ifest 2022

The Need for Classification and Education Credentials Modernization:
DOD Training the Workforce of the Future, Today

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BLUF:
For DOD to be One Workforce
Civil Servants Need Training and Qualification Equality

The 800,000 Civilian Employees are trapped in a 1940s-era system to qualify for positions, promotions, training, and career changes.

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The **talent landscape** is changing.

"Future of work"

85 million jobs will be displaced and **97 million** new ones to be created by 2025.

Longer careers

Within 20 years, **90%** of all jobs will require some digital skills.

Accelerated by the pandemic

69% of organizations are doing more skill building now than they did before the COVID-19 crisis.

"The great resignation"

A record **4.3 million** Americans quit their jobs in August 2020 and **4.5 million** quit in March 2022, evidence of an emerging Talent Economy.

Skills gaps are widening while power dynamics are shifting to the employee.

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Workforce of Tomorrow

Closing Skills Gaps

94%

of business leaders
expect employees to pick up
new skills on the job
[World Economic Forum Future of Jobs Report]

Leadership Development

53%

of L&D pros
list development of leadership
& management skills as their
top challenge
[LinkedIn Workplace Learning Report]

Enterprise Agility

2/3rds

of enterprises
report they're unprepared for
workforce disruptions caused
by technology and market
trends
[McKinsey Global Survey]

Improving Hiring Initiatives

43%

of enterprises
report finding diverse
candidates with appropriate
qualifications is the biggest
challenge to their DEI goals
[Lever State of DEI Efforts Report]

Workforce Retention

94%

of employees
would stay longer if the
company invested in learning
& career development benefits
[LinkedIn Workplace Learning Report]

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Mapping learning to career relevancy

50%
of all employees will require reskilling by 2025.*

71%
of C-suite executives said they considered an online credential generally equal to, or of higher quality, than one completed in person.**

40%
of workers will require reskilling of six months or less.*

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Most Recent Job Requirement Updates

THE CLASSIFIER'S HANDBOOK

- Computer Science Series, GS-1550, January 1988

- Secretary Series, GS-0318, January 1979

- Logistics Management Series, GS-0346, January 1987

- Contracting Series, GS-1102, December 1983

- Equal Opportunity Compliance Series, GS-0360, November 1980

- Pathology Technician Series, GS-0646, February 1968

- Public Health Program Specialist Series, GS-0685, November 1980

- Health Aid and Technician Series, GS-0640, September 1988

- Food Inspection Series, GS-1863, June 1971

- Consumer Safety Inspection Series, GS-1862, June 1972

- Economist Series, GS-0110, April 1963

Job Grades are Inverse Since System Start

Chart 7-9. The Changing General Schedule Workforce
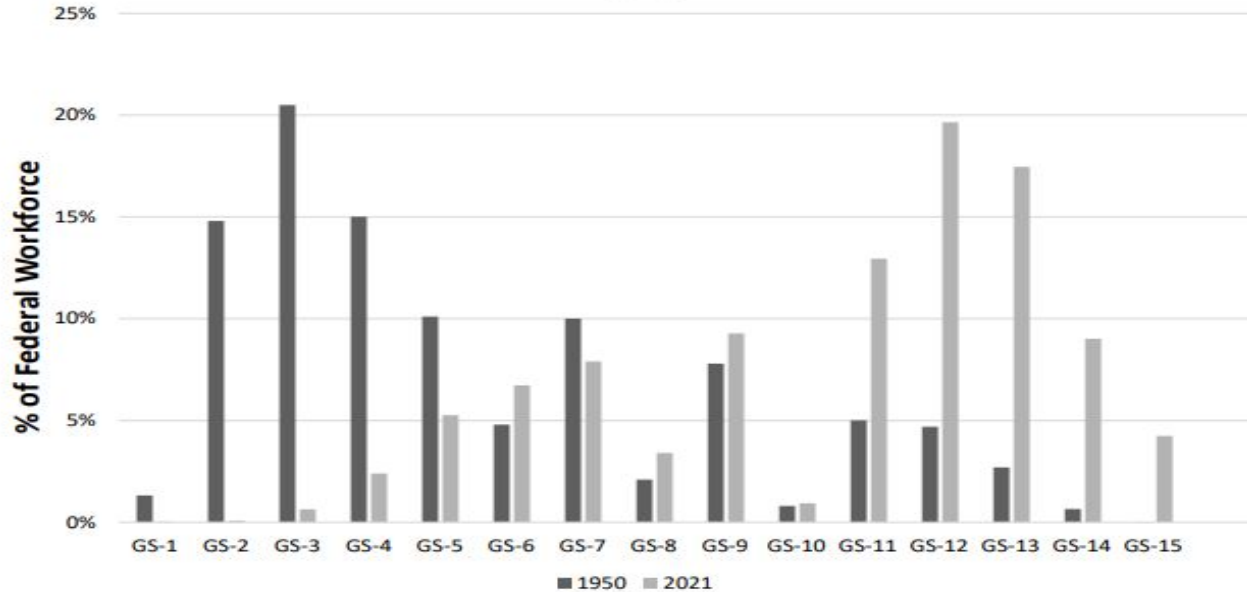
Source: OMB Budget Submission 2022

