



CORVELLE
CONSULTING

Demystifying Digital Transformation



Yogi Schulz
10 March 2021

Yogi Schulz

Biography

- ❑ Founder at Corvelle Consulting
- ❑ Information technology related management consulting
- ❑ IT World Canada columnist & CBC Radio guest
- ❑ Industry presenter:
 - Oil & gas industry - many years
 - Project World - 6 years
 - PMI – SAC - 10 years
 - PMI – Information Systems SIG - 2 years



SINCE IT'S OUR TOP PRIORITY,
WHAT DO WE MEAN BY
DIGITAL TRANSFORMATION?



ZOOM
MEETINGS



USING
SLACK



DIGITAL-FIRST,
DATA-DRIVEN
UM...
CUSTOMER-
CENTRIC
UM...



DON'T
FORGET
AGILE



AND SOME-
THING WITH
THE CLOUD



MAKING
TIKTOK
VIDEOS



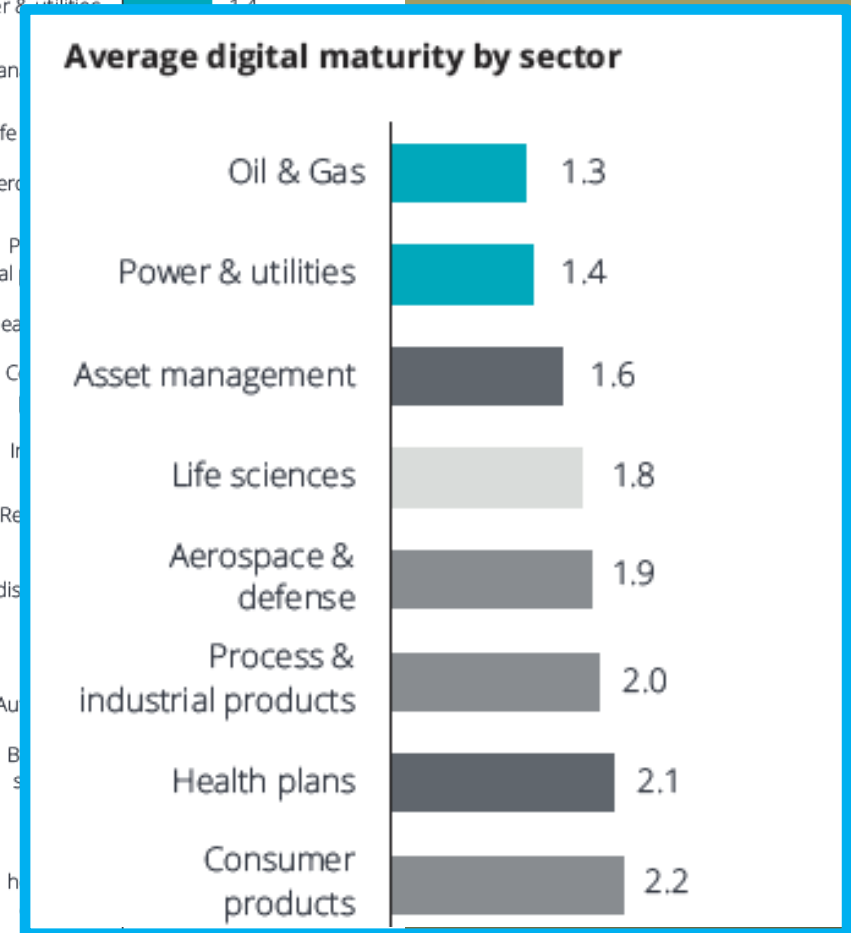
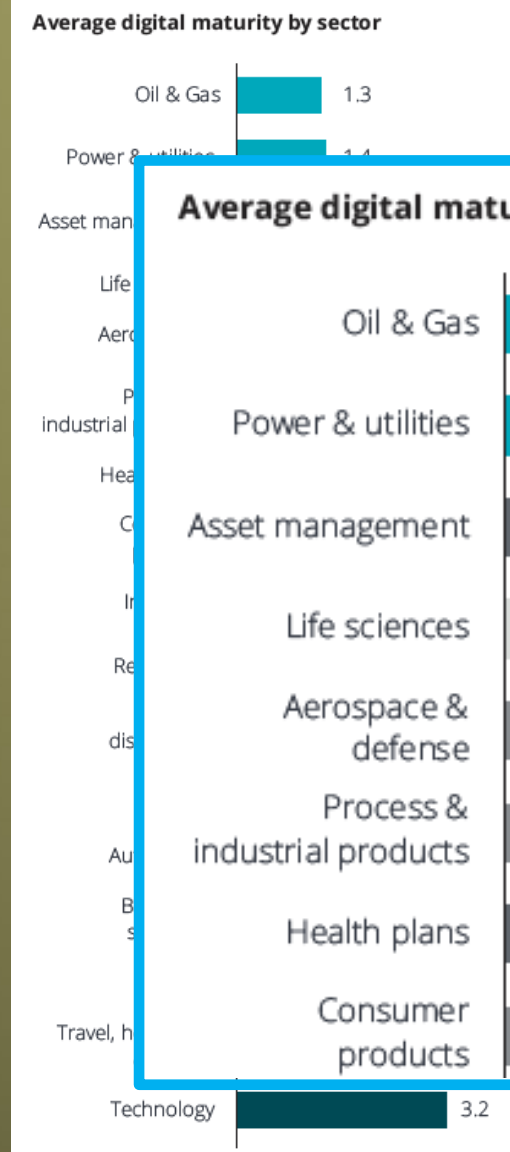
MAYBE WE SHOULD
START WITH WHAT IT
DOESN'T MEAN.



