterans know what services are available to them locally from the VA and VSOs without having to go through multiple websites.

## vi / Centralize information collection and dissemination within VA.

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All data collected and stored by VA needs to be kept track of (though not necessarily stored) in one place to maximize re-usability and minimize unnecessary collections.

An enterprise-wide view of VA's data allows for more strategic use of existing data assets and for more efficient planning for future collections.

### **Ask Once**

We eliminate as much burden as possible for Veterans and their caregivers by asking users for necessary information once, enabling the system to autofill known details and provide a more personalized experience.

The country of Estonia actually has a law against asking a citizen for information that is already collected from them; VA adopts the spirit of this law.

### **Auto-Fill and Verify**

To mitigate against the possibility of perpetually propagating incorrect information entered in the system, forms will autofill and Veterans will then be asked to verify the data previously collected to make sure it is accurate. This reduces data entry burden while increasing accuracy.

### **Immediately**

#### **Transformative for Veterans**

Right out of the gate, we collect all information from Veterans through the single digital interface. At the start, the digital service simply automatically fills out existing PDF forms in the background, which is not seen by the Veteran and requires no change to VA's existing business processes. Over time, we shut down each PDF and replace it with data services.

#### **Business-Friendly Interface**

Business owners can easily see the data fields the agency already collects and where each of those fields are currently used.

Designing a new collection as part of the Veteran-facing digital experience is as simple as dragging and dropping existing fields into a new form. This prevents a Veteran from having to re-enter any known information, such as a phone number.

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## **Accurate**

### **Time-to-Complete Data**

Code on every form page tracks how long it takes each user to complete each form. Exact times supplant rough estimates. The data collected improves user experience and reduce time spent completing forms.

### **Real-Time, Public Dashboard**

We share information collection burden hours with the public openly online, with the latest average completion times for each process.

### **Granular Privacy Controls**

Business rules and strong field-level security determine exactly where data can be reused internally or cross-agency.

A Veteran can always pre-fill new forms with information he chose to save earlier, reducing his burden even when business or security reasons prevent us from automatically reusing data he shared with another part of VA or agency.

## **Computable Data**

Data are received and stored in a way that enables re-use, whether to pre-populate messages, conduct further calculations, share with another agency for an authorized purpose, or trigger an alert.

Approved third-party programs such as VSO software can automatically transmit applications as pure data – not as documents – directly into VA's system.

Computable data is preferred over scanned documents wherever possible, and efforts are constantly underway to transmit and receive data in more computable ways.

### **Granular Approved Data Sharing**

When multiple lines of business do have data sharing agreements, the platform configures this on a field-by-field basis. This further protects Veteran privacy by sharing only the exact details needed instead of entire documents, while still allowing for potentially life-saving services like suicide prevention and emergency medical treatment.

## **Data-Driven Improvement**

New or modified information collections designed to provide greater service to Veterans can go live right away. If completion time data show a collection time passes a certain threshold, experts take a look at the collection's design for ways to streamline it.

### **100% Computable Data (no paper)**

Non-machine-readable data does not serve a Veteran. All information collected digitally is computable, and all information received in an analog format such as paper must be converted to computable data.





# 2 21ST CENTURY BENEFITS



## VISION

Automatic benefits awards  
based on clear, objective criteria.

## THE OPPORTUNITY

- ▶ Today's average compensation claim processing time is more than twice as long as the goal of 125 days.
- ▶ Veterans regularly open new claims and/or appeal prior claims because decision-making criteria are obscure and subjective.
- ▶ Today's processing is paper-intensive (across printed and scanned paper), utilizing almost no computable data.
- ▶ Less than 1% of claims are filed online.
- ▶ Medical claims are processed by non-medical employees who require years of training to achieve proficiency.
- ▶ None of the deployed Disability Benefits Questionnaire (DBQ) forms can be completely mapped to disability rating calculations, leaving room for error and subjectivity.

### OBJECTIVES

#### i / End-to-end automated, automatic award decisions.

A combination of objective criteria and artificial intelligence decide the majority of electronically-filed claims automatically and instantly. When a step cannot be automated, it is carefully reviewed for streamlining opportunities.

All non-rating claims are automated, assisted in part by connections to third-party Web systems such as IRS and Social Security. Compensation claims can be decided and awarded in under a minute from the time a medical provider electronically submits exam data.

#### **Artificial Intelligence (natural language processing and collaborative filtering)**

Artificial intelligence is commonplace in healthcare. VA uses AI for performing predictive analytics and recommending data-driven treatment plans, allowing computers to review an applicant's documentation and in most cases make claims determinations.

For example, the VA will be able to determine whether a Veteran's disability is service-connected or even the extent of that disability – all without human intervention.