Hiring "Assessments"

About 96% OPM provided assessments are self-reporting occupational questionnaires that if you do not score high enough, do not even have resume reviewed. Question examples are:

"Indicate the extent to which you have communicated orally with various levels of employees to obtain and provide information."

Knowing you need a high score, do you answer you are an expert in everything?

Repeated studies have shown that women in particular will self-assess lower.

Real Assessments Find Right Talent

- **Skills-based hiring**: "In evaluating job applicants, employers are suspending the use of degree completion as a proxy and instead now favor hiring on the basis of demonstrated skills and competencies. This shift to skills-based hiring will open opportunities to a large population of potential employees who in recent years have often been excluded from consideration because of degree inflation. (This population includes potential employees that have been described as "hidden workers" and "STARs.")" - Harvard Business Review

- **The Paper Ceiling**: "the invisible barrier that comes at every turn for workers without a bachelor's degree. See also: no alumni network, biased algorithms, degree screen stereotypes, and misperceptions." -Opportunity@work

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Improving Racial, Gender, & Ethnic Equality

- **Only about 1 in 10 employees at large tech companies are Black or Hispanic.**
  [Source: Silicon Valley Rising]

- **Only 8.7% of bachelor's degrees for computer and information sciences go to Black students, 10.5% go to Hispanic students.**
  [Source National Center for Education Statistics]

- **Women make up 47% of all employed adults in the U.S. but only 26% of computer related jobs are held by women. And of that 26%, only 3% are Black women and 2% are Hispanic women.**
  [Source: US Bureau of Labor Statistics]

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Defense Business Board Report: 5/2022

OBSERVATIONS AND FINDINGS

1. Civilian Development is not seen as a priority in DoD culture.

The future of DoD Civilian talent management must include a reimagining of the civilian workforce in line with modern best practices and culture to compete for, identify, and match critical skill sets. Disruptive change will not come without fundamentally thinking differently about the institution of civil service. A new mindset is needed as a stage setter for optimizing the workforce and identifying the opportunities for employees to embrace upskilling.

Our study has found the following issues with the way the DoD perceives the civil servant:
- Civilians aren't hired to train & develop. Therefore, opportunities are limited, upskill programs are insufficient, and incentives don't move the needle.
- Civilians are seen as agency/service assets, not DoD assets (parochialism)
- Civilians aren't seen as mobile (relocation)
- Managers are not incentivized to upskill or development employees

**Civilians aren't hired to train & develop**

Defense Business Board Report: 5/2022

This has taken on a sense of urgency, given several factors and developments:

- The advancements, capabilities, and prowess of the Department's most consequential strategic competitor, China, and other acute and persistent threats, such as Russia, North Korea, Iran, and violent extremist organizations.
- The lack of focus in our universities and education system on turning out STEM graduates.
- DoD's "outdated" methods, policies, and systems for civilian talent management in the Department.
- DoD's lack of leadership and focus on the "new" skillsets and talent within the DoD and extended ecosystem, including private companies.
- The COVID-19 global pandemic disrupted labor markets, accelerated the shift to remote work, and forced approximately 25% more workers to rethink their occupations[1]

Synopsis: Department leaders are responsible for ensuring the DoD has a workforce with the skills that can manage and adapt to these new changes. Currently, DoD hires talent to fill short-term vacancies with little regard to future technology needs and/or a strategy to upskill or reskill as needed. This needs to change for DoD to keep pace with changing technology and compete for and attract the best talent.

