

The background of the slide features a blurred image of stacked stones, with a small stack of three stones in the upper center and a larger stack of three stones in the lower right. The overall color palette is muted greens and blues.

DAU



***Software Acquisition:
Striking the Balance Between
Price and Value***

Feb. 10, 2021

1:00 – 3:00 p.m. (Eastern)

Software Acquisition– Value/Pricing



Jacky Ingram
Contracts Chief
Ops C2 Product Line
Kessel Run, AFLCMC



Matt Nelson
COO
Rise8



Theresa Terry
Branch Chief
Enterprise Support
USAF



Florence Kasule
Chief of Acquisition
US Digital Service



Will Roberts
Acquisition Chief
Joint AI Center (JAIC)



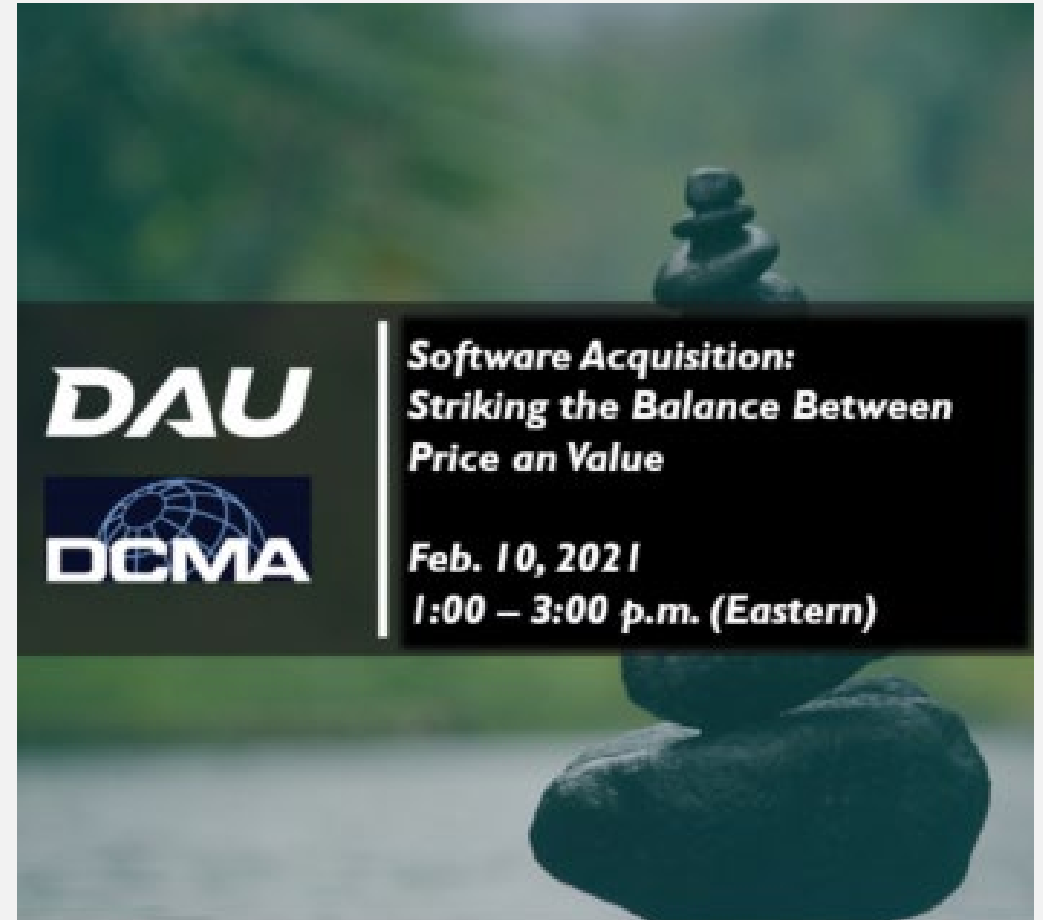
Scott Waldman
Price Analyst
CIG, DCMA



Ryan Connell
East Pricing Director
CIG, DCMA

Agenda

- Disclaimer
- Expectations from today
- Problem Statement
- Understand Selling
- Software Procurements & Price influencers
 - Licenses
 - Cloud
 - Software Development
 - Agile
- Price Considerations
 - Value & Functionality
 - Compatibility
 - Brand Recognition
 - Estimating Labor
 - User Experience
 - Exit Strategy
 - Financing



This brief is intended to promote pricing ideas, collaboration, and to increase communication. The slides and discussion are not official Agency Policy, or the policy of the Department of Defense or USG.