TOM
FISH
BURNE

Presentation Outline

- ❑ Trends enabling digital transformation
- ❑ Common business issues
- ❑ Digital transformation definitions
- ❑ Digital transformation goals
- ❑ Digital transformation opportunities
- ❑ Digital transformation benefits
- ❑ Future digital developments
- ❑ Obstacles to digital transformation
- ❑ Lessons from digital transformation
- ❑ Conclusions
- ❑ Recommendations



Trends enabling Digital Transformation

- ❑ Affordable Information Technology
- ❑ Big Data and Data Analytics
- ❑ SCADA
- ❑ Digital



Common Business Issues

- ❑ Rely heavily on various paper-based, manual processes

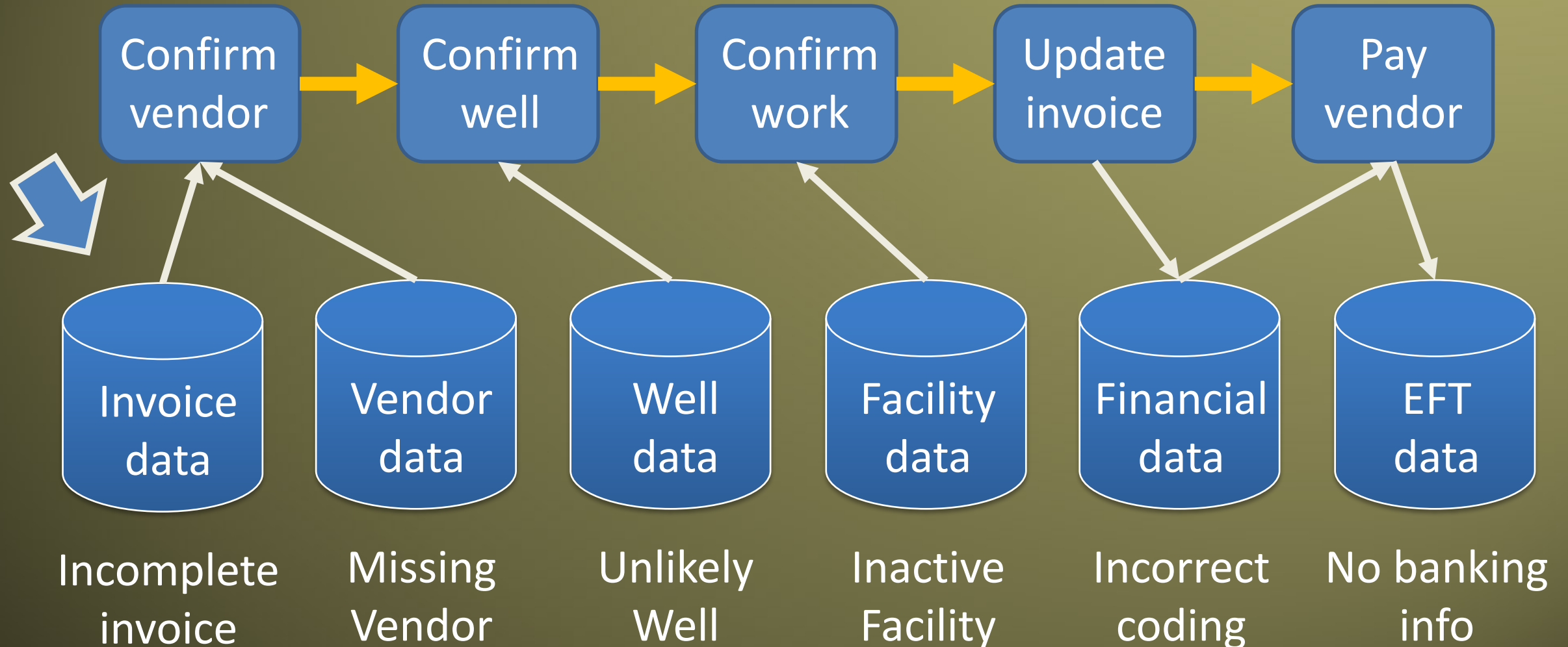
- ❑
- ❑
- ❑
- ❑
- ❑
- ❑
- ❑



ation



Typical Invoice Processing Business Process



Digital Transformation Definitions

- ❑ Good:
