

How Manufacturers Build Trust And Convert Buyers with Content Marketing





CEO and Co-Founder

TREW
MARKETING

Author and Podcast Host



Wendy Covey

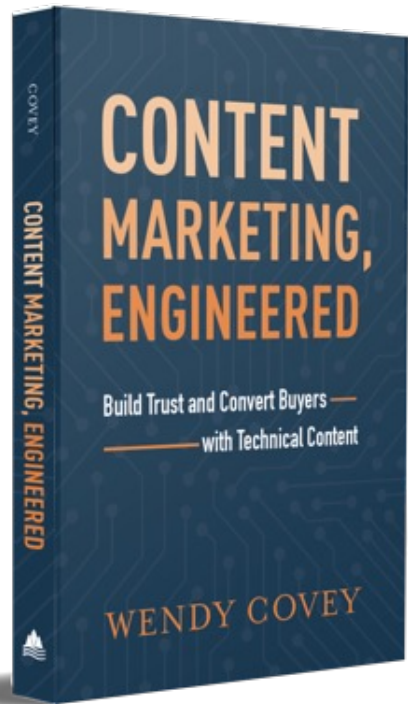
A Leading Content Marketing Agency Serving Highly Technical Companies

TREW
MARKETING

Offering branding, marketing strategy, content development, and digital marketing services to help customers build trust and grow their business.



Deep, Multi-Platform Education Approach



Book



**Annual
Research**



Podcast



Writing Training

About the 2023 State of Marketing to Engineers Research

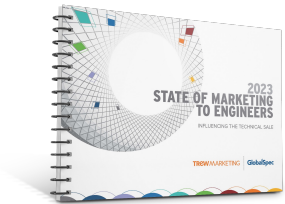
Purpose

Understand how engineers and technical buyers find and consume information to make purchasing decisions.

Methodology

Web-based survey, 850+ engineers and technical professionals responded.

Research conducted jointly by:



2023 State of Marketing
to Engineers Report

TREW
MARKETING

GlobalSpec



**Develop a
Content Strategy**



**Meet Your Prospects
Where They Are**

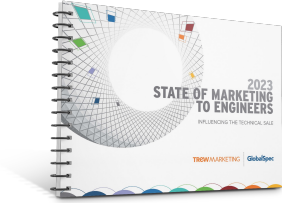
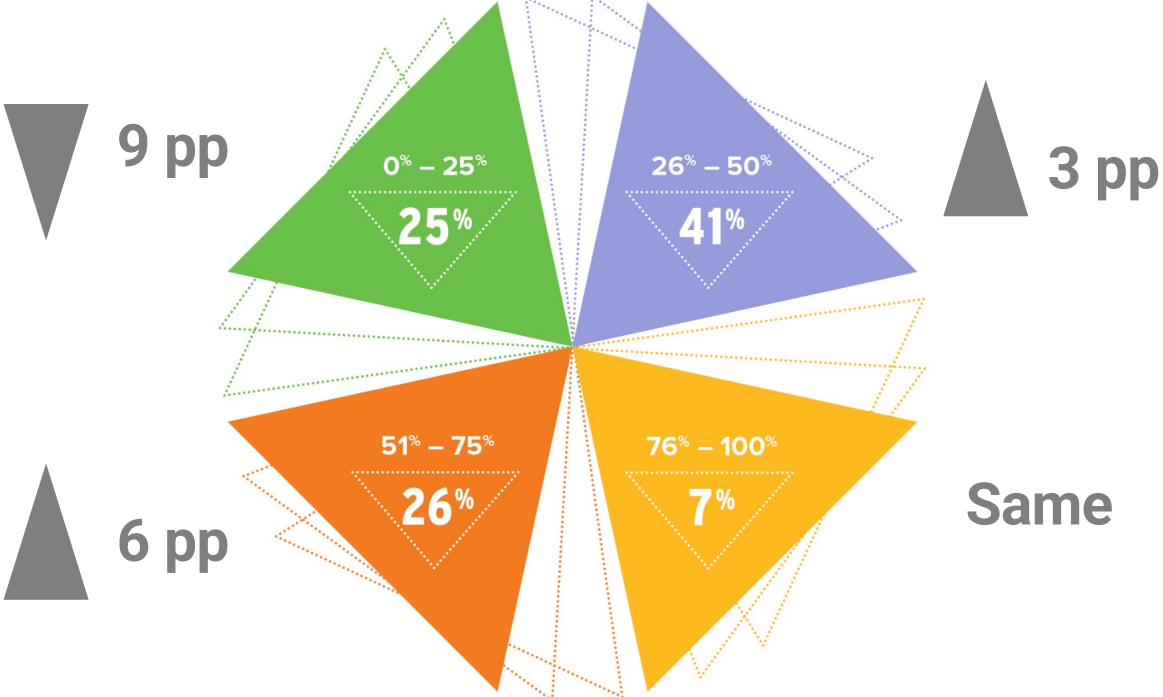


**Become a
Trusted Advisor**

Using Content Marketing

Much of the Buying Process Happens Online.

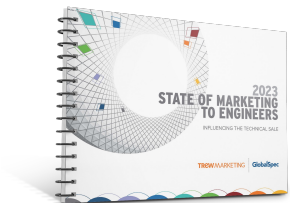
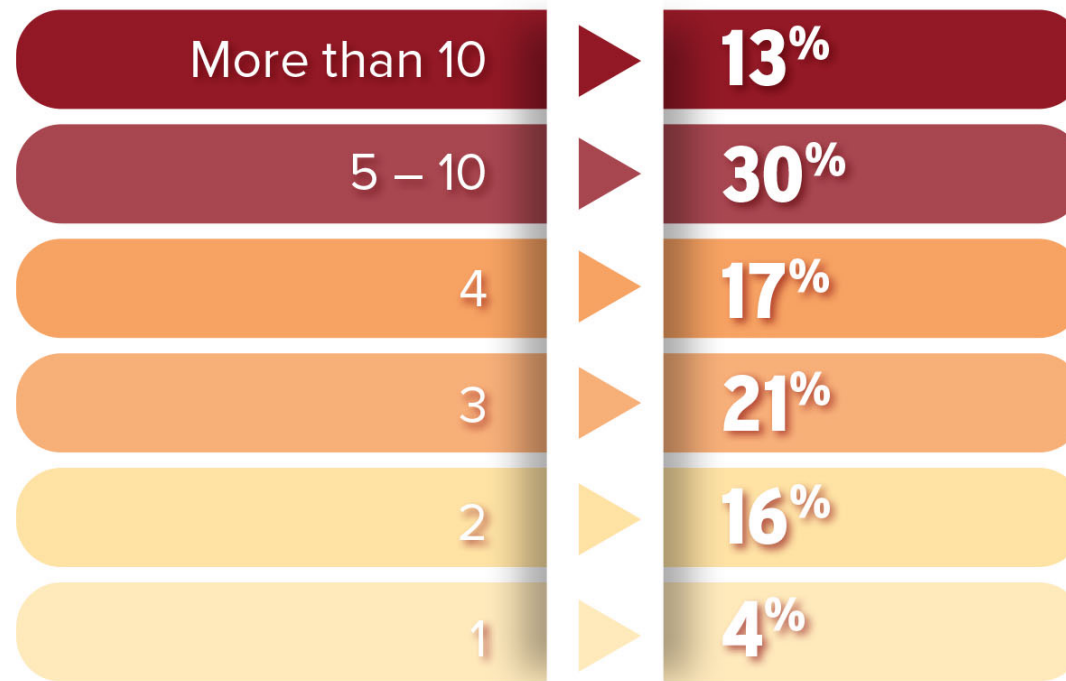
In thinking about the entire buying process for significant work-related purchases, **how much of the process happens online** before you choose to speak to someone at the company?