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Average Annual Training Costs

Source: https://fcom.cape.osd.mil/user/default.aspx
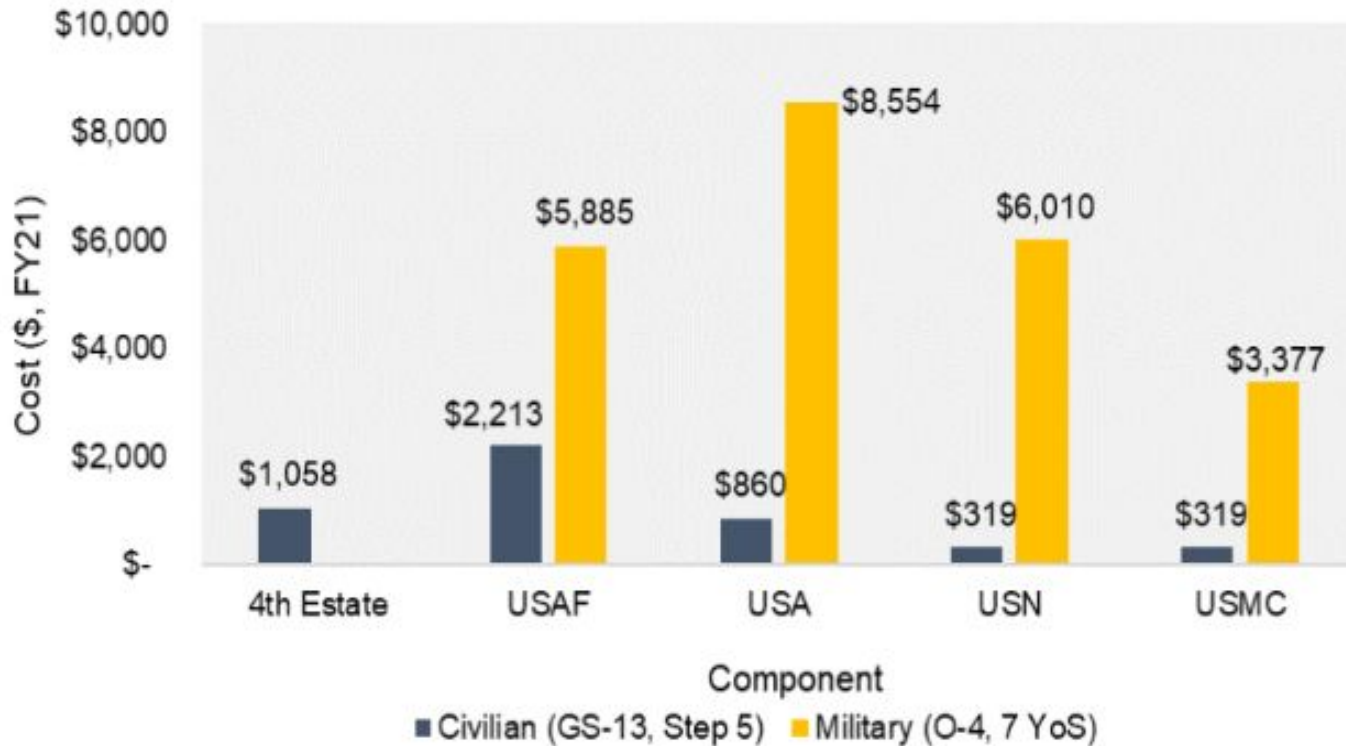
Distributed Learning: DOD Leads the Way

"Originally published in 2006 and revised in 2017, DoD Instruction (DoDI) 1322.26 ("Distributed Learning") establishes policy, responsibilities, and requirements for developing, managing, providing, and evaluating distributed learning for DoD military and civilian personnel. It also addresses distributed learning modernization, and it formally charters the Defense ADL Advisory Committee (DADLAC), the advisory body for DoD-wide distributed learning.