- What today is **NOT**
 - Lesson on the software pathway for Adaptive Acquisition Framework
 - A panel with official policies, direction, or requirements
- What today **is**
 - A collaborative discussion on how balance achieving value with paying a fair and reasonable prices for software procurements
- Discussion:
 - “I have another way to solve for fair and reasonable price...”
 - “The Government tends to _____, Commercial businesses tend to _____”
 - “I have another story or idea I want to share....”

Hypothesis / Problem Statement

- Many software procurements tend to be commercial or non FAR-based
 - Other Transactions – focus on price analysis
 - FAR 12/13 – focus on price analysis
- Software pathway under the Adaptive Acquisition Framework (AAF)
 - <https://aaf.dau.edu/aaf/software/>
- DCMA Commercial Item Group (CIG)
 - <https://www.dcma.mil/Commercial-Item-Group/>
- **Hypothesis:** There is a continued disconnect between price-evaluation practices used as commercial industry standards and those being adopted by DoD Contracting/Agreement Officers. Specifically, procuring software are becoming increasingly difficult to evaluate for price reasonableness

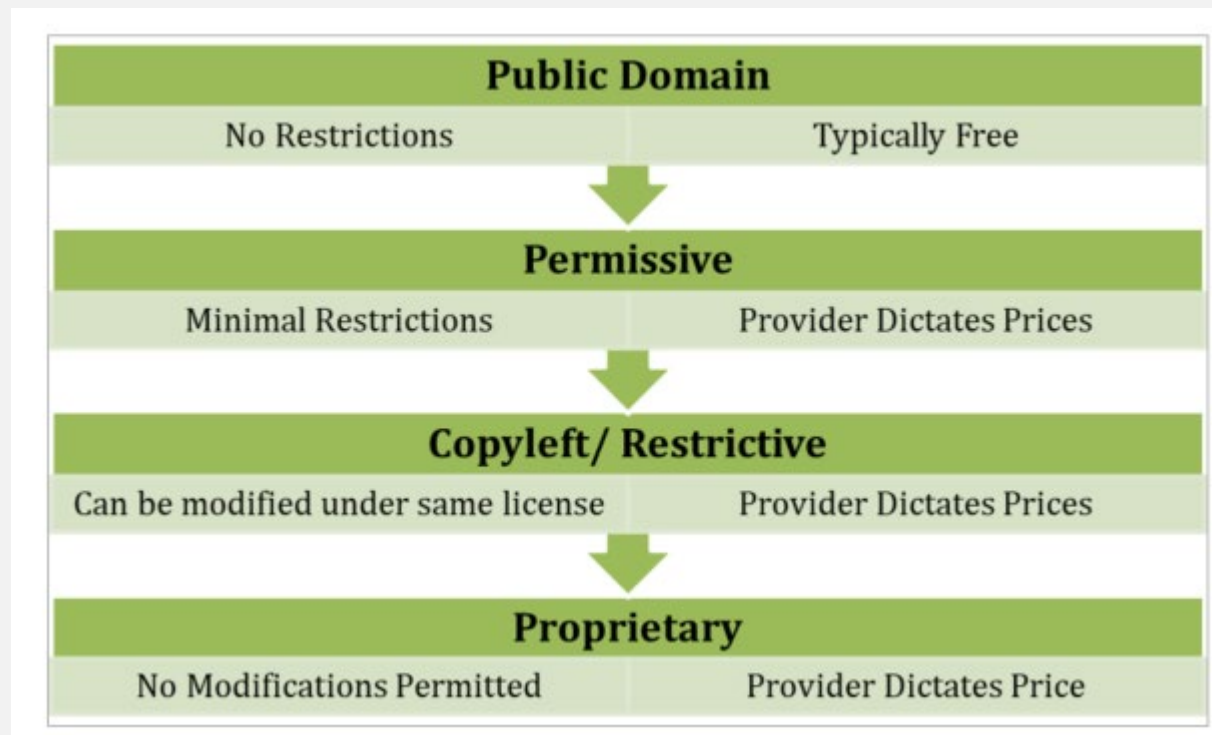
Understand Selling & Supporting Software