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Engineers Search Deeply

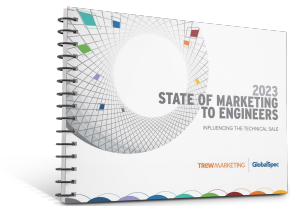
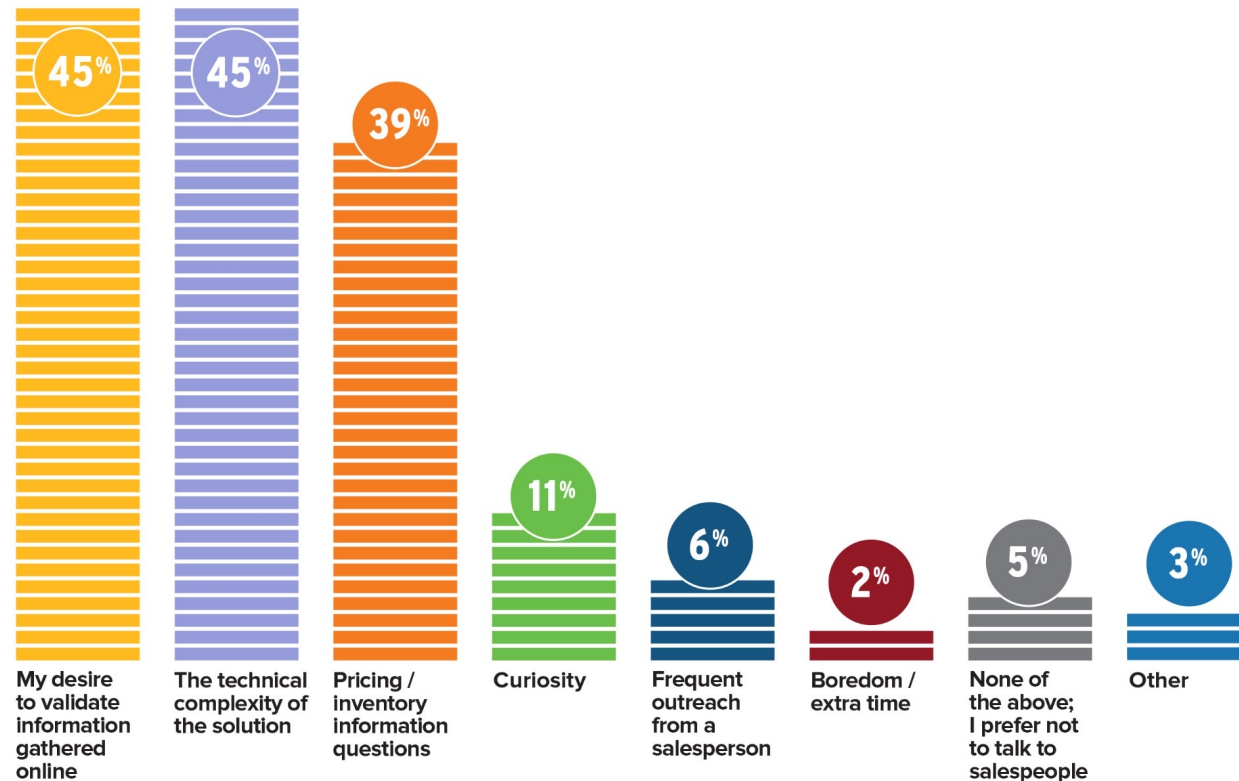
When searching for work-related information using a search engine, how many pages of results are you willing to review before you select a page to visit or restart your search?



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Why Engineers Engage With Sales

Think about your most recent work-related vendor purchases and fill in the blank.
_____ motivated me to interact with a salesperson for the first time?



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I'VE GOT THE

POWER

memegenerator.net

Your Website



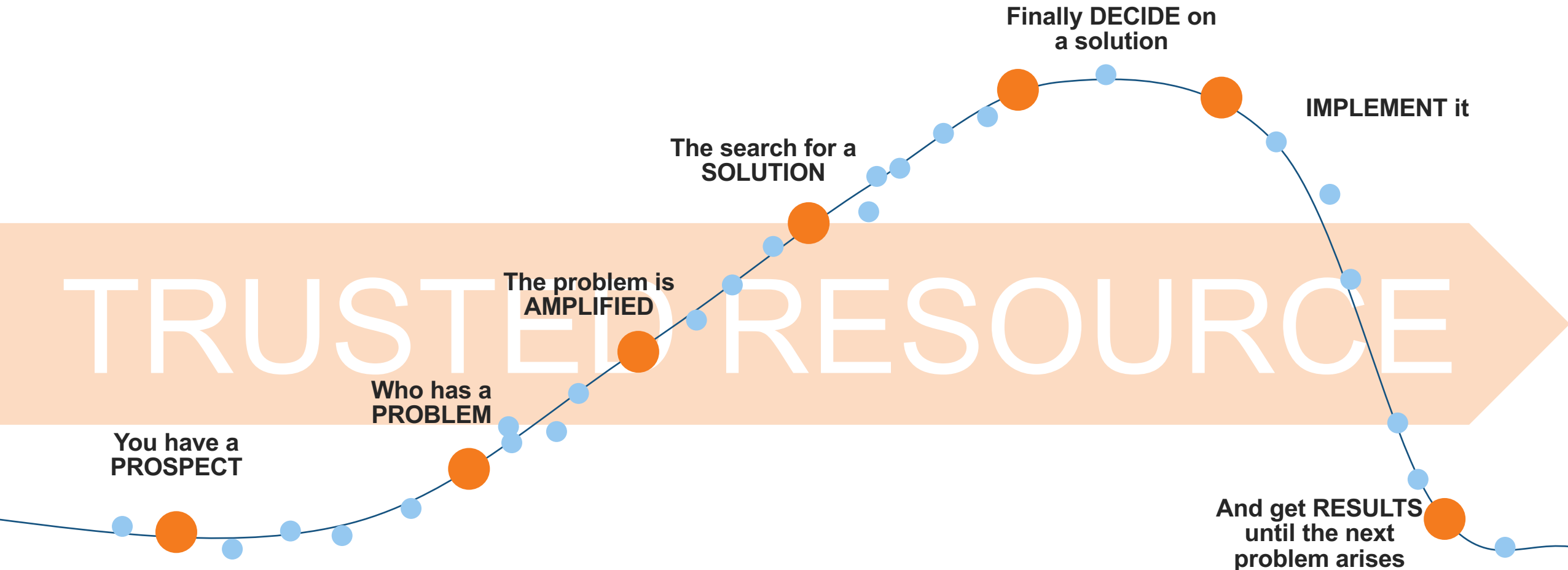
Your Website



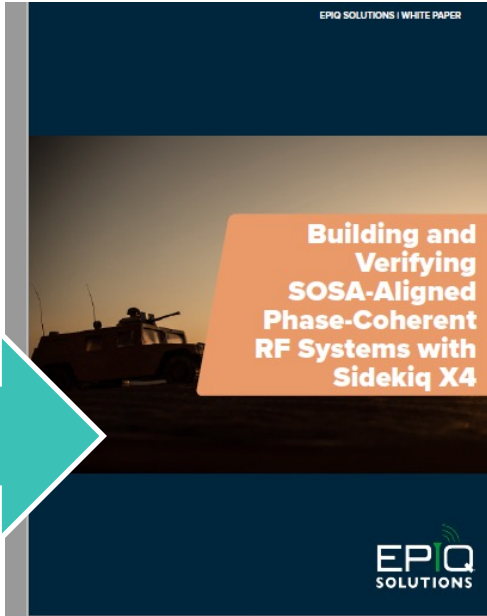
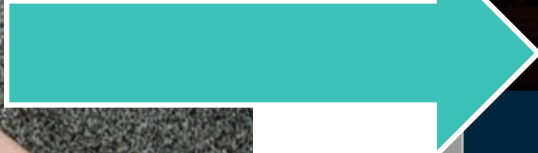
Your Web Content



The progression of a story



Get from this to that



WHITE PAPER | Building and Verifying SOSA-Aligned Phase-Coherent RF Systems with Sidekiq X4

Table Of Contents

- What Is Phase-Coherent Operation and Why Is It Important?.....3
- How Phase-Coherent Operation is Commonly Achieved Today.....4
- Multi-Channel Phase-Coherent Rx with the Sidekiq X4.....6
- System Configurations to Prepare for Phase-Coherent Reception.....7
- Configuring the System and Acquiring Phase-Coherent Samples.....9
- Measuring Phase-Coherence.....13
- Real-World Considerations for Deploying Phase-Coherent System Based on Sidekiq X4.....24
- Calibration Procedure.....25
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2 | EPIQ SOLUTIONS 08.2020

Building and Verifying SOSA-Aligned Phase-Coherent RF Systems with Sidekiq X4 | WHITE PAPER

Our focus is on developing tools that provide situational awareness and detailed insight into RF environments so you can identify and take action against wireless threats.

What is Phase-Coherent Operation and Why is it Important?

At Epiq Solutions, our focus is on developing tools that provide situational awareness and detailed insight into RF environments so you can identify and take action against wireless threats. For these applications, it's often not good enough to just identify RF signals of interest; we want to know where they're coming from as well. Ideally, a line of bearing (LOB) can be provided to indicate the direction of an RF signal of interest relative to the receiver. Multiple techniques exist to provide a LOB, and phase-coherent RF reception is a key capability to support this use case.