DoDI 1322.26 provides the following guidance:

- DoD personnel will have access to state-of-the-art, affordable, and effective education.
- In the design process, distributed learning will be considered as a delivery option, with accessibility consistent with Section 508 requirements for users with disabilities.
- Distributed learning capabilities will be based on interoperable standards.
- DoD Components will migrate away from SCORM-enabled courseware in favor of cmi5 and Experience Application Programming Interface (xAPI).
- Distributed learning data will be shared throughout DoD to the maximum extent.
- DoD Components will consider Identity, Credential, and Access Management (ICAM) when acquiring distributed learning systems."

Source: ADLNet.gov

Learning Ecosystems

"This envisioned "continuum of learning" includes features such as the following:

- Continuous: Career-long, continuous learning replaces the status quo's stovepipe, episodic learning
- Blended: Formal education and training, just-in-time support, and informal learning are integrated
- Enterprise Focused: Education, training, & talent management are considered in concert, holistically
- Diverse: Disparate learning technologies & methods are interoperable within a cohesive ecosystem
- Learner Centric: Learning adapts to individual and team needs, contexts, and characteristics
- Data Driven: Learner data from across many sources are aggregated & analyzed to drive decisions
- Competency Based: Competency frameworks support assessment & guide developmental trajectories
- On Demand: Modular education and training can be delivered at the point of need
- Cloud Based: Software services & network-based repositories support flexibility & discoverability"

Source: ADLNet.gov

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Training DOD today

- Campus-based:
  - Military Academies
  - Military Defense Schools (War College, National Defense University)
  - Job Specific Schools (Defense Language Institute, Defense Acquisition, Defense Information, Uniform Health Services)
- Resource-intensive:
  - Relocation
  - Time away from position, backfilling role
  - Per diem, facility costs, etc
- Adult-learning obstacles:
  - Reverting to classroom style learning environment
  - Balancing life (growing children, aging parents, adulting in general)
  - Challenges of career switching, expertise loss, work task volume