 - Transforming business processes to help organizations compete effectively in a digital world
- ❑ Bad:
 - Using technology to conduct business in new ways
- ❑ Ugly:
 - Implementing cutting-edge technologies

Digital Transformation Goals

- ❑ Make smarter, data-driven decisions faster
- ❑ Leverage assets and capabilities
- ❑ Stem market share and margin erosion
- ❑ Exploit new information technology:
 - Software including cloud computing, open-source software packages, Software-as-a-Service (SaaS)
 - Hardware including augmented reality headsets, drones, the Industrial Internet of Things (IIoT), tablets



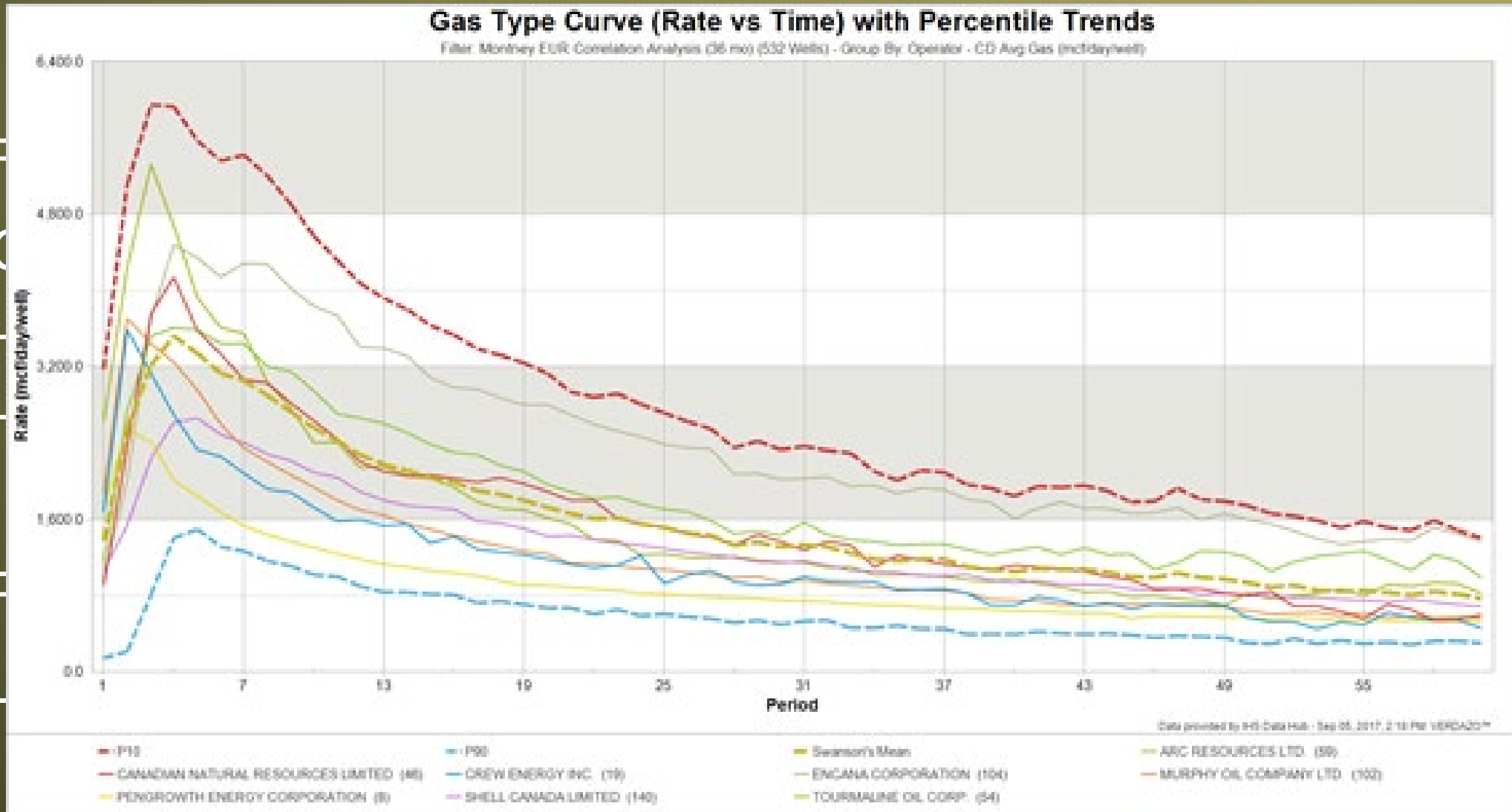
"Here's a set of about 100,000 data sources full of bits of well data. Please consolidate and integrate them into one meaningful data warehouse."

