

Call to Action: There Has To Be a Better Way

Viewpoint

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“There has to be a better way.”

After a combined 27 years active duty in the U.S. Army, this phrase resonates more than any other. It is born out of the frustration of seeing potential wasted and a relentless drive to find solutions. For the authors, it's not just a sentiment; it's a call to action.

In their landmark study, *Lying to Ourselves: Dishonesty in the Army Profession*, Dr. Leonard Wong and Dr. Stephen J. Gerras expose the impossible demands placed on company-level leaders. They are tasked with fitting 297 days of mandatory requirements into just 256 available training days. This impossible situation forces leaders into a corner, often making compromises that go against their values. The consequences are both predictable and dangerous. Operational efficiency declines, mental health deteriorates, and Soldiers are pushed to the brink. However, the most insidious consequence is the erosion of integrity.

When leaders begin to see integrity as negotiable in the face of impossible demands, it undermines the very foundation of Army values. There is a better way. It starts by saving the time we waste every day on tasks that are easily automated. Using widely available (and mostly free) tools, agile practices, and a willingness to change, it is possible to have the best of both worlds.

The Economics of Time and Risk

When leaders make decisions, time is almost always the key factor. Time is a resource used to buy down risk. With more time, Soldiers can progress further during training, plan more thoroughly, and execute missions with greater precision. Conversely, less time means increased risk, rushed decisions, and missed opportunities. Yet, precious time is being wasted on tasks that could be automated. Research by Maj. Donald Ingham at the Command and General Staff College revealed that officers spend, on average, more than two and a half hours daily manipulating data, exporting it from online systems, reformatting spreadsheets, and

transferring information into slide shows. These manual tasks rob leaders of the time they need to analyze, plan, and lead effectively. Imagine reclaiming almost three hours each day. What new levels of preparation and innovation could we achieve? What risks could we mitigate? The tools to achieve this already exist. The Army has access to powerful solutions like Advana, Power Apps, Power Automate, Power BI, Vantage, Excel and Access that can streamline processes, automate repetitive tasks, and make data-informed decision making more efficient.

Leverage Tools You Already Have

The wealth of tools that are already available, when combined with creativity, data literacy, and artificial intelligence (AI) can revolutionize workflows across Army units.

Excel is more than a spreadsheet; it is a powerful tool for organizing, analyzing, and automating data. Soldiers can use functions to track trends, inventory, and create visualizations. For example, Ingham used Excel to count the occurrences of the word “data” in Department of the Army Pamphlet 600-3 branch descriptions. Similarly, Lorona applied Excel’s conditional formatting and notifications to help the S6 track accounts nearing expiration within 90, 60, and 30 days. Color-coded highlights and automated alerts enabled proactive updates before accounts were locked. While other systems tracked expiration dates, Excel’s alerting capabilities provided a simple, effective solution to maintain readiness.

Access forms can be shared through various methods for collaboration and secure data entry. Saving the database on a shared network drive or splitting it into a backend (data storage) and frontend (forms) allows simultaneous use. Cloud storage like OneDrive and SharePoint enables remote access, while Access Runtime supports users without Access installed. Integration with Microsoft Teams further simplifies sharing, making it easy to manage tasks like personnel tracking or equipment logs efficiently and securely.

Advana, DoD’s enterprise data management and analytics platform, consolidates data from over 500 source systems, providing users with analysis, visualization, and decision support tools. It offers an integrated set of open-source AI, data science, and application development tools, enabling users to develop custom analytics and applications. A division protection cell could utilize Advana to track personal protective equipment (PPE) stocks across various subordinate units, facilitating efficient resource sharing and enhancing the division's response readiness.

Army Vantage is a centralized data platform that aggregates authoritative information from multiple Army systems, enabling commanders to create custom dashboards to monitor key metrics such as personnel readiness, training statuses, and equipment maintenance. This central data repository facilitates informed decision-making and operational efficiency. Vantage supports data export capabilities, allowing commanders to connect its outputs to external tools like Microsoft Power BI for advanced data visualization and analysis. A unit could use Army Vantage to develop a transportation management tool that integrates real-time updates from tactical edge devices, streamlining logistical operations.