The system can search through thousands of pages for keywords, text patterns, synonyms, and other relevant details far faster and more accurately than any human. VA's vast troves of already-decided claims train the system in what data lead to what outcomes. Learning over time, this software ultimately processes most claims without human intervention.

#### **Proactive Identification of Additional Contentions**

VA takes great pride in going the extra mile in its duty to assist, reviewing medical records to see if a Veteran may be entitled to claim additional service-connected contentions beyond those listed in the original application.

Natural language processing detects the presence of additional service-connected disabilities and even automatically grants them wherever possible.

#### **Data-Driven Auditing and Error Detection**

VA trusts Veterans. Instead of checking every detail upfront, it performs timely audits of statistically relevant samples to confirm accuracy and prevent fraud, similar to IRS and SSA. Built-in fraud detection algorithms highlight suspicious submissions. This speeds up processing times and prevents manually checking the validity of documents upfront, holding up claims processing.

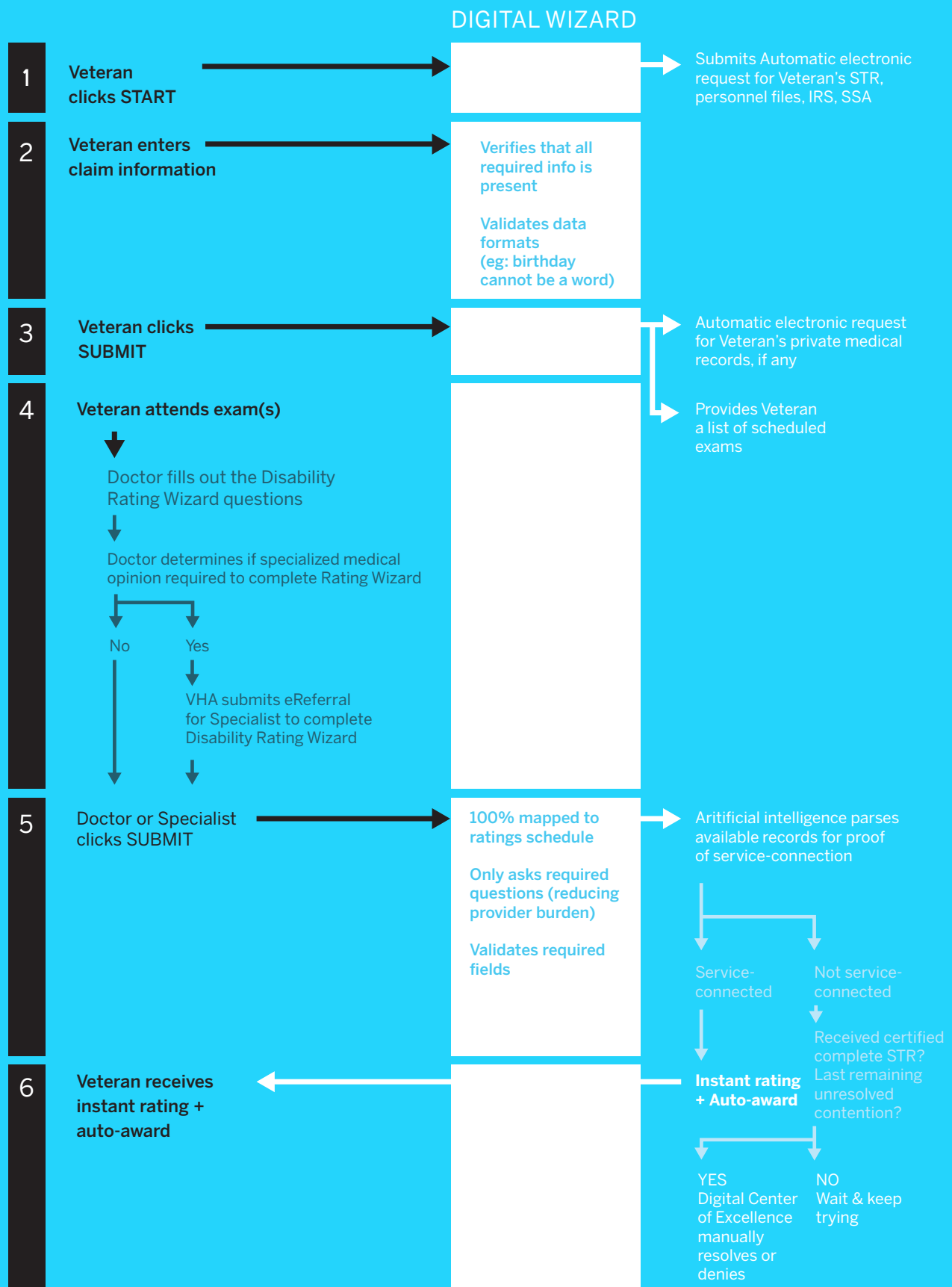
#### **Just-in-Time Decision-Making**

The days of having to wait for a certified complete service treatment record or for every piece of paper from a doctor's visit 30 years ago are largely over. With artificial intelligence, the system automatically reads and parses each piece of information as it's received and determines if a decision can be reached. For example, if a claim is waiting on service-connecting tinnitus, the moment VA receives evidence of exposure to artillery fire, service-connection is granted – without needlessly waiting for additional documentation to arrive.