Digital Transformation Opportunities

- ❑ Eradicate remaining paper-based, manual business processes
- ❑ Integrate IT systems
- ❑ Support seamless employee and partner collaboration
- ❑ Implement electronic connectivity
- ❑ Boost data quality
- ❑ Enhance data management practices
- ❑ Modernize aging IT systems

Digital Transformation Benefits

- P
- C
- I
- P
- L



Land Management



LandRite



LandWorks



GIS



Projects



Roads



Crossings



Connect

Financial Accounting



JV



AFE



AP



VP

Production Accounting



PetroNet



PA

Field Operations



Jobutrax



Connected Entities

3rd Party Requests

Actuals

AFEs

Agreements

Business Associates

Cost Centers

DOIs

Invoices

Lease Rentals

Majors

Minors

Royalties

Revenue



Digital Transformation Information Technologies

Applications

- Enterprise search
- Knowledgebase
- Machine learning
- Master data management
- Metadata management
- Predictive maintenance
- Supply chain

Information Technologies

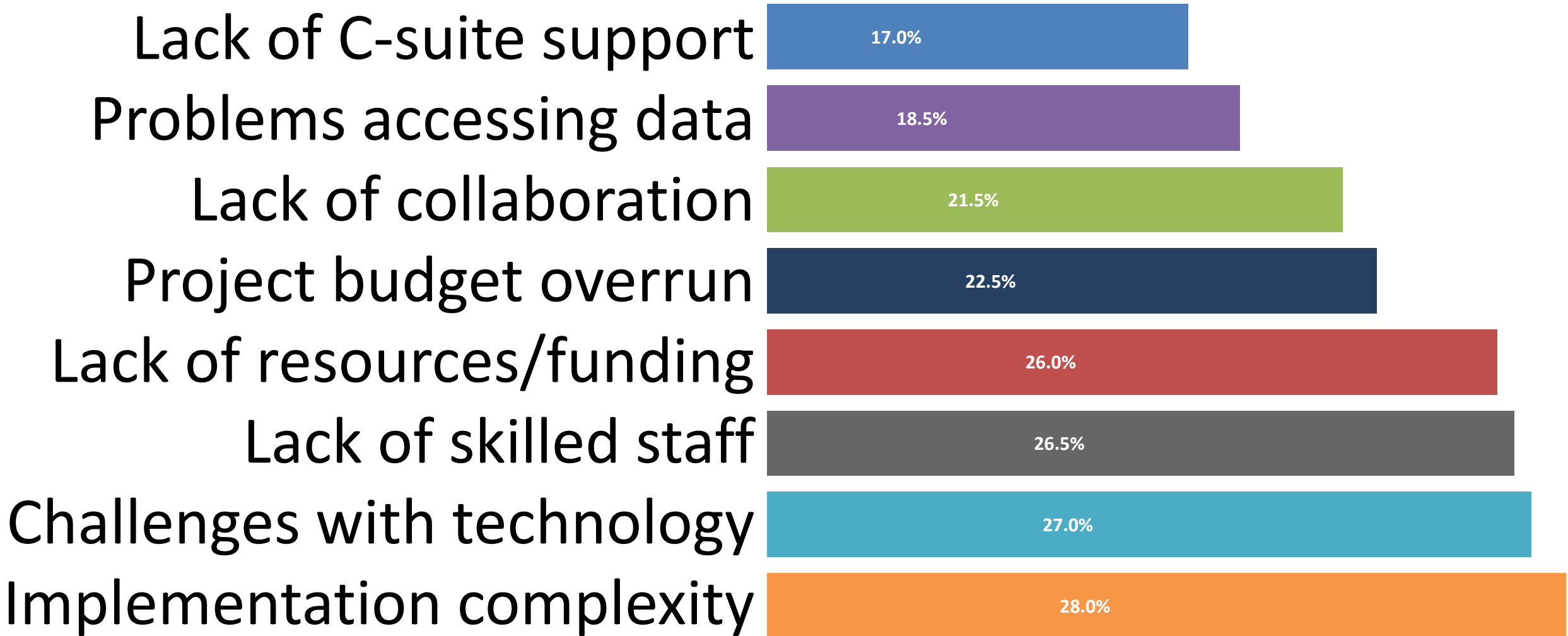
- Cloud computing
- Data analytics
- Graph DBMS
- Industrial Internet of Things (IIoT)
- Robotic process automation (RPA)
- Tablets