Power Apps and Power Automate work seamlessly together to streamline workflows and enhance efficiency. For example, Soldiers can use Power Apps to log training completions, notify leadership of upcoming expirations, and generate reports. The app integrates with SharePoint and Excel, ensuring data is shared and updated effectively. Power Automate enhances this process by automating workflows. When a Soldier submits a form in Power Apps, Power Automate routes it to the approver, updates the status in SharePoint, and sends notifications to the Soldier and leadership. It can also schedule reminders for expiring certifications, ensuring proactive updates. This integration eliminates manual effort, reduces errors, and keeps tasks on track, improving readiness and efficiency.

Power BI transforms raw data into actionable insights through interactive dashboards, enabling leaders to visualize trends, monitor readiness, and make informed decisions. Its user-friendly design allows Soldiers to create customized reports that highlight key metrics. For example, Ingham once created a “Commanders Dashboard” through Power BI that allowed company-level leadership to quickly drill into

each identified focus area to receive by-name feedback on everything from Army Combat Fitness Test scores to mandatory training delinquencies.

Microsoft Teams and *SharePoint* enhance collaboration and knowledge sharing. Features like Lists in Teams allow Soldiers to track project progress, manage task assignments, or maintain operational checklists. With its document libraries and workflows, SharePoint ensures that knowledge is preserved and accessible, reducing redundancy and duplication of effort. For example, Ingham used Teams to democratize access to certain parts of his Commanders Dashboard, which allowed team and platoon leaders fast and accurate visibility of necessary information.

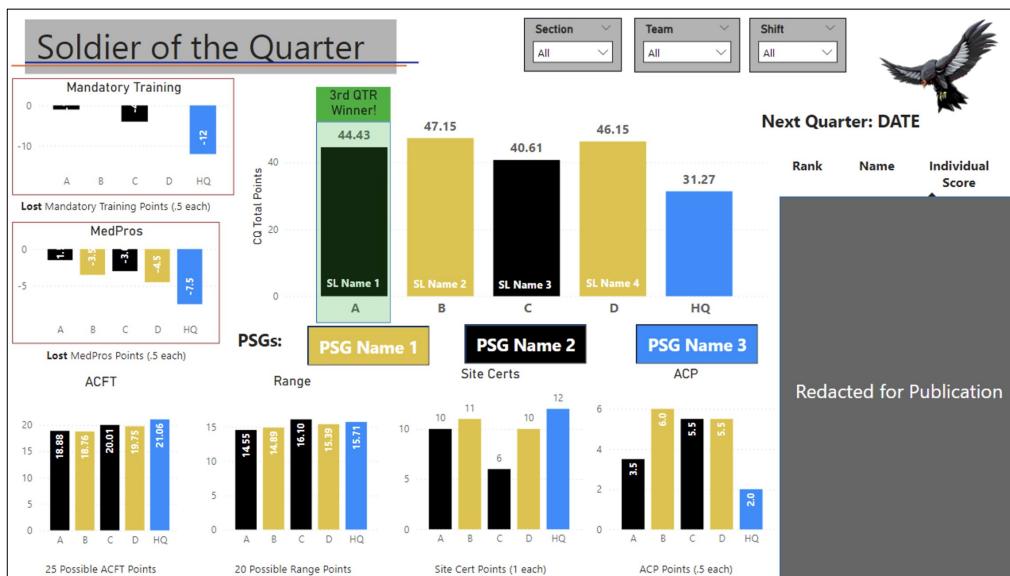
Planner provides Soldiers with a Kanban-style system to organize and track tasks, such as planning a field exercise. Tasks are divided into stages like “To Do,” “Doing,” “Done,” and “Blocked,” providing clear visibility into progress and bottlenecks. For example, tasks such as dispatching vehicles, obtaining Meals Ready-to-Eat, managing classes of supply, and preparing the range can be assigned and moved between columns as they progress. Delays can be flagged as “Blocked” for immediate attention, enabling leaders and subordinates to monitor real-time progress. This transparency reduces the necessity for face-to-face interactions while keeping everyone informed and aligned.