#### **Automatic Handling of New Presumptive Conditions**

In the case of a new presumptive condition decision, the system can automatically parse all eligible Veterans to identify those that meet the criteria. Veterans with complete information in the system are automatically awarded, drastically reducing or entirely eliminating manual intervention.

# IMAGINED 21ST CENTURY CLAIMS PROCESS



## ii / Efficient, standardized, and objective medical information collection.

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Veteran medical information is collected and maintained in ways that promote completeness, enterprise-wide standardization, and objectivity, allowing for an efficient and effective claims review process.

When subjectivity is required, we trust these decisions to medical professionals.

### **Replace DBQs with Exact Numeric Ratings Wizard**

Disability Benefits Questionnaires have numerous shortcomings that interfere with the automation process, beginning with the fact that no DBQ forms completely map to ratings calculators, making automation impossible without changes. Further, it is difficult to express complex ratings logic across 82 static forms (for example, a diagnosis of Parkinson's requires sections of many other DBQs, while Alzheimer's requires different sections of other DBQs; etc.).

Instead, providers (both within and external of VHA) complete a "wizard" form for each patient that collects the necessary information (and no information that is not necessary). At the end of the wizard, the Veteran's disability rating(s) for the condition(s) covered in the exam is instantly calculated. Over time, this wizard integrates with VistA Electronic Health Records to pre-populate patient information, diagnoses, and status.

When new rating rules are published, the wizard must be updated accordingly in conjunction with publication of the new rule.

### **Validated Medical Provider Entry**

A medical provider cannot submit patient medical information if any required fields are blank or incorrect. Built-in logic ("If this box is checked, then this question is required") eliminates errors while alleviating almost all data entry.

Complex validation rules, such as not allowing a doctor to add a non-presumptive Agent Orange contention to a list of Agent Orange presumptive contentions, are integrated to further reduce rework.

### **Map All Medical Information to Standard Medical Terminologies**

The medical field has a number of standard, recognized "dictionaries" to describe conditions, prescriptions, etc. – many of which are used in VHA everyday.

In order to automatically and instantly extract disability ratings from a patient's existing electronic health record, we must have accurate and complete semantic mapping between VBA's needs for awarding benefits and data already collected and stored by VHA.

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**Medical Decisions Are Always Made by Medical Professionals**

In cases where a truly objective decision cannot be made, such as differentiating between Traumatic Brain Injury and PostTraumatic Stress Disorder, final determinations are made by VA doctors with expertise in the area. Putting these claims through the existing eReferral system allows claims to be distributed across the country, and to particular specialists as needed.

Instead of having one single doctor full-time in a regional office, claimants benefit from a distributed workload and the ability to access domain expertise for rare or complicated situations. A supply and demand compensation model gives providers a financial incentive to take on particularly complicated cases and/or to take on additional caseloads in periods of high volume.

Similar approaches have been used in models like medical imaging. Images collected in remote areas are made available to a national pool of certified experts who provide reads for a fee. This alleviates shortages and brings expertise that would not have normally been available locally.

**Feedback Forum for Disability Ratings**

VA maintains a feedback forum to keep track of suggestions and error reports from the field.

It is the responsibility of the rating calculator owners to monitor and interact with this group frequently.

### iii / **Objective, transparent criteria and processes that are easily understood by all Veterans.**

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When we file our taxes, we do so with an idea of whether we will receive a bill or a refund, and for what amount.

Similarly, any Veteran should be able to understand exactly how to qualify for a given benefit, and how each calculation and decision is made.

Decisions regarding claims and ratings are made objectively and transparently, and always with the interest of the Veteran in mind.

#### **100% Objective Criteria**

VA does the work necessary to ensure benefits are awarded fairly to all Veterans by translating all subjective criteria to objective criteria.

The same Veteran submitting the same claim always receives the same rating. Disability ratings are computed mathematically on the basis of objective measures, such as range of motion.

#### **Digital Centers of Excellence**

In cases where the machine confidence level is not high enough to make an automatic grant, the system displays the relevant information it did find to a human claims representative (and to the Veteran) to weigh in.

VA connects the best and brightest internal experts to evaluate the claims in their areas of expertise regardless of geographic location. The artificial intelligence engine learns from their work to become even smarter over time.

## iv/Directly connect benefits to restoring a healthy Veteran.

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VA actively and explicitly recognizes the intentions behind providing Veteran benefits and looks for new ways to assist and honor Veterans.