Future Digital Transformation Developments

- ❑ Artificial intelligence
- ❑ Augmented reality



Common Obstacles to Digital Transformation



Lessons from Digital Transformation

Successes and Failures

- ❑ Focus on business opportunity
- ❑ Listen to end-users
- ❑ Prioritize people, process, and behavioral change
- ❑ Avoid pilot purgatory
- ❑ Fail fast and learn fast
- ❑ Approach work with agility
- ❑ Recognize transformation takes effort

Conclusions

- ❑ Digital transformation is receiving lots of attention because the benefits are real
- ❑ Successful digital transformation projects
- ❑ Every organizations off

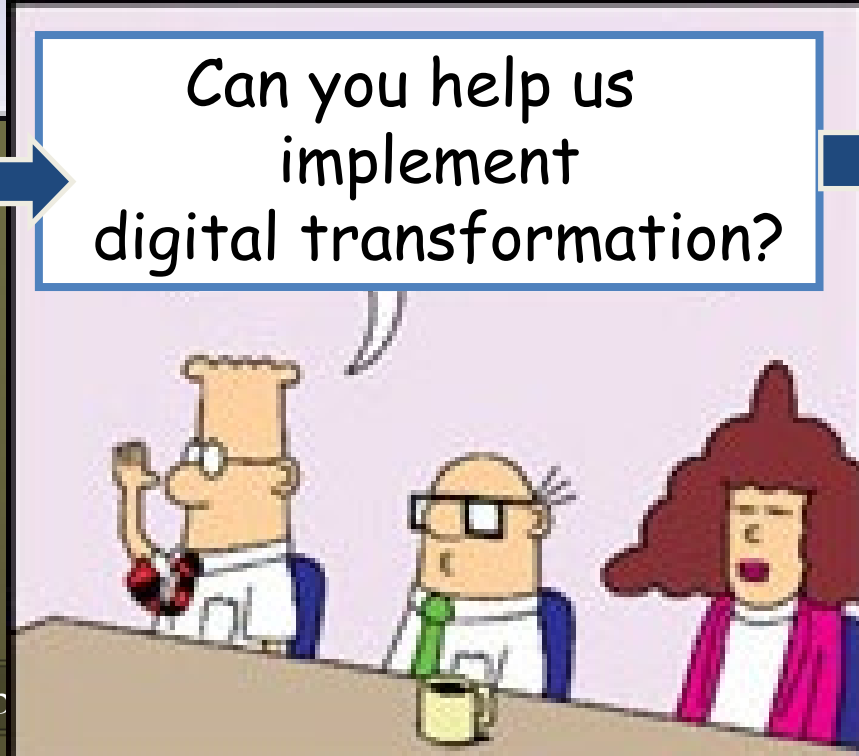
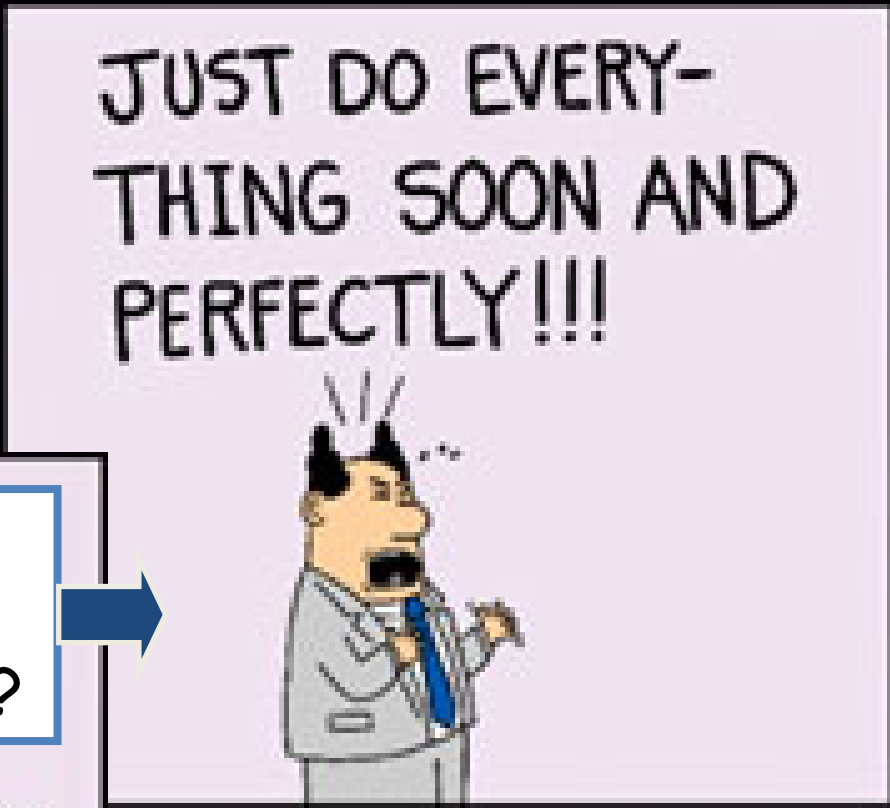