Forms is a versatile tool that allows Soldiers to quickly create surveys, quizzes, and polls to gather feedback or input. For example, Ingham once used Forms to create a simple and standardized ticketing system, which offered a fast alternative for an otherwise expensive enterprise-level solution.

Each of these tools has immense potential, yet their true power lies in the creativity of the Soldiers and leaders using them. Innovative Soldiers can customize these diverse tools for individual use cases that can provide value to any unit. The Army can organically create efficiencies, save time, and achieve more by fostering a culture of data literacy, which is easier than ever with the advent of AI.

Pairing AI with Existing Tools

Emerging AI tools further lower the barriers to automation and learning, enabling Soldiers to implement innovative solutions without requiring deep technical expertise. AI chat-based systems, already available on secure networks, provide real-time assistance and allow Soldiers to experiment, ask



A company-level Power BI dashboard. (Maj. Donald Ingham, Army Software Factory)

questions, and learn using natural language as they work. AI creates a collaborative, self-paced learning environment where Soldiers can build practical skills while solving real problems. For example, a Soldier tasked with building an Excel dashboard might need help figuring out where to start. They can receive detailed guidance and actionable examples by asking AI questions like, “How can I create a formula to track inventory discrepancies?” or “What is the best way to build a pivot table for this data?” Soldiers can refine their projects by asking additional AI-driven questions, such as:

“How can I automate the process of pulling data from a shared OneDrive folder into an Excel file and update my dashboard?”

“In Excel, what formula can I use to flag equipment maintenance due within the next 30 days using conditional formatting?”

“How can I create a SharePoint list that consolidates equipment readiness data from multiple units into a single, centralized view?”

“What free visualization tools can I use to best display trends in equipment readiness, including metrics, that I currently have saved in an Excel document?”

“In Excel, how do I set permissions to allow certain users to edit specific sheets while restricting access to others?”

“How can I set up automatic notifications from a SharePoint List?”

By engaging with AI to address these specific questions, Soldiers learn how to integrate tools, automate workflows, and customize solutions for their unique challenges.

AI acts as a virtual mentor, teaching Soldiers to create custom reports, design databases, or develop automated processes, democratizing access to once-advanced knowledge. AI empowers every Soldier to innovate without relying solely on the “go to” technical expert in their unit. Soldiers can focus on identifying problems and outlining solutions, while AI provides the technical expertise to implement them effectively. This approach embodies the philosophy of “falling in love with the problem, not the solution.”

Limitations

While AI and automation tools provide powerful capabilities, their use does not replace legal, regulatory, and policy compliance. Soldiers must ensure that all implementations comply with data classification guidelines, the Privacy Act, records management policies, and all other applicable laws and regulations to include adhering to DoD and Army policies on software as a service and AI. For example, automation workflows that handle sensitive data must respect classification levels, and any data collection or sharing must align with privacy and information security requirements.

Agile Practices

Agile, a methodology originating in software devel-

opment, focuses on iteration, collaboration, and ongoing improvement. This process makes it an effective approach for integrating AI and data tools into workflows. Leaders who embrace these principles empower Soldiers to develop solutions incrementally and refine them through feedback, ensuring adaptability to evolving needs. For example, a Soldier creating a Power BI readiness dashboard might begin with a simple visual showing training certifications. Through collaboration, they will likely identify additional needs, ranging from trend analysis, projections, or SharePoint-integrated notifications. Iterating allows these innovators to further exploit their newfound functionality.