- Understand the other side
 - Seller
 - Supporter
 - Builder
- Industry Perspective

- Two common Contract Types
 - FFP
 - T&M

Firm-Fixed Price	Time & Materials
Defined parameters	Developers set parameters
Low flexibility	Good for flexible projects
Good for small projects	Grant creative freedom: Price can vary

- Two big factors
 - Restrictions
 - Maintenance



Perpetual License

- Paid up-front in one, big lump sum
- Customer take full custody of software
- May have additional yearly maintenance fee typical at 15-30%

Subscription

- Priced on a yearly or monthly basis and is an on-going subscription
- Provider maintains custody and software updates

Software Development - Estimating Labor

- Cost vs Price
 - Wage/ BLS/ GSA Calc/ Level.fyi
- Pros
 - Good way to estimate cost
- Cons
 - Doesn't consider value

Estimating for Labor - An Interactive Approach						
		Total	20-Jan	20-Feb	20-Mar	20-Apr
PE Hrs		180	20	30	60	70
Factory Cost		32,730	3,205	4,808	11,558	13,160
Engineering - Type 1						
PE Hrs		120	20	30	30	40
F/C (\$160.25 for 2020)		19,230	3,205	4,808	4,808	6,410
Engineering - Type 2						
PE Hrs		20	-	-	10	10
F/C (\$162.55 for 2020)		3,251	-	-	1,626	1,626
Project Specific						
PE Hrs		15		5	5	5
Factory Cost		3,843	-	1,281	1,281	1,281
Central Shipping						
PE Hrs		10			5	5
Factory Cost		2,562	-	-	1,281	1,281
Schedulers						
PE Hrs		25		10	10	5
Factory Cost		6,406	-	2,562	2,562	1,281
Hardware						
		50,000			25,000	25,000
Tooling						
		17,500		17,500		
Purchased Engineering						
		100,000		100,000		
Other Costs						
Factory Cost		268,525	6,410	135,958	53,240	55,164
BE	1.30%	3,491	83	1,767	692	717
SUBTOTAL COST INPUT		272,016	6,493	137,726	53,932	55,881
G&A	4.25%	11,561	276	5,853	2,292	2,375
IR&D	3.87%	10,527	251	5,330	2,087	2,163
SUBTOTAL		294,103	7,021	148,909	58,311	60,418
FEE / PROFIT	15.00%	44,115	1,053	22,336	8,747	9,063
COM - BE	0.10%	269	6	136	53	55
COM - G&A	0.07%	188	4	95	37	39
Total Price		338,675	8,085	171,477	67,148	69,575
* Cost of Money (COM)						

Software Development – Labor / Agile / Value

- Agile
- Sprints
- “Buying Labor”
- What about value?

	Cost	Deliverable	PRICE
Sprint A	3 developers (\$100/hour) for 40 hours = \$12k	Functional, usable capability	???
Sprint B	3 Sr developers (\$120/hour) for 40 hours = \$14.4k	No functional capability	???



Other Considerations

- Customer Needs
 - Agility, Adaptability and Exit Strategy
 - Financing & Payment Structure
 - Requirements cost money
 - Ethics of AI do they effect price?
 - Should you pay more for non trads?
-
- What else??