Defense Business Board Report: 2018

2. **No Incentives to Save.** Budget considerations should remain at the forefront of all force and labor mix decisions in order to achieve true force optimization in this time of continued budgetary uncertainty and potential for long-term budget austerity. Cost savings as a cultural practice is not incentivized when determining force and labor mix throughout the Department. As a result, DoD component organizations add compounding costs to an already unsustainable labor workforce bill to the USG. Labor decisions appear to be made with minimal consideration for lifecycle costs. There are additional costs to the USG that should be factored in any labor costing method to ensure all levels of management remain cognizant of the true accounting for the fully burdened and the lifecycle costs of employees, as outlined in the task group's proposed cost elements spreadsheet (**TAB E**). Those additional costs include those that are paid for by non-DoD agencies, such as the Department of Veterans Affairs and the Treasury, for benefits such as post-retirement health benefits, certain education benefits and post-retirement life insurance benefits to name a few. Current labor decision processes implemented inside the Department do not consistently factor these fully burdened costs as a key variable in manning or force mix decision making.
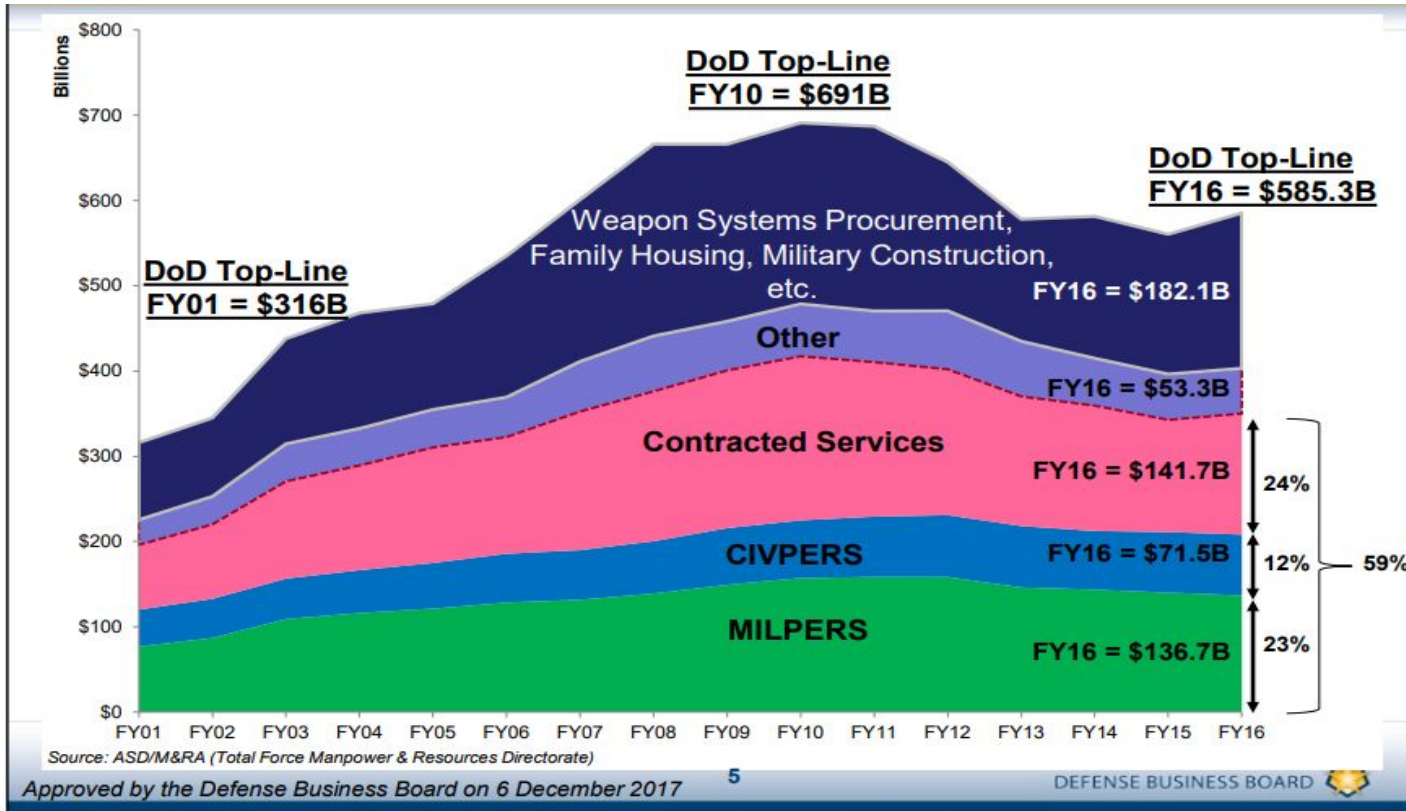
Civil Servant/Uniform/Contractor Costs

Figure 1: FY16 DoD Budget Estimate

Savings from Training DOD Civil Servants

- Total lifecycle cost of a civil servant is lower to the taxpayer because they do not receive benefits such as GI Bill, Tricare, Veterans' hospitals, enhanced early retirement, and burial.
- Civil Servants are paid less than the total cost of a contractor because of the lack of overhead.
- DOD has more oversight of its own civil servants than contractors who report to external companies and their missions.
- Unionized civil servants have partnered with management for decades
- Hiring, onboarding, and acclimating a new hire is more expensive than incremental training costs of current staff.
- Military culture of training is already the proof of concept for the need to have people who can quickly learn to accomplish new task.