### **Proactive Eligibility Awards**

When a Veteran becomes eligible for a new benefit, the VA automatically sends an invitation to apply. When a new benefit is offered or an existing benefit changes, those Veterans affected receive notification.

As VA learns of a change in circumstances, it automatically sends relevant notices, such as reminding an impending college graduate of Veteran employment preferences. Based on what a Veteran has already shared with us, we can even recognize and pre-approve Veterans for additional benefits for which they qualify.

### **Connect Disability Ratings to Healthy Outcomes**

A disability rating is not a life sentence. For disabilities where improvement is possible, the Veteran is immediately connected with and encouraged to take advantage of related programs, such as physical therapy at the nearest VHA center. For chronic conditions like diabetes or heart disease, evidence-based treatment plans are offered to help prevent the disease from worsening.

Even in the case of a non-treatable disability, all available support is highlighted, such as home modification grants and prosthetics for an amputee.

### **Pilot Innovative New Benefits**

Ideas for new benefits and feedback related to existing benefits regularly lead to piloting new programs proactively. Data on outcomes and ROI are the primary drivers for program acceptance.

For example, VBA may test the idea of allowing Veterans to apply education benefits to short-term, non-degree computer programming courses to determine if this could allow Veterans to gain meaningful higher-paying employment in shorter timeframes and for less overall tuition.

### **Increase the Health Utility of Collected Information**

The comprehensive information gathered for a claim can help guide health decisions.

For example, the data collected is usually sufficient to provide cardiovascular risk estimates to the clinician. Once the form is filled out, this information could be calculated and provided to the clinician and Veteran to inform decisions such as use of aspirin or statin to reduce the risk.

RY VA ...

HAPPY & HEALTHY Vets by ...

IN EFFECTIVE & SIMPLE SERVICES

# USER NEEDS & EVIDENCE

accomplished by  
tern product dev.  
institutional capacity  
procurement  
research

TC. > PRODUCTS

WHERE WE'RE GOING

welcome to VICTORVILLE

Commandments

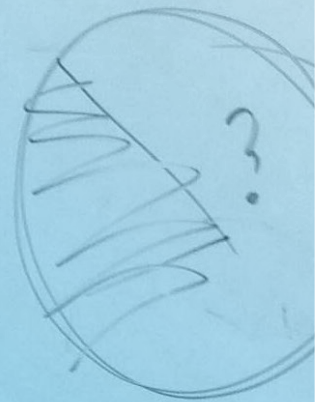
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How to get there



Principals

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# 3 A 21ST CENTURY AGENCY



## VISION

An organization capable of building and delivering 21st century Veteran experiences, benefits, and care.

## THE OPPORTUNITY

- ▶ While VA has enjoyed benefits such as shortened development cycles from adopting some Agile principles, it can continue to benefit by becoming a fully Agile organization.
- ▶ Almost all technical work, from requirements gathering to product development, is done by contractors instead of employees.
- ▶ An over-reliance on contractors means the current division between business and technical project owners minimizes opportunity for collaboration.

OBJECTIVES

i / **Increase VA's internal technical capacity.**

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A 21st century agency needs a 21st century workforce. VA must have the ability to respond to its own basic technology and design needs internally. Contractors should serve to supplement our existing talent pool, not substitute for it.

**Serve as Home to the First United States Digital Service Team**

The United Kingdom, after spending £10 billion trying to create an electronic health record for its National Health Service and failing, turned government IT around by installing a Cabinet Minister for Digital and bringing in an internal team of the best and brightest IT talent in the country. This team sets the bar for what is possible in terms of excellent, modern digital service delivery.

The United States is looking to pilot this concept at a federal agency to create the first United States Digital Service Team. VA can attract top technical talent to build many pieces of this 21st century plan by providing the home and mission for this first pilot team.

ii / **Increase the technical literacy of VA's existing workforce**

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VA employees must have at least a basic understanding of the digital technologies being used by Veterans and by private sector developers in order to make informed decisions.

**More Technical Training**

Just as VA provides management and leadership training, it also offers training in many technical topics such as automated testing, prototyping, and cloud computing. Training is rigorously tested and revamped to ensure VA employees are both aware of and adhering to modern technological best practices. Employees with technical responsibilities are required to demonstrate proficiency against private sector standards.

**Real-Time Employee Training**

Test and sandbox accounts coupled with frequent online training and comprehensive video training libraries deploys new features to the field more efficiently than relying on manual and/or group trainings.

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### **Increase 21st Century Internal Communications, Development, and Design Resources**

Today there is no internal group to prototype new applications or design a digital announcement, or with whom a small-scale app such as the GI Bill School Comparison Tool can live without requiring an expensive, one-off maintenance contract.

VA must have an internal resource pool to provide these services on, at minimum, a small scale.