Panel Remarks



Jacky Ingram
Contracts Chief
Ops C2 Product Line
Kessel Run, AFLCMC



Matt Nelson
COO
Rise8



Theresa Terry
Branch Chief
Enterprise Support
USAF



Florence Kasule
Chief of Acquisition
US Digital Service



Will Roberts
Acquisition Chief
Joint AI Center (JAIC)



Scott Waldman
Price Analyst
CIG, DCMA



Ryan Connell
East Pricing Director
CIG, DCMA

• Alternative Resources & References

- Jia, M. (2017, April 21). 7 Important Factors To Consider When Choosing Enterprise Software. Retrieved January 1, 2020, from <https://www.topbots.com/7-most-important-factors-evaluation-enterprise-software-technology/>.
- Jia, M. (2017, April 21). A Detailed Vendor Sourcing Framework For Enterprise Solutions. Retrieved January 1, 2020, from <https://www.topbots.com/a-detailed-vendor-sourcing-framework-for-enterprise-solutions/>
- Shleyner, E. (2019, November 5). The 8 Key Factors When Buying Marketing Software: Databox Blog. Retrieved January 1, 2020, from <https://databox.com/how-to-buy-software/>
- Mays, K. (2018, February 12). Top Factors to Consider When Buying a Software. Retrieved from <http://www.ontwik.com/top-factors-to-consider-when-buying-a-software/>
- Parsons, J. (2019, June 10). How to Determine How Much to Charge for Your Software. Retrieved January 1, 2020, from <https://www.entrepreneur.com/article/334977/>
- Saper, J. (2017, October 2). How to Price Your Software: 101. Retrieved January 6, 2020, from <https://medium.com/@jakesaper/how-to-price-your-software-101-4762fb939dd/>
- Law, Ryan. "The Ultimate Guide to SaaS Pricing Models, Strategies & Psychological Hacks." *Cobloom*, 6 May 2019, www.cobloom.com/blog/saas-pricing-models.
- Staff, Rhumbix Editorial. "How to Choose Between a T&M Contract vs Fixed Price Contract." *Rhumbix*, 8 Aug. 2019, www.rhumbix.com/how-to-choose-between-a-time-and-materials-contract-vs-fixed-price-contract/.
- Team, Synopsys Editorial. "5 Types of Software Licenses You Need to Understand | Synopsys." *Synopsys*, Google, 2017, www.synopsys.com/blogs/software-security/5-types-of-software-licenses-you-need-to-understand/amp/.
- Agile Team Estimator. (n.d.). Retrieved July 19, 2020, from <https://techfarhub.cio.gov/custom-tools/ate/>
- Rahmani, B. (2020, March 05). ☞ Mattermost Slack ! Which Way Should You Go? Retrieved September 11, 2020, from <https://www.troopmessenger.com/blogs/mattermost-vs-slack>
- Slack vs Mattermost. (n.d.). Retrieved September 11, 2020, from <https://www.capterra.com/team-communication-software/compare/170524-135003/Mattermost-vs-Slack>
- Skok, D. (2011, October 31). Multi-axis Pricing: A key tool for increasing SaaS revenue. Retrieved November 09, 2020, from <http://assets.businessinsider.com/multi-axis-pricing-a-key-tool-for-increasing-saas-revenue-2011-10>
- Project-Management.com. (2020, October 23). Agile Development Methodology & Principles for 2020. Retrieved November 09, 2020, from <https://project-management.com/10-key-principles-of-agile-software-development/>
- Kumar, A. (2020, June 08). What is DevSecOps? Benefits of Adopting DevSecOps. Retrieved November 09, 2020, from <https://www.devopsschool.com/blog/what-is-devsecops-benefits-of-adopting-devsecops/>
- Barron, A. (2014, July 30). Pizza as a Service. Retrieved October 20, 2020, from <https://www.linkedin.com/pulse/20140730172610-9679881-pizza-as-a-service>

BACKUP

Infrastructure as a Service (IaaS)

- Externally Managed Servers and Data Infrastructures
- Pay-as-you-go

Platform as a Service (PaaS)