Recommendations

- Start
- Start anywhere
- Start small
- Identify irritants
- Identify sponsors
- Assess risks
- Go easy on technology
- Read resources



Questions & Discussion



Please fill out evaluation form

Demystifying Digital Transformation

Yogi Schulz

Founder at Corvelle Consulting
Information technology related
management consulting
ITWorld Canada columnist
Industry presenter
PPDM Association member

Corvelle Consulting
300, 400 - 5 Ave. S. W.
Calgary, Alberta T2P 0L6
Phone: (403) 860-5348
E-mail: YogiSchulz@corvelle.com
Web: www.corvelle.com

Digital Transformation Bibliography

Yogi Schulz

- ❑ Avoiding CIO Failure in Oil and Gas
 - Yogi Schulz, EnergyNow, January 12, 2021
 - <https://energynow.ca/2021/01/avoiding-cio-failure-in-oil-and-gas/>
- ❑ A roadmap for improving reporting and data analytics
 - Yogi Schulz, IT World Canada, July 3, 2020
 - <https://www.itworldcanada.com/blog/a-roadmap-for-improving-reporting-and-data-analytics/432403>
- ❑ Digital transformation benefits for your organization
 - Yogi Schulz, IT World Canada, April 25, 2019
 - <https://www.itworldcanada.com/blog/digital-transformation-benefits-for-your-organization/416971>
- ❑ Shining light on shadow IT: managing risk around informal systems
 - Yogi Schulz, IT World Canada, February 25, 2019
 - <https://www.itworldcanada.com/blog/shining-light-on-shadow-it-managing-risk-around-informal-systems/415128>
- ❑ Exciting and scary shadow IT drivers
 - Yogi Schulz, IT World Canada, December 18, 2017
 - <https://www.itworldcanada.com/blog/exciting-and-scary-shadow-it-drivers/400056>
- ❑ Is your company data-driven?
 - Yogi Schulz, IT World Canada, August 22, 2016
 - <https://www.itworldcanada.com/blog/is-your-company-data-driven/385732>

Digital Transformation Bibliography

- ❑ The #1 Key to Successful Digital Transformation in Oil & Gas
 - Vista Projects, February 1, 2021, EnergyNow Media
 - <https://energynow.ca/2021/02/the-1-key-to-successful-digital-transformation-in-oil-gas/>
- ❑ A new mandate for the oil and gas chief information officer
 - McKinsey, November 26, 2019
 - <https://www.mckinsey.com/industries/oil-and-gas/our-insights/a-new-mandate-for-the-oil-and-gas-chief-information-officer#>
- ❑ Accelerate Your Culture Practices For Digital Transformation
 - Michelle Beeson, March 5, 2018
 - <https://go.forrester.com/blogs/accelerate-your-culture-practices-for-digital-transformation/>
- ❑ Bits, Bytes, and Barrels: The digital transformation of oil and gas
 - Geoffrey Cann, Rachael Goydan
 - <https://www2.deloitte.com/us/en/pages/consulting/articles/bits-bytes-barrels-digital-transformation-of-oil-and-gas-book.html/>
- ❑ The case for digital reinvention
 - Jacques Bughin, Laura LaBerge, and Anette Mellbye, McKinsey, February 9, 2017
 - <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-case-for-digital-reinvention>
- ❑ Chevron fuels digital transformation with new Microsoft partnership
 - Microsoft, October 30, 2017
 - <https://news.microsoft.com/transform/chevron-fuels-digital-transformation-with-new-microsoft-partnership/>
 - <https://www.chevron.com/stories/chevron-partners-with-microsoft>
- ❑ The Definitive Guide to Enterprise Digital Transformation
 - <https://www.ciopages.com/digital-transformation/>