### **21st Century Governing Board**

To ensure the goals and spirit of this 21st Century agenda are met, VA should establish a 21st Century governing board with authority to report projects and processes that are veering away from the agency's modernization mission to leadership. Intervention can range from helpful advice to, at the extreme, recommending project termination or re-evaluation to senior leadership.

Membership in this group is characterized by significant hands-on private sector technology experience in the last five years.

### **Technical Advisory Groups with Private Sector Representation**

Similar to the President's technical advisory group, PCAST, composed of private sector science and technical leaders, VA should seek the expertise of outside technical advisors on high-impact technical projects like re-imagining the ratings schedule in VBA or the details of semantic interoperability in iEHR.

These groups can meet remotely, running proposals and architecture plans by groups of experienced external talent for opinions and additional ideas before final decisions are made.

### **Expand VA's In-Residence program**

VA has a number of "in-residence" programs that allow talented private sector talent to donate a portion of their time and expertise to VA projects. This has led to bringing on Craigslist founder Craig Newmark as a "Nerd-in-Residence," and well-respected user experience designer Mark Trammell as a Designer-in-Residence.

Expanding use of this program allows technical talent who may not be able or willing to become a VA employee to still impact Veterans through VA in a substantive and official way.

### **Invite Experts to Share Skills and Insights with VA**

Through VALU, bring in a rotating group of technical subject matter experts to host brown bags, workshops, and other accessible learning opportunities. Internal experts are also welcome to share their expertise with their peers as well as other parts of VA.

### **Continue the Presidential Innovation Fellows program**

VA has benefited from a significant return-on-investment from participating in the Presidential Innovation Fellows program, which brings private sector innovators in for "tours of duty" within different federal agencies.

Presidential Innovation Fellows at VA have built prototypes and production tools that saved the agency hundreds of thousands of dollars, led workshops that brought 21st century technical skills to internal teams, and gained traction for developer adoption of Blue Button electronic health record downloads, among other accomplishments. VA should commit to continuing to participate in this program annually.

### iii / Adopt modern technical development practices and standards.

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Our project management and development processes empower true Agile development and all modern best practices, including user experience design, test-driven development, prototyping, constant usability testing, etc.

Moreover, the VA ensures every project has an owner responsible and accountable for the entire project, from collaborative requirement development through to delivery and user satisfaction.

#### **Fully Adopt Agile Development Practices**

While VA uses the term “Agile” frequently to describe its internal processes, current IT product development cycles closely adhere to the contrasting waterfall methodology.

VA must revise policies and procedures to reflect formal Agile practices, and follow them. This also involves updating contracting practices to allow us to hire external resources without so tightly defining the final deliverable and schedule upfront.

#### **Prototype First**

New technical projects should not start with a Business Requirements Document (BRD); they should start with brainstorming sessions and prototypes.

Whether on the backs of napkins or built by VA’s internal technical talent or by weekend hackathon participants, a required part of a project’s beginning is the development of a prototype to test viability and help stakeholders ensure they’re on the same page early on. A prototype is also much easier to translate into a technical requirements document than a BRD alone.

#### **Automated End-to-End Testing**

Automated test scripts emulating real users from start-to-finish run regularly and as part of every development iteration, detecting errors and rating system speed and performance. A new feature is only complete when it has full corresponding test coverage.

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**Require Feedback Loops in Every Stage of Development**

Instead of viewing product development as a straight line, VA institutes policies and development strategies that require constant feedback loops from stakeholders and end users.

This allows us to tweak and make changes as we move forward, instead of going too far down a sub-optimal path.

**Fully Open Source**

Code powering VA's digital experience is written out in the open on GitHub. The public is welcome to review code, submit tests and issues, and make suggestions for the continued betterment of our systems. Our developers' core responsibilities include engaging in the open source community.

We also use existing open source solutions wherever possible. Open source development ensures we maintain a cost-efficient, technologically modern platform.

**“Google-Fast”**

At scale, seconds add up quickly. Slow response times are unacceptable. VA employs modern technologies and monitoring to ensure digital services are responsive and lightning fast.

**Single Sign-on**

Veterans need only one username and password to access all VA services, from scheduling an appointment to updating a benefit claim. This same account federates with other government services, such as Labor and IRS, as those agencies adopt single-sign-on.

**APIs for Everything**

It is assumed that all new technical systems will need to interface with other systems, internal and external. Therefore every new system modification and creation must include Application Programming Interfaces that are built against modern standards, such as REST, and well-documented from the start.

This is also in line with OMB M-13-13, which requires new and substantially modernized systems to adhere to modern standards such as having an API.

## iv/ Be more proactive than reactive.

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The cutting edge ideas and plans of today will soon become outdated. We must always be open to re-evaluating the policies and decisions of our past to ensure they are still helping us achieve our goals, and always keep an eye towards our future needs. A small change now can have a big impact on our future capabilities and progress.