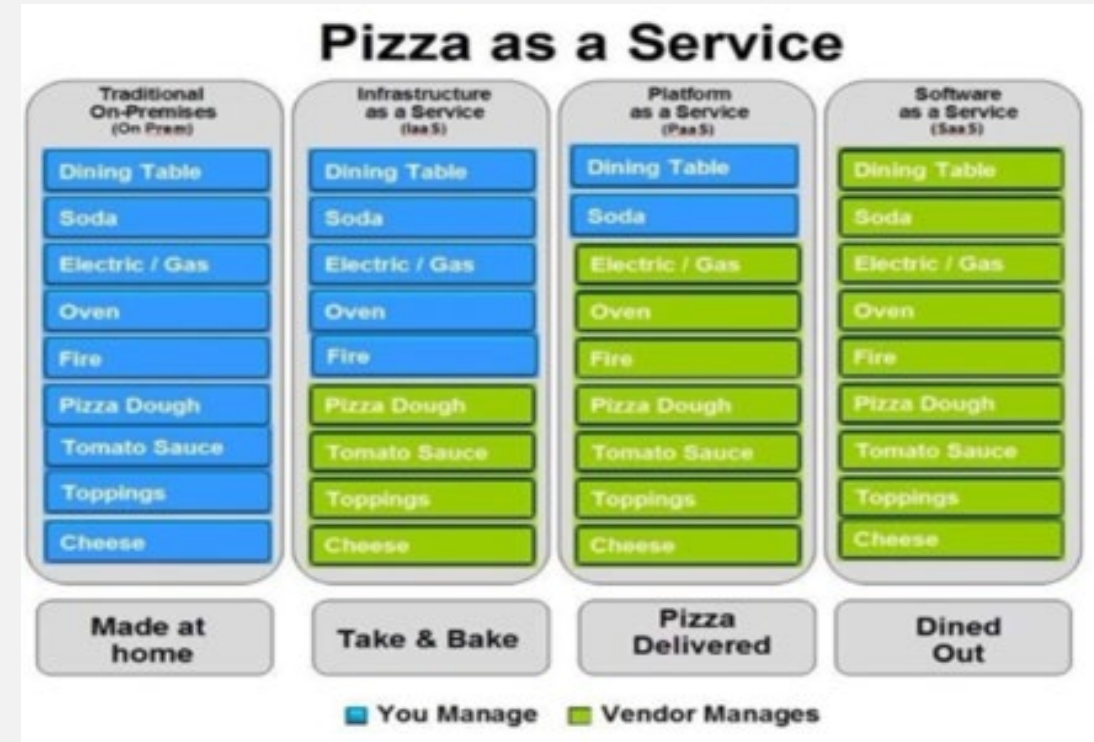
- Co-Managed; Users maintain Own Applications
- Pay-as-you-go

Software as a Service (SaaS)

- Users Gain Secure Access to Provider's Applications
- Price Determined by Number of Features and Users

Serverless Computing

- Hands-off approach for Users
- Providers Handle All Data and Infrastructure Needs



Value/Functionality

- Single Source
 - Can still compare to other solutions
 - Gives you a baseline for price reasonableness

- Competitive
 - Do white papers articulate value?

Company A Vs. Company B		
Stakeholder's Chosen Criteria Score (5 best to 1 least)	Company A	Company B
Functionality / Compatibility: Does the product contain the necessary programs to complete the work? Do they require extensive Training to use properly?	Score 5	Score 3
User Friendliness / Customer Service: Training & Customer Service Packages	4	2
Compatibility: Does the product easily replace the previous Solution? Is there going excessive downtime waiting for the program to finish installation?	5	4
Agility/Adaptability: Does the vendor allow for easy transaction between bundles/products in response to business growth?	4	2
User Friendliness: Is the solution easy to learn how to use? Are Customization options available to compliment Individual work styles?	3	2
Total Score out of 25	<u>21</u>	<u>13</u>
Over and Above:		
Purchase Software	\$155,000.00	\$85,000.00
Price/Value Formula:		
Score rating for First software (1-25)	21	
Score rating for Second Software (1-25)	13	
Price for First software score	\$155,000	
Price for Second software score	\$85,000	

- In the example above, the team reviewed the software and subjectively scored Company A 21/25 and Company B 13/25. Dividing Company A's (21) score by Company B's score (13), concludes that Company A's software is 1.6x better than Company B's.
- The price of Company A's software package (\$155K) is then divided by the price of Company B's software package (\$85K), resulting in a 1.8x markup.
- Conclusion: "I am paying 1.8x the price for something I rated 1.6x better".