Phase-coherent operation is the ability of an RF system's receive and/or transmit channels to be both time- and phase-aligned, where the signals have a defined and constant relative phase relationship. Applications including MIMO, beamforming, and direction finding require this alignment as well as a known phase relationship between each RF input or output. Typically, a multichannel software defined radio (SDR) transceiver is leveraged to provide time- and phase-aligned digital radio sample streams which can then be processed by a host system to extract information such as angle of arrival of an RF signal of interest.

In this whitepaper, we'll explore the phase coherence capabilities

08.2020 EPIQ SOLUTIONS | 3

WHITE PAPER | Building and Verifying SOSA-Aligned Phase-Coherent RF Systems with Sidekiq X4

In this whitepaper, we'll explore the phase coherence capabilities of Epiq Solutions' Sidekiq X4, and how to measure this phase coherence using software applications delivered as part of the Sidekiq X4 Platform Development Kit.

How Phase-Coherent Operation is Commonly Achieved Today

Typical solutions for phase-coherent operation utilize one of two different mechanisms to derive coherence, as shown in Figure 1. First, an external RF transmitter can be utilized to emit an RF calibration signal that is then fed into the multi-channel receiver during operation of the system to measure and correct for phase ambiguity across the multiple receivers. While effective, this requires a transmitter to be integrated into the system. Additionally, generating an RF calibration signal and feeding it into all of your receivers may be required every time you change RF frequencies if phase coherence can't be guaranteed between tuning operations. So, if you're monitoring an RF signal at 2.4 GHz and then want to process a signal at 900 MHz, you would have to repeat the entire phase calibration process. This is time consuming and it requires transmitting a signal in situations where transmitting an RF signal may be the last thing you want to do.

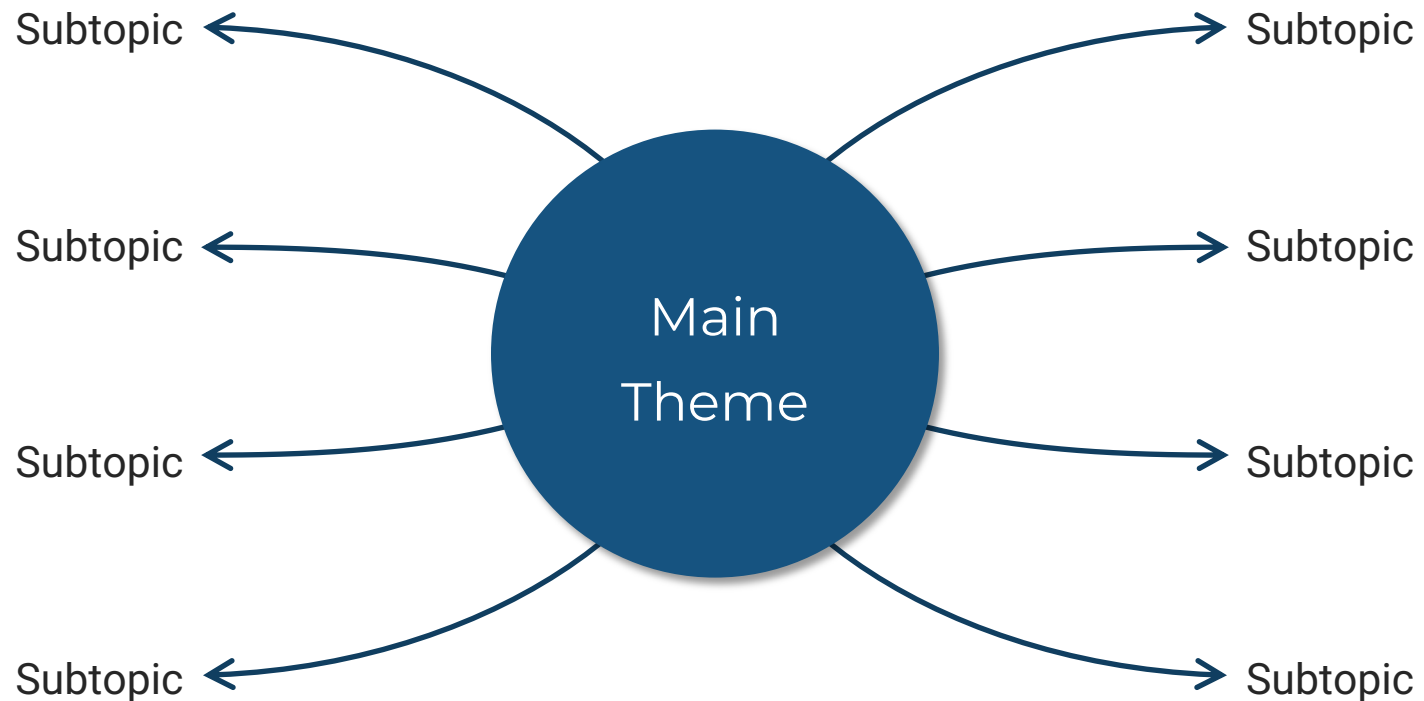
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Two-Step Approach to Content Development