### **PRA Reform**

The Paperwork Reduction Act was designed to limit the burden on Americans, but in practice puts Veteran lives in jeopardy by limiting VA's ability to conduct usability testing and severely impeding our ability to move from paper to computable data. VA must take a bold leadership stance and demand that this law, which puts Veteran lives and livelihoods at risk, be revised.

To start, VA must request blanket clearance that exempts the new digital experience from the OIRA paperwork approval process; in exchange, we will publish real-time completion time data and focus on lowering the information collection burden as much as possible.

### **Innovate Boldly**

VA does not shy away from trying new things or listening to new voices in its continual attempt to provide the best possible service to Veterans.

### **Proactive Press Engagement**

Expanding workshops and invitational events with the press to help them understand how VA and its processes work can help ensure that even future negative articles are more factually correct and therefore potentially fairer. If the media cannot clearly describe a process, then it becomes that much harder to make that process clearer to the Veterans and dependents who need to navigate it.

### **Proactive IT Planning**

Ongoing IT projects such as VBMS and VistA should always have a clear end-state, even with the full recognition that the end-state will change. Otherwise, we run the risk of accidentally veering off course and/or not moving fast enough when the whole team is not clear on exactly where the project is headed.

## v/ **Cultivate an engaged, collaborative workforce.**

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Every part of VA works in tandem as a unified organism, sharing institutional knowledge and insight. Success breeds success.

### **Establish a User Engagement Office in Each Administration**

VBA is launching an initial user engagement office in order to encourage more collaboration across the administration.

Additional collaboration offices in other areas of VA, working together, can help bridge many of the communication gaps that are inherent in an agency of VA's size.

### **Central Project Wiki**

Today there is no central resource for understanding all of the active projects—IT and otherwise—underway across VA, and who is involved in each one. This leads to costly duplication at worst and wasted time tracking down project owners at best.

VA should create a central wiki that describes every active project, associated project members, and contact points. Requiring a tool of this nature will significantly increase visibility across the organization and provide a central authority against which new proposed projects and ideas can be compared.

It can also help connect interested employees with projects they want to support but otherwise would not have known existed.

### **Expand and Refine the Definition of Success Under PMAS**

Software quality and user satisfaction need to be as important as schedule in how we measure project success. Today's PMAS neutralizes many of the benefits of Agile development and needs revision.

### **Require Collaboration Between Business and IT Owners**

Instead of business owners writing requirements documents that they then pass on to IT for a second, distinct set of requirements documents, a project's goals and requirements are worked on collaboratively at every step.

### **Liberalize the Centralization of IT Services**

The strict separation of IT from other units of VA means IT lacks an in-depth awareness of most business processes and requirements, and all areas of VA are devoid of potential technical talent who can identify and solve problems early on.

VA needs to look critically at how well this arrangement is working today and identify new opportunities for collaboration and embedding of IT throughout the agency.

## vi/ **Become a more data-driven, accountable organization.**

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An ingrained practice of planning for, collecting, and evaluating data agency-wide is a built-in safeguard for ensuring every project stays on course. Focusing on data elements, and not documents, leaves VA flexible to set and achieve objectives without being beholden to how someone once decided to structure a form.

### **Accountable Employees**

VA staff must be empowered to pursue ideas that will improve the experience of Veterans when interacting with VA benefits and services. To keep morale high and make VA an attractive employer, underperforming staff must be held accountable for their work just as high-performing staff are recognized.

### **Focus on Return-on-Investment**

New and existing initiatives should be measured primarily by their return on investment in terms of dollars and resources spent against the benefits delivered for Veterans – such as shaving 30 minutes off average disability claim processing time or increasing flu shot delivery by 10%.

While brand-new pilots may need time and space to reach their full potential, releases and updates to established projects must be held to a high ROI standard in order to receive approval and/or funding.

### **Measure Everything**

“Optimism without data is just an emotion.” Modern technology affords us no excuse not to drive priorities, deliverables, and budgets according to hard metrics. Projects must define their measurements and goals upfront, and continually report against those measurements.

New feature releases should compete on data – their ability to quantitatively improve a Veteran experience or save a life.

### **End a Document-Based Mindset**

VA must remember as we move forward that we are no longer constrained by the limits of 8.5” x 11” sheets of paper. Instead of thinking in terms of needing a “Service Treatment Record” or an “Income Tax Return” we instead need individual pieces of data to accomplish our missions.

While those data may take the form of paper today, we should be cautious about defining our requests and needs (such as in multi-year MOUs with other agencies) in terms of documents and instead in terms of data elements.



## vii/ **Make it easy for innovative new and small businesses to do business with VA.**

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The contracting process must ensure that deliverables maximize usability and value to Veterans.

### **Style Guide for RFPs**

To maximize the human-readability of our Requests for Proposals, VA should develop (and share) a “style guide” that ensures plain English over technical or VA-specific jargon, while also using standard industry terminology. For example, a Web form is a Web form, not an “information collection vehicle.”