Digital Transformation Bibliography

- ❑ Digital Fuels Transformation in Oil & Gas Sector
 - Rachael Goydan, Geoffrey Cann, Nate Clark, Deloitte Consulting LLP
 - <https://deloitte.wsj.com/cio/2020/02/10/digital-fuels-transformation-in-oil-gas-sector/>
- ❑ Digital Maturity, Not Digital Transformation
 - Gerald C. Kane, MIT Sloan Management Review, April 04, 2017
 - <https://sloanreview.mit.edu/article/digital-maturity-not-digital-transformation/>
- ❑ Digital Maturity Means Integrating These Two Things
 - Daniel Schmidt, September 22, 2017
 - <https://documentmedia.com/article-2714-Digital-Maturity-Means-Integrating-These-Two-Things.html>
- ❑ The Digital Paradox Of Change In The Oil And Gas Industry
 - Paul Kurchina, August 6, 2019
 - <https://www.digitalistmag.com/digital-economy/2019/08/06/digital-paradox-of-change-in-oil-gas-industry-06200036/>
- ❑ Digital Transformation: Powering the Oil & Gas Industry
 - Oil & Gas Journal, August 1, 2018
 - <https://www.ogj.com/home/article/17297879/digital-transformation-powering-the-oil-gas-industry>
- ❑ Digital transformation in energy: Achieving escape velocity
 - McKinsey, September 3, 2020
 - <https://www.mckinsey.com/industries/oil-and-gas/our-insights/digital-transformation-in-energy-achieving-escape-velocity>
- ❑ Digital Transformation Initiative - Oil and Gas Industry
 - World Economic Forum, January 2017
 - <https://reports.weforum.org/digital-transformation/wp-content/blogs.dir/94/mp/files/pages/files/dti-oil-and-gas-industry-white-paper.pdf>

Digital Transformation Bibliography

- ❑ Digital Transformation for Oil & Gas
 - OpenText
 - https://www.opentext.com/file_source/OpenText/en_US/PDF/opentext-oilandgasiq-report-en.pdf
- ❑ The Digital Transformation of the Oil and Gas Industry in Canada
 - American Express, December 12, 2019
 - <https://www.americanexpress.com/en-ca/business/trends-and-insights/articles/the-digital-transformation-of-the-oil-and-gas-industry-in-canada/>
- ❑ Expert-Guided Machine Learning: Getting Operators To Buy-In
 - <https://www.ospreydata.com/2020/02/17/expert-guided-machine-learning-getting-operators-to-buy-in/>
- ❑ Focus on the CEO expectations that matter most to become an influential leader
 - Lisa Bigelow, January 2, 2020
 - <https://www.gartner.com/smarterwithgartner/be-a-digital-transformation-pioneer/>
- ❑ 4 Indicators Digital Transformation is Reshaping the Oil and Gas Industry
 - Itrack 365
 - <https://itrak365.com/4-indicators-digital-transformation-is-reshaping-the-oil-and-gas-industry/>
- ❑ Future Oil & Gas accelerates digital transformation
 - Editorial staff, Oil & Gas Technology, December 4, 2020
 - <http://www.oilandgastechnology.net/news/future-oil-gas-accelerates-digital-transformation>