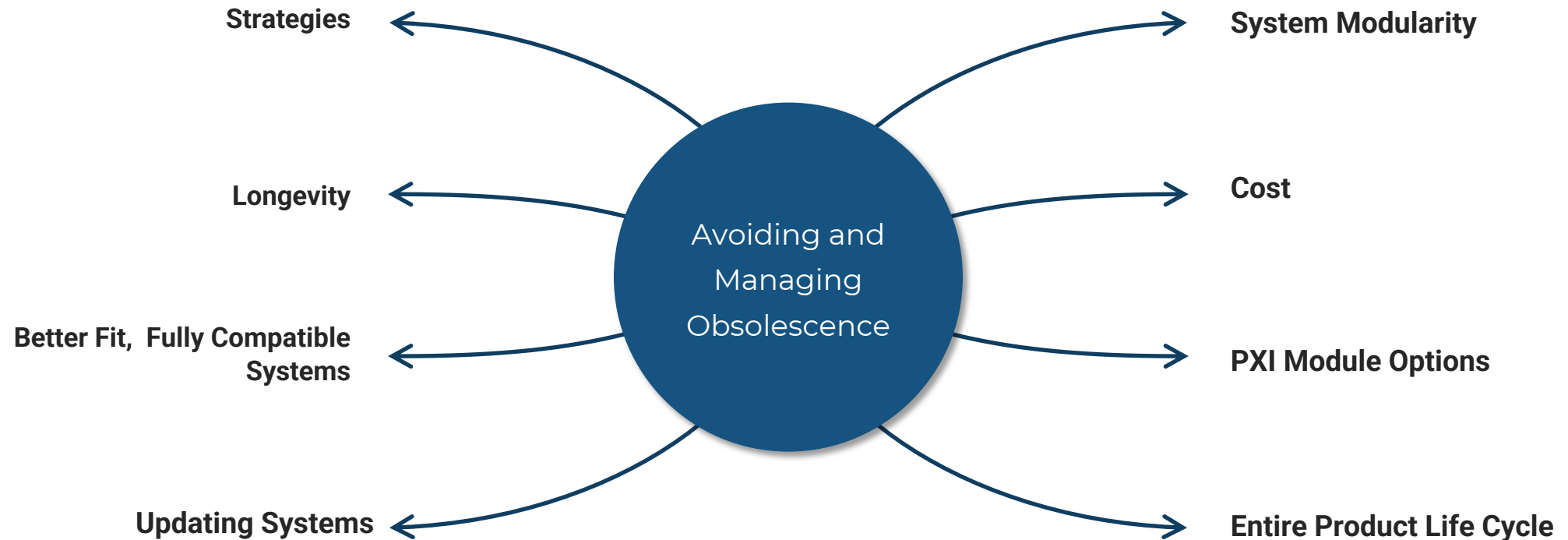


1. Identify Topics
2. Write & Publish

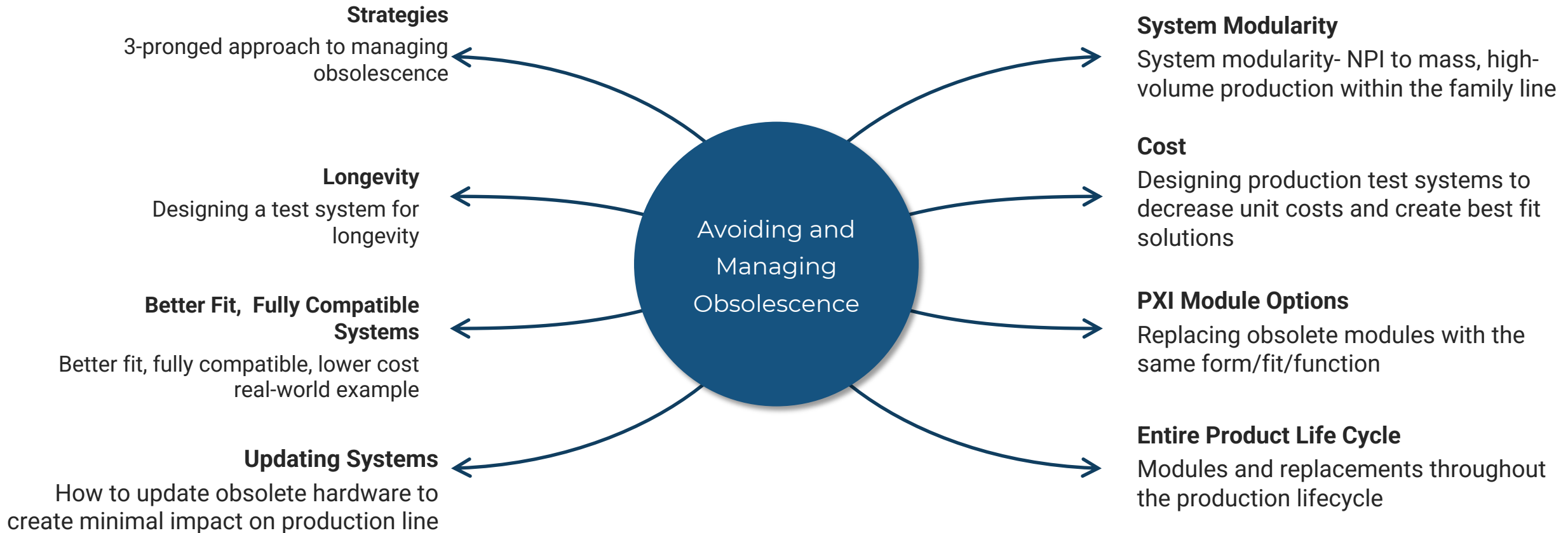
Building Content Topic Clusters



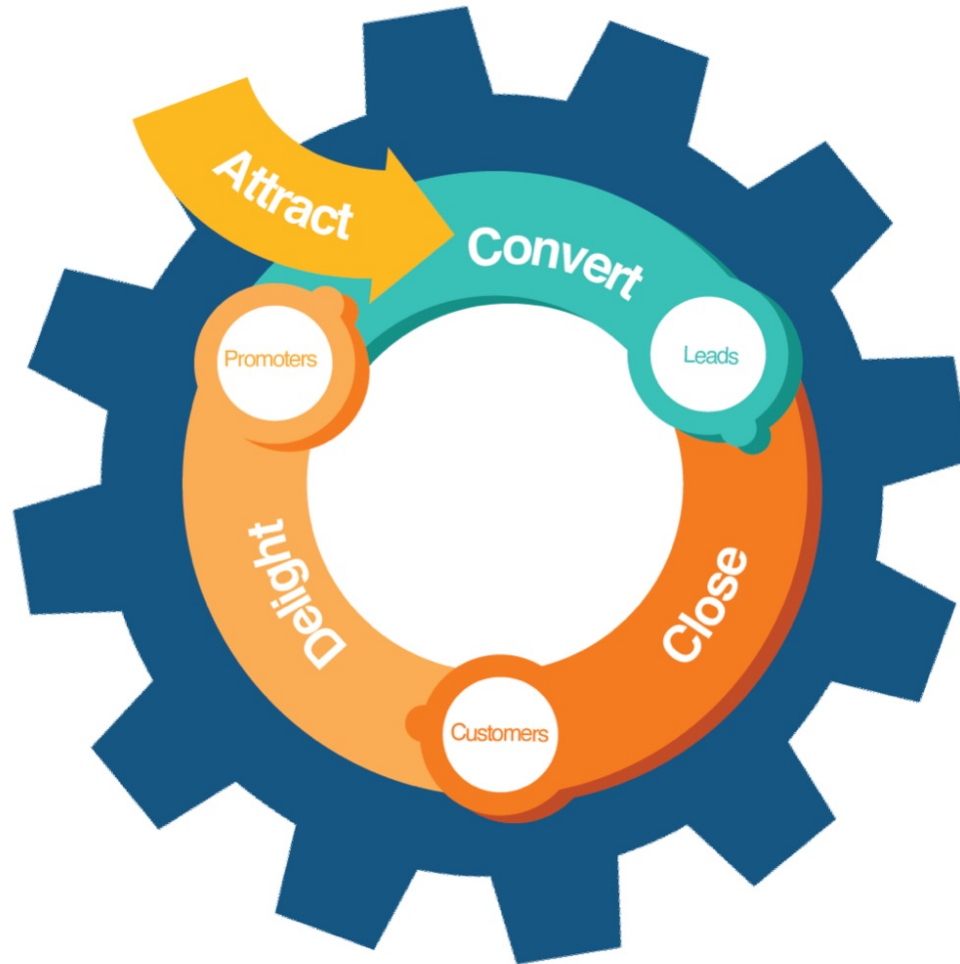
Example



Example



Content Through the Buyer's Journey



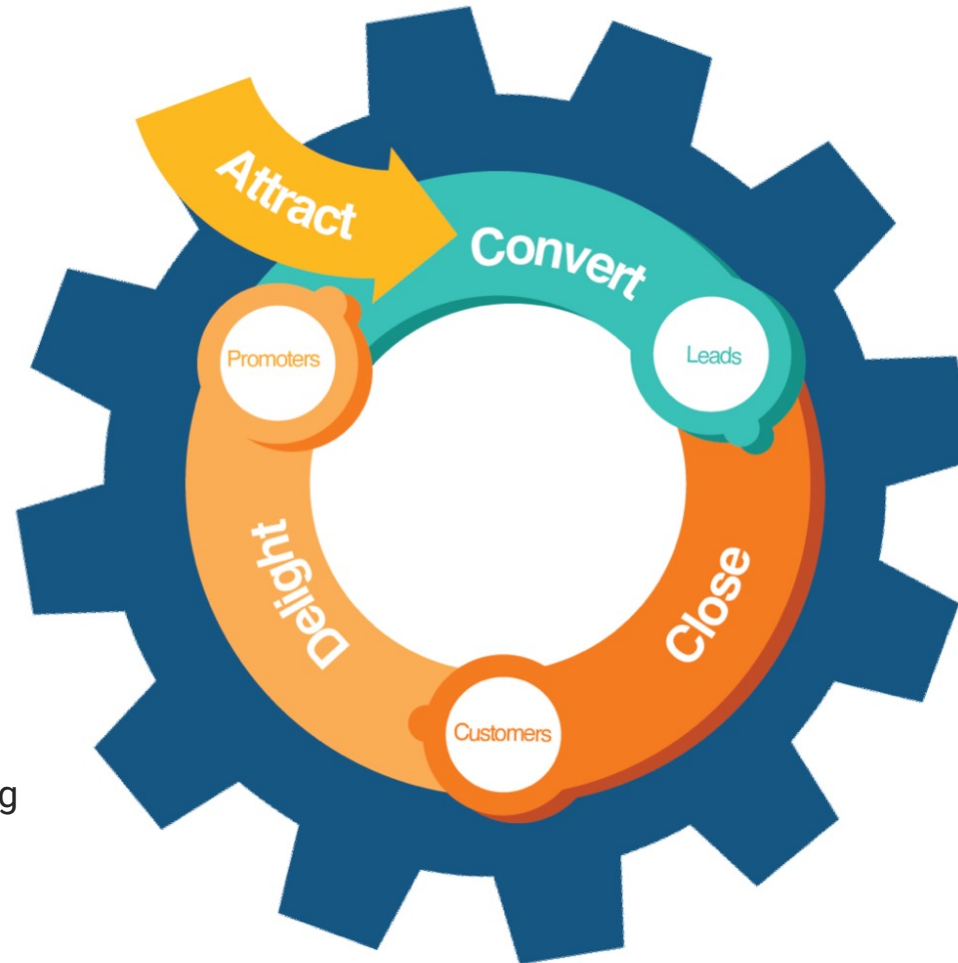
Content for Every Stage

Attract

- Blog post
- Infographics
- News Release

Delight

- Interactive product configurator
- Reference design
- Tutorials and training
- E-newsletter



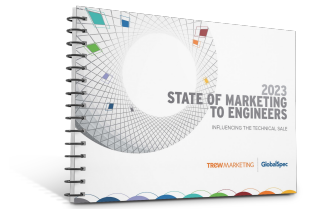
Convert

- White papers/ebook
- Webinar
- Industry & application web content
- Case study
- Videos
- Email Nurturing