### **Clear 1-2-3 Steps for Vendors**

Doing business with the federal government is complicated and confusing. At VA it is particularly important that we provide clear, easy to understand steps so that Veteran-owned businesses can effectively compete for VA projects.

Our website should make it very clear, in plain English, exactly what steps to follow to become eligible for, to find, and to bid on, VA RFPs.

### **RFP Vetting/Consulting Group**

Before publishing, proposed new RFPs need to be run by a small group of technical representatives that can validate whether the RFP makes sense and uses accurate language.

This group can also proactively assist in writing clear RFPs, resulting in better and more affordable deliverables for VA on contracted projects.

## viii/ **Engage customers personally like a modern service organization.**

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Adopting established customer engagement practices amplifies VA's ability to expand access to care and benefits to more Veterans.

### **Informed Engagement**

VA engages efficiently and effectively with Veterans because all communications are informed by data collected from prior engagements. We know which Veteran demographics prefer text messages and which prefer emails. We know which Veteran populations are most at risk and how to effectively communicate with them.

### **Maintain an Up-to-Date Contact Relationship Management (CRM) System**

Already underway in a partnership with OPIA and OPP, VA must maintain one authoritative contact database for our Veterans that includes an accurate address, preferred contact method, and basic demographics.

This allows us to conduct targeted outreach to better ensure Veterans are aware of and have access to VA benefits and services.

### **Disseminate Targeted Content**

Instead of generic emails and digital advertisements intended to reach large groups of Veterans, VA can use data and modern digital advertising practices to conduct very specific outreach campaigns.

This can range from overlaying known Veteran populations with our existing user base to identify areas where the smallest percentage of Veterans are utilizing VA services, to sending proactive emails to specific Veterans who qualify for a new benefit or are affected by an upcoming regulation change.

## vii/Behave transparently.

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VA approaches work with openness and transparency, sharing information, products, data, programs, partners, models, and success stories to ensure effectiveness and efficiency.

### **Develop Out in the Open**

All VA technical contractors should be required to develop and deploy their code in the open on GitHub. VA has already begun doing this with the VLER-DAS platform.

By developing in the open, VA can benefit from bug reports, fixes, and new features contributed by members of the public, while also getting publicly-validated product. If the vendor is using sub-par coding standards or practices, we will be alerted quickly in ways that are not possible when code is developed behind closed doors.

### **Closely-Monitored Feedback Tools**

To keep a pulse on user needs, the public and all of our field employees must always be able to engage in a feedback loop in which they can provide ideas and concerns to VA, and receive a timely response with next steps.

### **Public Roadmaps**

Veterans, employees, and the public have a right to know where VA is headed. This is particularly important for change management situations where employees need to endure periods of additional or unpleasant work – if they see a clear end goal and a near-term timeline, it is much easier to tolerate unpleasant work.

Public roadmaps also allow VA to receive valuable feedback regarding different approaches and potential pitfalls, particularly from the IT community.

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### **Adopt Data Standards When Disseminating Information**

Standards make data easier to understand, use, and exchange. While VA makes strides towards data standardization and interoperability in the health data realm, it also must adopt and influence data standards in other areas, such as defining our lists of benefits and facility locations in a way that can be easily processed by search engines.

### **Become a Leader in Federal Open Data**

In following with OMB M-13-13, which requires all agencies to make non-sensitive data open by default, VA should continue to release open data and centralize its availability on VA's (free, open source) GitHub repository.

This makes it simple for VA employees to add and update data sources, while simultaneously making it easy for developers and researchers to re-use the data in useful ways, such as integrating lists of VA locations into an existing mobile app for Veterans.

### **Leverage Hackathons for Agency Missions**

Developer events and “hackathons” are becoming commonplace ways for agencies to harness the ideas and capacities of the wider developer community. These events can be leveraged to create prototypes and generate innovative approaches for serving Veterans.

For example, if VA has an upcoming plan to expand access to vocational rehabilitation resources, hackathon participants could spend a weekend prototyping the user experience of an online vocational rehab service. VA can then use those ideas and insights to inform its ultimate plan and deliverable.

### **Require Public Feedback on New Project Proposals**

Technical approaches and options change faster than any one person can keep up with, and the longer an individual is at one organization (such as VA), the less familiar they become with the alternatives outside the ones they work with regularly.

As new technical projects are architected and developed, their plans should go online for public comment, and project owners must certify that they considered the public's suggestions before arriving at a final decision.