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Skills Development Pathways for Learners

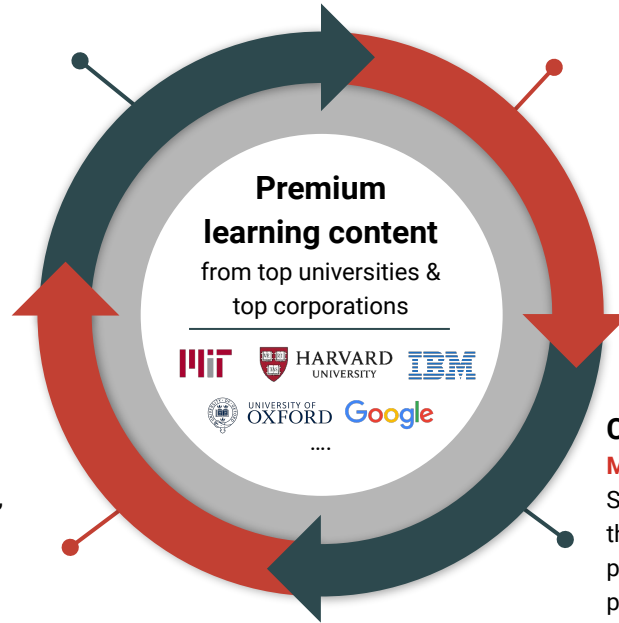**Open Courses & Certificate Programs**
Scalable, stackable, learning pathways.
Online, self-paced courses across a multitude of subject areas offer stackable credentials economically priced to upskill your entire organization at scale..

Executive Education
Cohort-based, personalized learning.
Online, cohort based courses focusing on upskilling high potential employees on future-focused topics, and equipping teams with the latest skills to respond to industry shifts.

Premium learning content
from top universities & top corporations

MIT · HARVARD UNIVERSITY · IBM
UNIVERSITY OF OXFORD · Google
....

Boot Camps
High-touch, rapid upskilling. Train-to-hire.
Designed to bridge skills gaps through intensive, hands-on, project-based curriculum. Perfect for upskilling staff or train-to-hire for data science, computer programming, or web development.

Credit-Bearing Online Learning
MicroBachelors®, MicroMasters®, Degrees.
Subsidize employees' pursuit of a degree with these innovative, stackable, credit-bearing programs. Unlock the career prospects or high performers. Give a leg up to unpolished gems lacking a degree.

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Reskilling: We Tried, Bureaucracy Won

Federal Cyber Reskilling Academy:

- 1,500 applicants for about 50 spots

- 2 graduating classes

- "Entry level cyber jobs on offer didn't match up to the pay grades of the feds who enrolled in the reskilling program; Participants couldn't move over and up into cyber jobs because they didn't meet standards requiring a certain amount of experience in a field, generally a year;"

- "That is somewhat of an antiquated perspective, especially in areas of emerging technology," [former Federal CIO Suzette] Kent said. "Because what's relevant in the space changes so quickly, I'd take somebody that had a certification in the last 24 months for the role before someone who had a degree 10 years ago.... If I'm putting somebody on the playing field, I want somebody who's been in the game recently."

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Training DOD Tomorrow (and some today!)

- Digital Learning Record regardless of branch or agency
- Training wherever in the world individual is based
- Parity in opportunities for civil servants and uniformed services
- Agile curriculum to train total workforce in real-time
- Ability to find skills and competencies anywhere in DOD

- MicroBachelors Median Cost: $900
- MicroMasters Median Cost: $1250

"Use of Microlearning Significantly Reduces Attrition in Army Air Assault School:The results confirmed that PERLS and microlearning can be effective training tools: soldiers who used PERLS had a 25% higher course completion rate, higher test scores in one element of the TSAAS training, and outperformed their peers by 13% in another

Meaningful impact

50%
say that taking courses with edX **changed their lives**

97%
of all 2U-powered degree alumni achieved a **positive career outcome** after graduating

13K+
MicroMasters® credentials earned

89%
career advancement for MicroMasters® program completers

$11K
median income increase for boot camp alumni 1 yr after graduating*

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However…

Even if DOD does everything correct and invests in its people properly, until the laws and regulations change, bureaucratic rules will keep the status quo in place as training and ability does not outweigh the arbitrary existing standards.

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Thank you.

Any Questions?

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