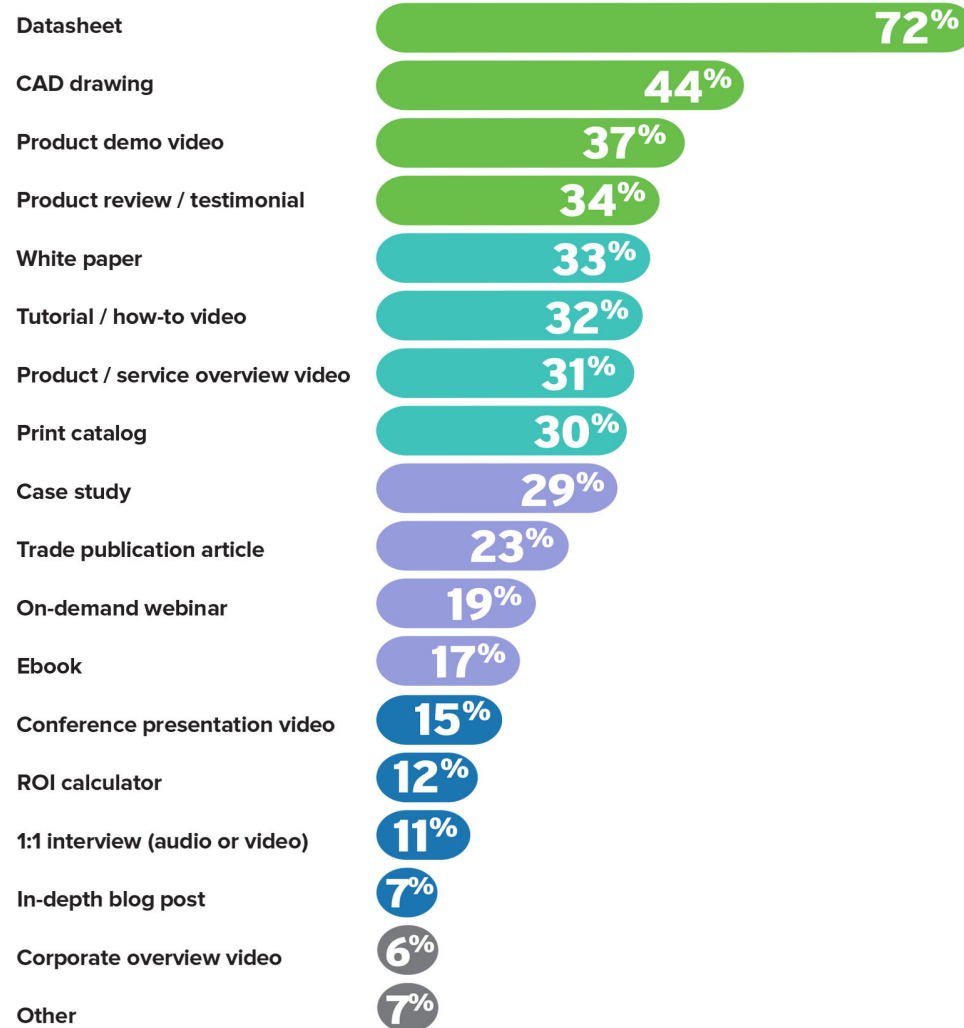
Close

- Demo video
- Interactive ROI calculator
- Datasheets
- Product web pages
- CAD Models

Engineers Crave a Variety of Technical Content



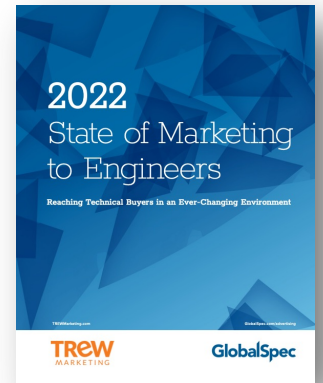
2023 State of Marketing to Engineers Report



What form(s) of content do you find most valuable when researching to make a significant work-related purchase?

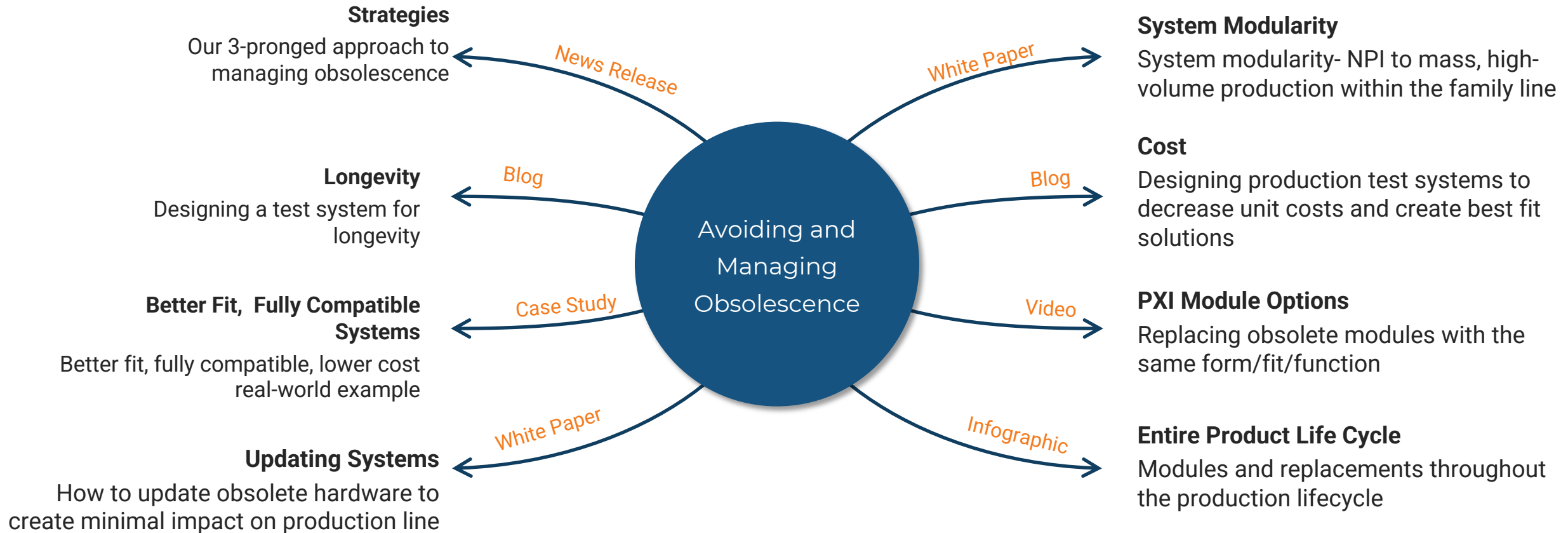
96% of engineers watch video weekly for work

Approximately how much time per week do you spend watching videos for work-related purposes?



- More than 5 hours
- Between 1 and 5 hours
- Less than 1 hour
- I do not watch work-related videos.

Example



Write

Creating ATE Switching Subsystems: 3 Approaches for Successful Implementation

[Nick Hickford](#)

Dec 15, 2022 4:30:06 PM

Engineering departments face challenging macroeconomic market and budget risks, test engineers must plan test systems during the early product design phase, test engineers must identify available components, and confirm any outsourced test systems. Switching subsystems are at the center of most automated test systems. Engineers have the flexibility to select the ideal hardware and software platform that will meet the demands of the current product.

Test engineers take one of three approaches for the success of their switching subsystems:

- COTS-based Product Selection
- COTS Products + Guidance and/or Support
- Outsourced Build

Aerospace & Defense: Supporting Industry Innovation with PXI Switching and Simulation Systems Designed to Sustain Your Test System

When designing mission-critical equipment for aerospace and defense applications, failure is not an option; therefore, extensive testing and simulation using highly reliable automated test equipment (ATE) are required. Beyond ensuring ATE is designed for high performance and to execute tests reliably, ATE used in the aerospace and defense industry must also support long lifecycles and offer the flexibility and agility needed to meet changing requirements. The design and integration process can be cumbersome – both in cost and time. Test engineers really need to work with suppliers who can provide the support and expertise needed to sustain their test systems.

This case study explores two examples of how Pickering's switching systems meet the needs of both integrators and test engineers.

White paper: HOW TO BUILD SUCCESSFUL SWITCHING SYSTEMS FOR MISSION-CRITICAL TEST APPLICATIONS

Today's test systems are often developed in silos without considering future testing needs. However, shifts in demand require today's products to scale in production or grow in functionality.

When organizations begin with signal switching design, standardizing core electronics test and measurement platforms along the way, the result is a reliable test system, scalable for growth and flexible for reuse across multiple programs and projects.