# TIMELINE

High-Level Phase Overview / Next 12 Months

## PHASE 1

Months 1 -3

### User-facing features

- ▶ Benefit wizards pre-populate known information, use logic to show/hide/require fields based on user input, and validate data formats (e.g. a social security number must have 9 digits).
- ▶ Consolidated Veterans employment portal available with resume generator, content resources, and other features (consolidation meets requirements of legislation).
- ▶ Anyone can sign up for an account. Once logged in, user can validate Veteran status against the DEERS database and unlock additional information. In phase one, this process remains nearly identical to the current eBenefits experience if a Veteran has difficulty validating status, though we work closely with DoD to improve this experience.
- ▶ Knowledgebase available to the general public on the Web, with initial content seeded.
- ▶ Secure messaging available when a user is logged in. Inquiries are handled by existing email support staff in call centers.
- ▶ Real-time “time to complete” data available online for each form in order to meet the spirit of the Paperwork Reduction Act while enjoying blanket clearance.
- ▶ User feedback forums available on the Web.
- ▶ Responsive mobile interface so the site works on phones and tablets from the start.
- ▶ Granular user-controlled sharing allows an account holder to log in and designate other user accounts to have access to all or specific portions of his own account, such as giving read-only access to a spouse or read/write access to a specific application to an attorney. Users can revoke or edit access themselves at any time.

### Internal features

- ▶ Platform auto-fills computable PDF forms in the background and submits to VBA. No VBA systems changes are necessary.
- ▶ Extensible platform foundation in place on top of which this and future iterations are built.
- ▶ Integrated analytics to monitor user pathways and search terms to continually improve the user experience.
- ▶ All benefits described using Schema.org CivicServices schema for search engine usability.
- ▶ Test-driven development methodology that ensures end-to-end code coverage so future releases do not break deployed features.

## PHASE 2

Months 4 - 6

### User-facing features

- ▶ Assisted Digital is available through call centers: call in, and the operator navigates the digital platform on behalf of the Veteran.
- ▶ Secure messaging is extended to all VBA employees. Two-way communication with Veterans and claimants is available for clarifying questions, status updates, etc.

### Internal features

- ▶ Disability Ratings Wizard completed and available for use by VHA doctors and private medical providers. Most ratings are calculated instantly at the conclusion of an exam.
- ▶ VHA eReferral program integrated so a provider can forward all or part of a wizard to a VHA specialist if necessary.
- ▶ Platform submits general Veteran data and compensation claim applications as computable data to VBMS through new D2D API.
- ▶ Non-rating claims are automatically processed by the platform. Computable data and/or results sent to VBMS, depending on VBMS's readiness.
- ▶ Two-way claim status updates available to logged-in Veterans from VBMS.

## PHASE 3

Months 7 - 9

### User-facing features

- ▶ Digital Centers of Excellence established.
- ▶ National Resource Directory 2.0 launched.

### Internal features

- ▶ Artificial intelligence deployed to automatically identify service connection from Veteran documents.
- ▶ Scheduling integration with VHA.
- ▶ Full integration of MyHealthVet features and information.

## PHASE 4

Months 10 - 12

### User-facing features

- ▶ All disability rating notifications include resources and action steps to treat, cure, improve, or prevent worsening of the contention, keeping a focus on healthy outcomes.

### Internal features

- ▶ All rating schedule fields are mapped to industry standard (e.g. SNOMED) codes for EHR interoperability. nexion from Veteran documents.

**A note on photography:**

All photos used in this document depict images of real veterans, sourced from the Department of Veterans Affairs photo archives.

the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion.

It is not only the illiterate who are at risk of being left behind. The world's population is growing rapidly, and the number of people who are poor is increasing. In 1990, there were 1.2 billion people living on less than \$1 a day. By 2000, there were 1.5 billion.

The world's population is also becoming more diverse. There are now more than 200 different languages spoken in the world, and more than 100 different ethnic groups. This diversity is a source of strength, but it also presents challenges.

One of the biggest challenges is how to ensure that everyone has access to the benefits of globalization. We need to find ways to help the poor and the illiterate to participate in the global economy.

Another challenge is how to ensure that the benefits of globalization are shared fairly. We need to find ways to reduce the gap between the rich and the poor.

Finally, we need to find ways to ensure that globalization is sustainable. We need to protect the environment and to ensure that we have enough resources to support the world's population in the future.

Globalization is a double-edged sword. It has brought us many benefits, but it has also brought us many challenges. We need to find ways to maximize the benefits and to minimize the challenges.

One of the best ways to do this is to invest in education. Education is the key to success in the global economy. It is the only way to ensure that everyone has the skills and knowledge they need to compete in the global market.

Investing in education is also one of the best ways to ensure that globalization is sustainable. Education helps to protect the environment and to ensure that we have enough resources to support the world's population in the future.

Finally, investing in education is one of the best ways to ensure that the benefits of globalization are shared fairly. Education helps to reduce the gap between the rich and the poor.

Education is the key to a better future. We need to invest in education if we want to ensure that everyone has the opportunity to succeed in the global economy.

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