There needs to be more than iteration alone. Documenting workflows, key insights, and lessons learned is critical to ensure the solutions’ longevity. Soldiers should use tools like SharePoint, Microsoft Teams, or milSuite to record and share their processes, enabling others to build on their efforts rather than starting from scratch. By combining Agile practices with robust documentation, units can foster a culture of innovation that supports continuous improvement, scalability, and collaboration across teams and missions. This approach enhances operational effectiveness and ensures that solutions remain dynamic and responsive to future challenges.

Leveraging Existing Tools and Knowledge

The tools and knowledge to address these challenges are already available. By leveraging modern technology, fostering data literacy, and embracing creative solutions, Army leaders can reduce inefficiencies, save time, and empower Soldiers to focus on what truly matters. However, realizing this potential requires more than tools; it demands leadership that prioritizes innovation and creates the conditions for success.

Conditions for Success

As leaders, we must provide Soldiers with the resources they need to succeed. This begins with time dedicated for Soldiers to learn, experiment, and refine their ideas. This commitment is necessary for even the most capable Soldiers to develop meaningful solutions. Leaders must make an initial investment in time allocated to innovation, which will pay off exponentially with modernized processes and data-centricity.

Access to tools and platforms is equally critical. Tools like Power Apps, Power Automate, Vantage, and Power BI are already available on government-funded devices, but their potential remains untapped without access, encouragement, and preferably training. AI can help, but training users to a basic proficiency level will ensure they have the necessary language to interact with any AI model.

Success also hinges on buy-in from leadership. Soldiers need support to experiment, fail, and iterate without fear. Leaders must remove red tape, advocate for innovation, and champion new ideas to foster a culture where creative problem-solving thrives.

Education is another pillar of this foundation. Prioritizing data literacy as a core competency across the force enables Soldiers to analyze and communicate with data, transforming inefficiencies into opportunities for innovation. By embedding data literacy into training, the Army can ensure the force remains adaptable and efficient in an increasingly data-driven environment.

Finally, leaders must cultivate passion, a shared sense of purpose, and urgency to save the Army time, money, and resources. Soldiers must believe in the value of their work and understand how their contributions align with the larger mission. Leaders play a vital role in connecting individual efforts to organizational goals, fostering engagement and ownership.

A Call to Action

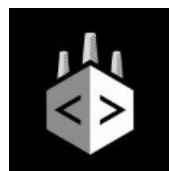
The challenges highlighted in *Lying to Ourselves*

and Ingham's research remind us of the costliness of inaction. Officers lose almost three hours per day to manual data tasks, time that could be reinvested into mission planning, training, and Soldier welfare. This inefficiency underscores the urgent need for leaders to embrace modern tools, foster data literacy, and create a culture of innovation. By leveraging technology, integrating AI as a collaborative partner, and applying Agile principles, Soldiers can develop scalable solutions that reclaim time, enhance operational effectiveness, and reduce risk. Leaders must prioritize education, provide access to resources, and advocate for experimentation to ensure Soldiers have the tools and support needed to succeed.

There is a better way – one that starts with the tools already in our hands, the ingenuity of our Soldiers, and the leadership that drives innovation.

About the authors ...

Maj. Donald Ingham is a signal officer currently assigned as a product manager for the Army Software Factory, where he facilitates the lifecycle of software products, including problem discovery, solution framing, application development, iterative feature updates, and eventual retirement. Ingham has earned a Master of Military Arts and Sciences degree from the Command and General Staff College, a Master of Professional Studies in technology management from Georgetown University, and a Bachelor of Arts degree from Stetson University. His notable assignments include commanding the United States Army Signal Activity-Camp Roberts, serving as the 35th Signal Brigade S8, and working as a Signal Basic Officer Leadership Course training and academic counselor.



Capt. Noe Lorona is a signal officer currently serving as a platform engineer for the Army Software Factory where he plans, develops and deploys cloud architecture to support Agile application development. Lorona holds a Doctor of Management from Colorado Technical University, and a Master of Science in management and a Bachelor of Science in information technology, both from National American University. His professional certifications include Certified Associate in Project Management from the Project Management Institute and six Computing Technology Industry Association certifications.