Details include:

- How to design standardized switching systems for reliable, repeatable results
- Software options and things to consider for your system
- What to know when creating a switching system for growth

After reading this white paper, you'll learn how to streamline your testing to get to market quickly and without the stress of technology lock-in, surprise project delays, or ballooning costs.

[Submit the form to get your free copy of "How to Build Successful Switching Systems for Mission-Critical Test Applications."](#)



DOWNLOAD THE WHITE PAPER

LAST NAME*

FIRST NAME*

COMPANY NAME*

COMPANY EMAIL*

Company Email

COUNTRY*

HOW DID YOU HEAR ABOUT US?

Pickering Interfaces
1,977 followers
2d · 🌐

Are you building a PXI system? Compatibility with 3rd party modules. We offer a variety of PXI and PXI Express (PXIe) chassis that are compatible with third-party modules. To learn more, watch our new video -

Compatibility of Pickering's PXI & PXIe Chassis With Other Vendors Modules

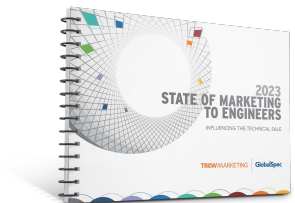
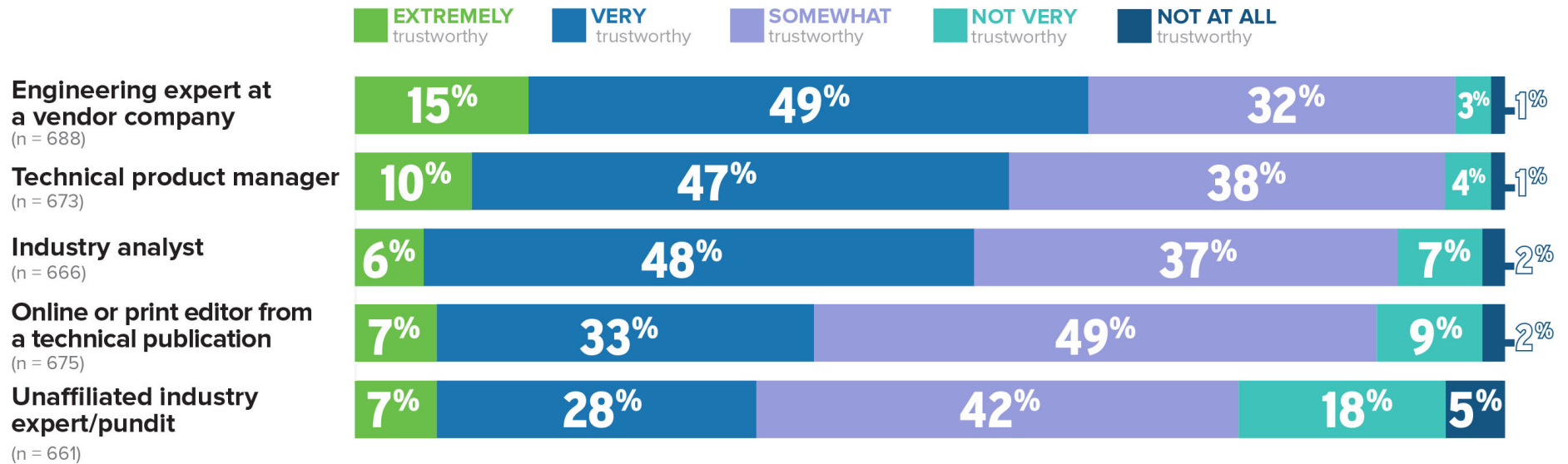
pickering

7 likes 5 reposts

Like Comment Repost Send

Who Should “Author” Content?

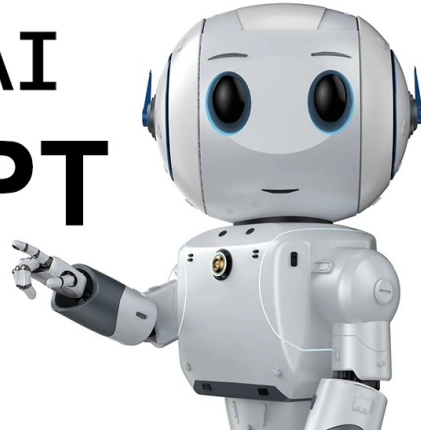
Technical content can be written and published by a variety of professionals. To what extent do you trust the following authors?



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AI: Your New Brainstorming & Writing Buddy

 OpenAI
ChatGPT



WRITER



Jasper

Generative AI: Dos and Don'ts

Use Generative AI for:

Story ideas

Research

Creative headlines

Social posts (derivative)

Definitions

Grammar

Branding rules

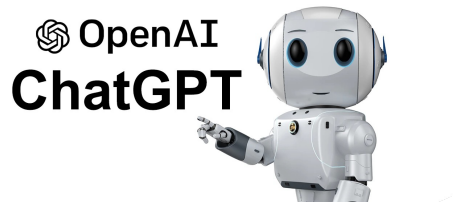
Don't use Generative AI for:

Emerging technical topics

Long-form technical content

Reinforcing your brand

Editing for meaning, flow



WRITER

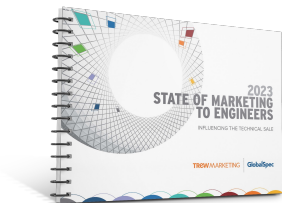
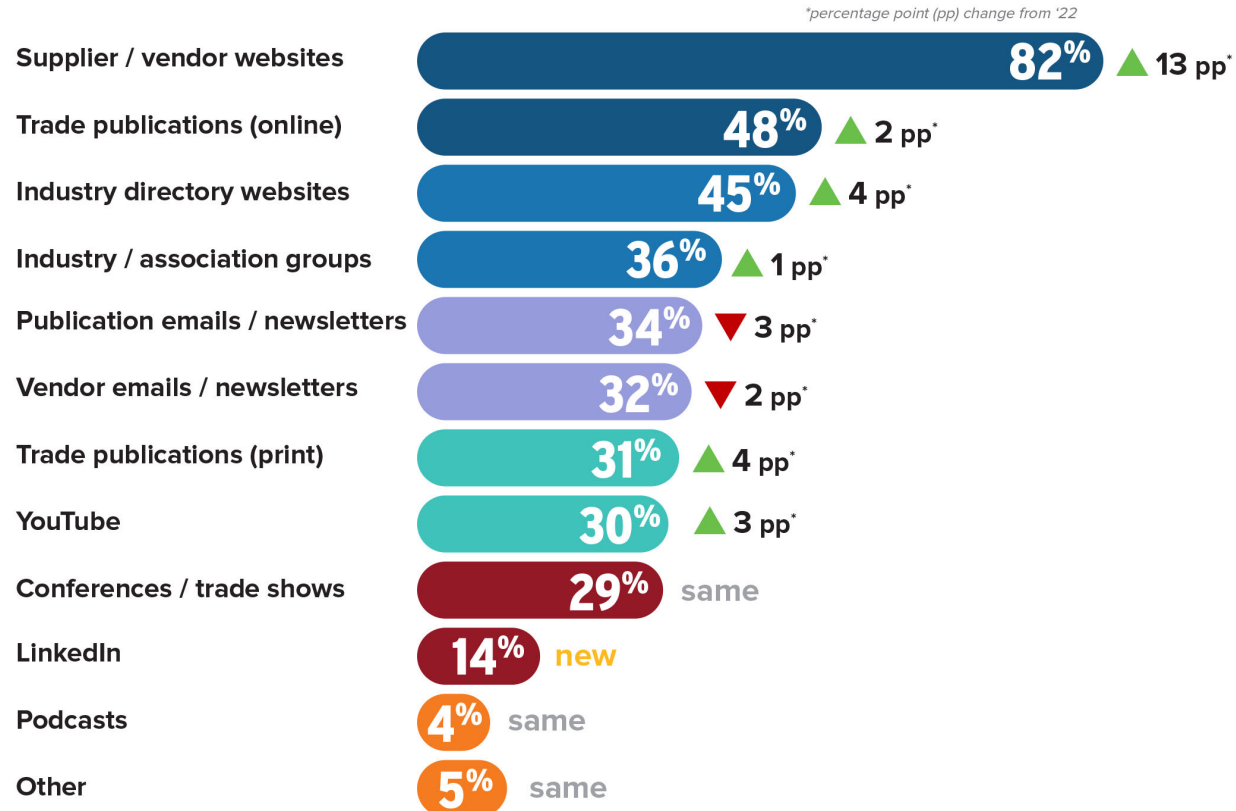


Now, what do we do with our content?



Vendor and Industry Websites More Popular Than Ever

Where do you routinely seek information when researching a product or service for a work-related purchase?