Digital Transformation Bibliography

- ❑ How Big Data is reducing costs and improving performance in the upstream industry
 - Binu Mathew, Global Head Of Development & Product Management, GE Oil & Gas Digital, December 13, 2016
 - <https://www.worldoil.com/news/2016/12/13/how-big-data-is-reducing-costs-and-improving-performance-in-the-upstream-industry>
- ❑ How COVID-19 is accelerating digital transformation
 - <https://fluix.io/blog/accelerate-digital-transformation>
- ❑ How Digital Transformation Improves Perceptions of Oil and Gas Industry
 - Chris Carpenter, JPT Technology Editor, December 01, 2020
 - <https://pubs.spe.org/en/jpt/jpt-article-detail/?art=7870>
- ❑ How digital transformation is changing the oil and gas industry
 - Ian Barker, betanews, July 15, 2020
 - <https://betanews.com/2020/07/15/digital-transformation-oil-and-gas/>
- ❑ How your business can succeed in a digital transformation project
 - 8 April 2020
 - <https://www.information-age.com/how-your-business-can-succeed-digital-transformation-project-123488683/>
- ❑ IDC Provides Guidance for Thriving in the Digital Economy as New and Reinvented Competitors Disrupt Industry Leaders
 - March 18, 2015
 - <https://www.businesswire.com/news/home/20150318005132/en/IDC-Provides-Guidance-for-Thriving-in-the-Digital-Economy-as-New-and-Reinvented-Competitors-Disrupt-Industry-Leaders>
- ❑ IT Roadmap for Digital Business Transformation
 - Gartner, 2020
 - <https://www.gartner.com/en/information-technology/trends/the-it-roadmap-for-digital-business-transformation-gb-pd>
- ❑ IT Roadmap for Oil & Gas CIOs
 - CIO Applications, October 19, 2019
 - <https://www.cioapplications.com/news/it-roadmap-for-oil-and-gas-cios-nid-5172.html>

Digital Transformation Bibliography

- ❑ The next frontier for digital technologies in oil and gas
 - Harsh Choudhry, Azam Mohammad, Khoon Tee Tan, and Richard Ward, August 25, 2016
 - <https://www.mckinsey.com/industries/oil-and-gas/our-insights/the-next-frontier-for-digital-technologies-in-oil-and-gas>
- ❑ Overcoming Digitization Challenges In The Oil And Gas Industry
 - Aleksandrs Malins, Forbes Technology Council, September 18, 2020
 - <https://www.forbes.com/sites/forbestechcouncil/2020/09/18/overcoming-digitization-challenges-in-the-oil-and-gas-industry/>
- ❑ Roadmap to Digital Transformation
 - Pablo Moreno, February 10, 2021
 - <https://mydacfed.com/view/blog/roadmap-to-digital-transformation>
- ❑ The seven decisions that matter in a digital transformation: A CEO's guide to reinvention
 - Peter Dahlström, Driek Desmet, and Marc Singer, McKinsey, February 22, 2017
 - <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-seven-decisions-that-matter-in-a-digital-transformation>
- ❑ SAP launches digital transformation as a service, agrees to acquire Signavio
 - Lynn Greiner, January 29th, 2021
 - <https://www.itworldcanada.com/article/sap-launches-digital-transformation-as-a-service-agrees-to-acquire-signavio/441523>
- ❑ Standing still is not an option
 - Deloitte | A Middle East Point of View - Fall 2019 | Digital transformation
 - https://www2.deloitte.com/content/dam/Deloitte/xs/Documents/About-Deloitte/mepovdocuments/mepov30/standing-still-is-not-an-option_mepov30.pdf
- ❑ Success at digital transformation? Make mistakes and think small
 - Jim Love, IT World Canada, June 7, 2019
 - <https://www.itworldcanada.com/article/success-at-digital-transformation-make-mistakes-and-think-small/418818>

Digital Transformation Bibliography

- ❑ Top 10 Trends For Digital Transformation In 2017
 - Daniel Newman, Forbes, Aug 30, 2016
 - <https://www.forbes.com/sites/danielnewman/2016/08/30/top-10-trends-for-digital-transformation-in-2017/?sh=7692928047a5>
- ❑ The Ultimate Digital Transformation Roadmap: A Tactical Guide for Corporate Innovation
 - Janice Yau
 - <https://www.hellosign.com/blog/digital-transformation-roadmap>
- ❑ Upstream Digital Transformations in Oil and Gas: A Remedy for Market?
 - Intellias, November 12, 2020
 - <https://www.intellias.com/digital-transformation-in-oil-and-gas-a-remedy-for-market-volatility/>
- ❑ Upstream oil and gas companies spend smarter on digital technologies to drive value, reduce costs in downturn, Accenture and Microsoft survey finds
 - Ben Ryon, Microsoft, March 9, 2016
 - <https://news.microsoft.com/2016/03/09/upstream-oil-and-gas-companies-spend-smarter-on-digital-technologies-to-drive-value-reduce-costs-in-downturn-accenture-and-microsoft-survey-finds/>
- ❑ What does digital transformation in oil and gas look like?
 - Oil & Gas IQ Editor, May 10, 2019
 - <https://www.oilandgasiq.com/oil-gas/news/what-is-digital-transformation>
- ❑ Why Digital Transformation Will Become More Critical in 2021
 - Kendall Clark, January 12, 2021
 - <https://tdwi.org/articles/2021/01/12/BA-ALL-Digital-Transformation%20Critical-in-2021.aspx>