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Pillar Pages

RegalRexnord
Creating a Better Tomorrow

Search by Catalog or Model Number / Keyword

REGISTER | LOGIN

PRODUCTS SERVICES BRANDS INDUSTRIES TOOLS & RESOURCES PERCEPTIV POWERTRAIN


Home > Industries of Regal Rexnord > Aerospace and Defense

AEROSPACE AND DEFENSE


Trends
Industry demand is driven by the overall economic, climate, and military budgets. Improving process and operational efficiencies are the keys to maintaining profitability due to global competition.

High-Quality Products
The industry requires high-quality solutions and quality systems that meet standards such as Nadcap accreditation and AS9100 or ISO certification of facilities, guaranteeing the consistent quality of materials and products.

Engineered Solutions
We have earned a reputation for providing customer collaboration by using DFSS toolsets during the design process which deliver unique solutions that incorporate exotic materials, special geometries, and high precision levels.




Aerospace & Defense Solutions




Aerospace and Defense Solution
Global competition drives technology innovation, and McGill® bearing innovators have played a pivotal role in aerospace applications for more than 60 years. With the goal of reduced weight and size, increased resistance to corrosion, and improved performance, customers turn to Regal for solutions in "Mission Critical" applications.

[LEARN MORE](#)


Aerospace & Defense Products




AC Drives and Controls




Bearings




Conveying




Couplings




Gearing



Generators



Mechanical Drives



Motors

Aerospace & Defense Literature Training

- + Documents
- + Certifications

Aerospace & Defense Reference List

Regal manufactures high-quality motors, controls, and power transmission products for a myriad of industries and applications. Our motor products range from high efficiency severe duty variable speed motors to medium voltage motors that are used in the manufacturing process. Additionally, our drives and controls are "Performance Matched" to operate seamlessly with our motors to deliver operational savings on the plant floor. We manufacture high quality aerospace and specialty bearings that are used in "Mission Critical" applications on fixed-wing and military aircraft as well as on helicopters. Our 400HZ power generators are used on ground support for aircraft.

Motor Types	Baggage Handlers	Conveyors	Diversers	Geardrives	Ground Support	Hydraulics	Jetbridges	Pallet Loaders	Rotor Heads	Screening	Sortation
Brakemotors	•	•	•	•			•	•	•	•	
DC Motors	•	•	•	•			•	•	•	•	
Fractional	•	•	•	•			•	•	•	•	
Gearmotors - AC	•	•	•				•	•	•	•	
Gearmotors - DC	•	•	•				•	•	•	•	
IEC	•	•	•	•			•	•	•	•	
Integral Horsepower	•	•		•			•	•	•	•	
Variable Speed	•	•		•			•	•	•	•	

Association

Regal actively supports and participates in industry leading trade associations, such as American Bearing Manufacturers Association (ABMA), that promote the aerospace industry and its member organizations.



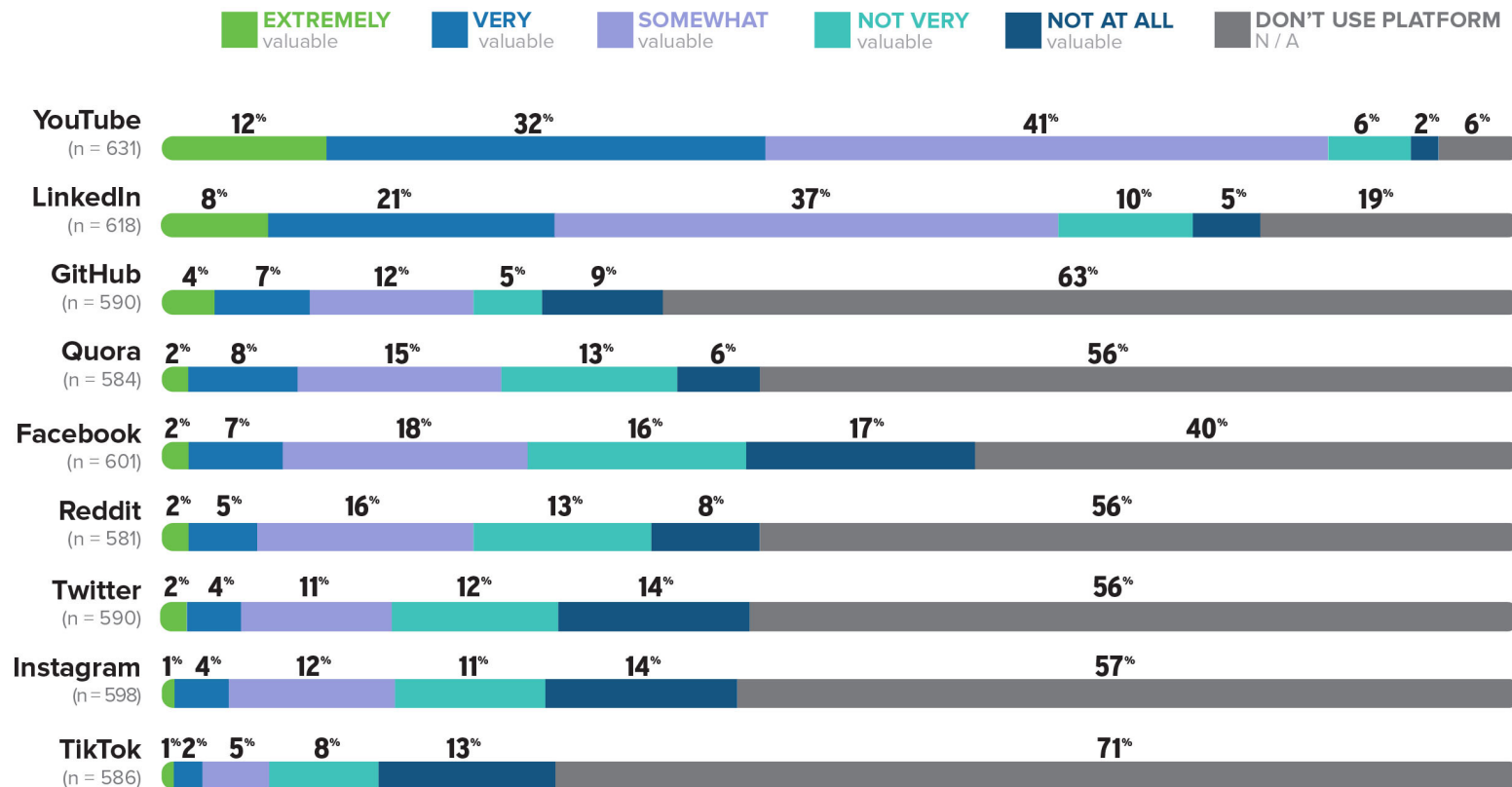
Aerospace & Defense Regal Brands



https://www.regalrexnord.com/industries/aerospace-and-defense

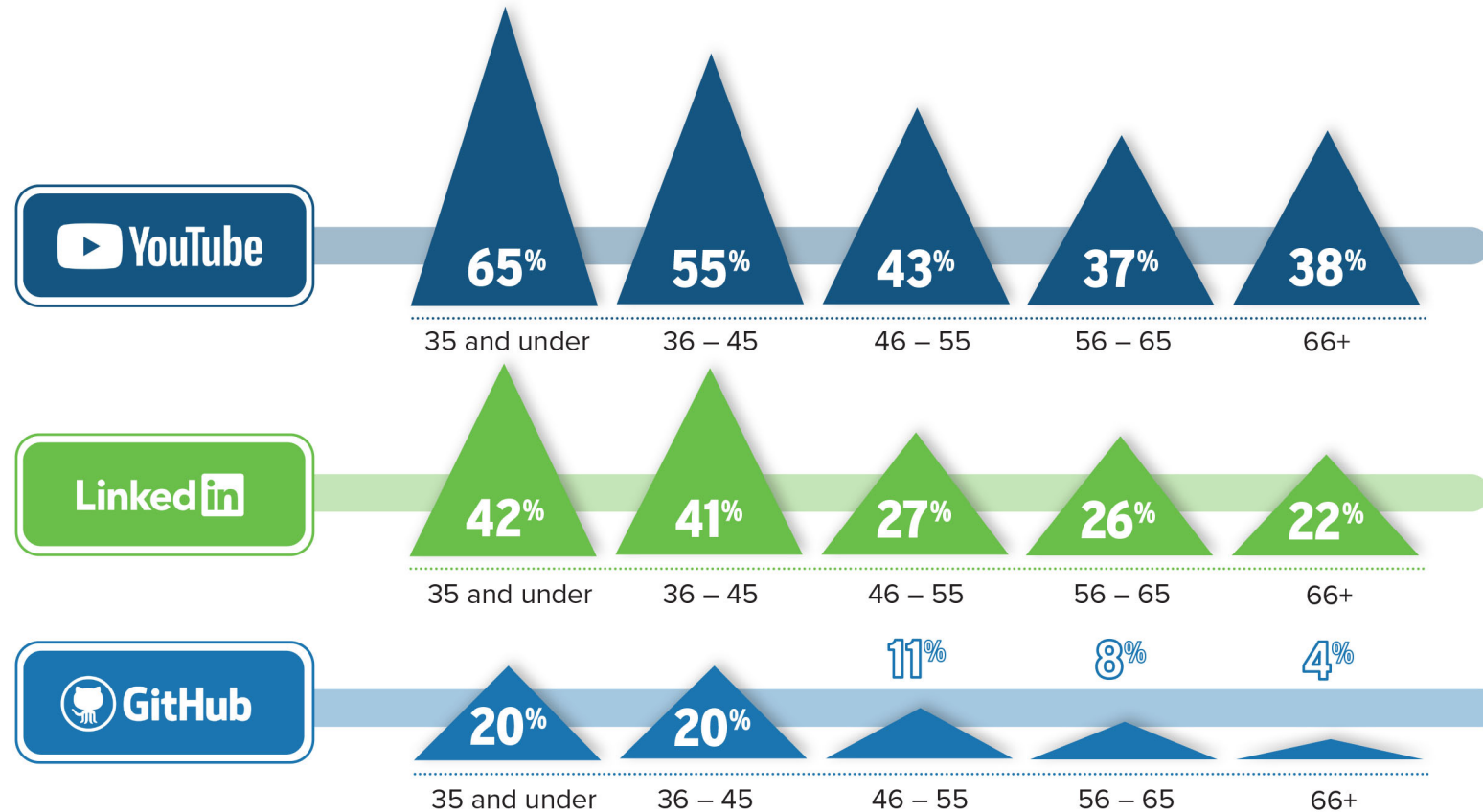
YouTube and LinkedIn: Top Valued Social Channels

How valuable are each of the following social media platforms when seeking information on the latest engineering technologies, industry trends, and products?



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Top Social Channels by Age



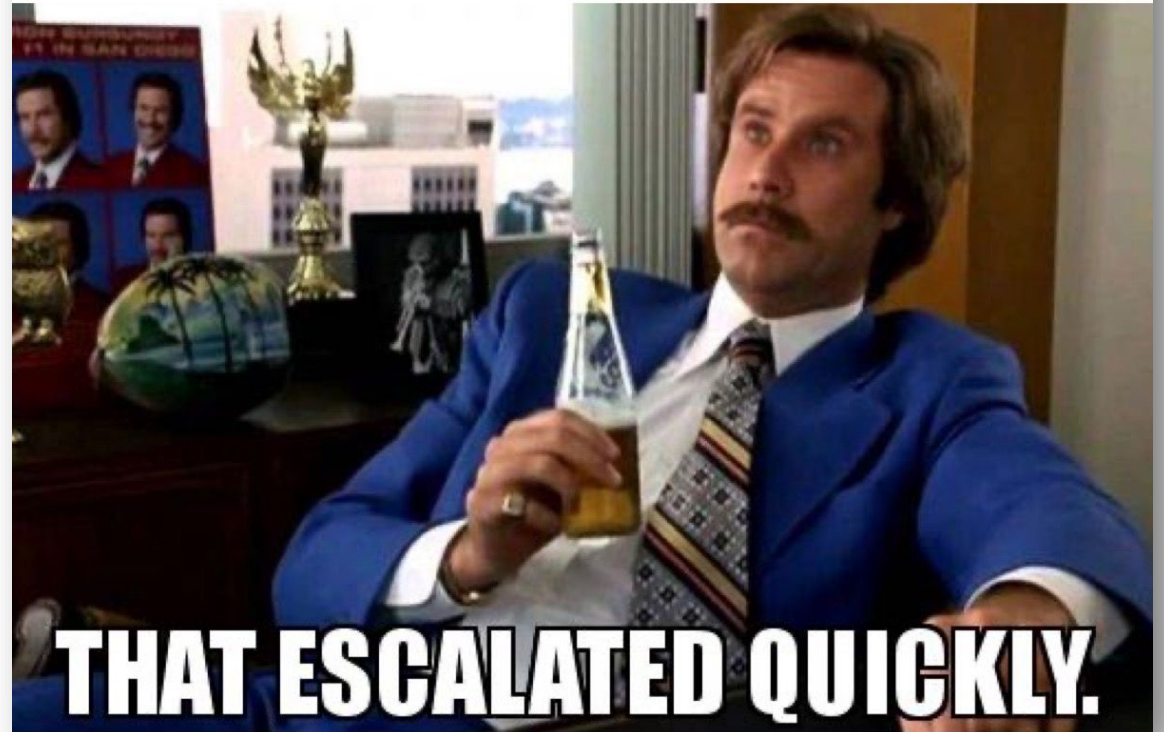
2023 State of Marketing to Engineers Report

**I'D LIKE TO ADD YOU TO MY
PROFESSIONAL**



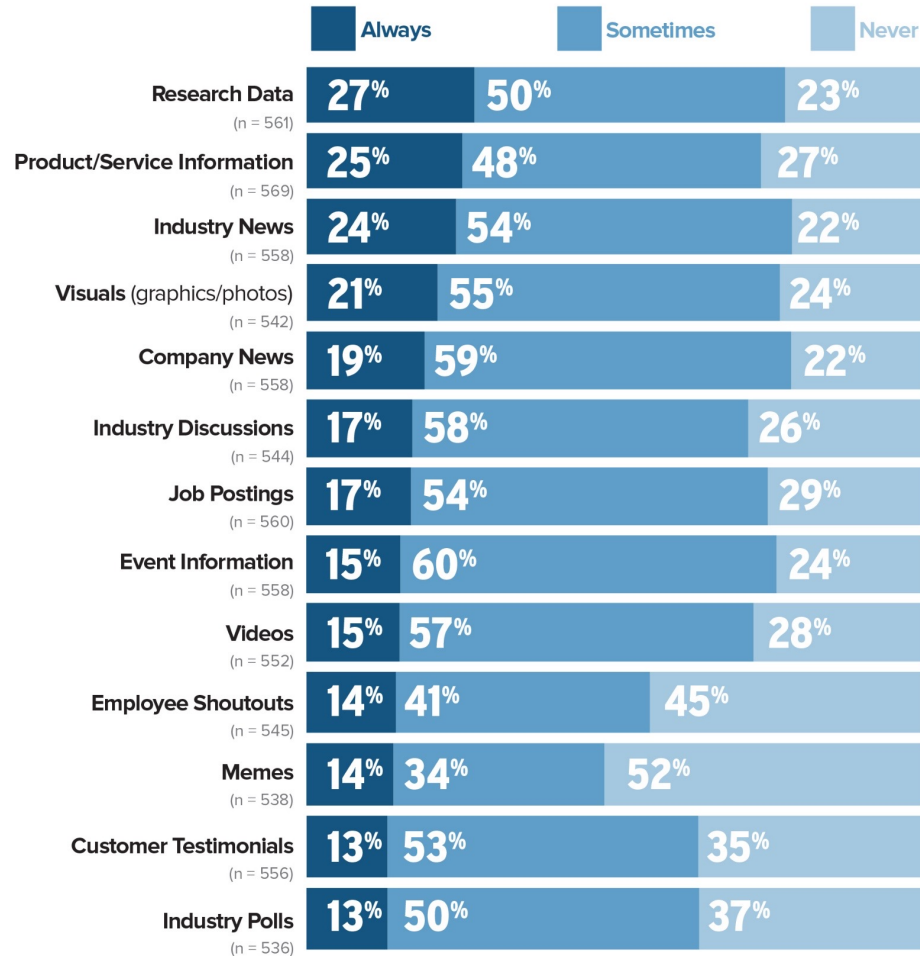
NETWORK ON LINKEDIN.
memegenerator.net

When you accept a connection request on LinkedIn and get a sales pitch within 5 minutes...



THAT ESCALATED QUICKLY.

Compelling LinkedIn Content



When visiting LinkedIn, what makes you stop scrolling?



2023 State of Marketing to Engineers Report



Michael Knight · 1st

President & CEO Endries International Inc

3w · 🌐

When you hear the term [#goldenscrew](#) what do you think of? The 1967 off off Broadway folk rock musical of the same name? The cocktail made with Cognac, Gifford Abricot du Rousillon Liqueur, OJ and Champagne? ...see more

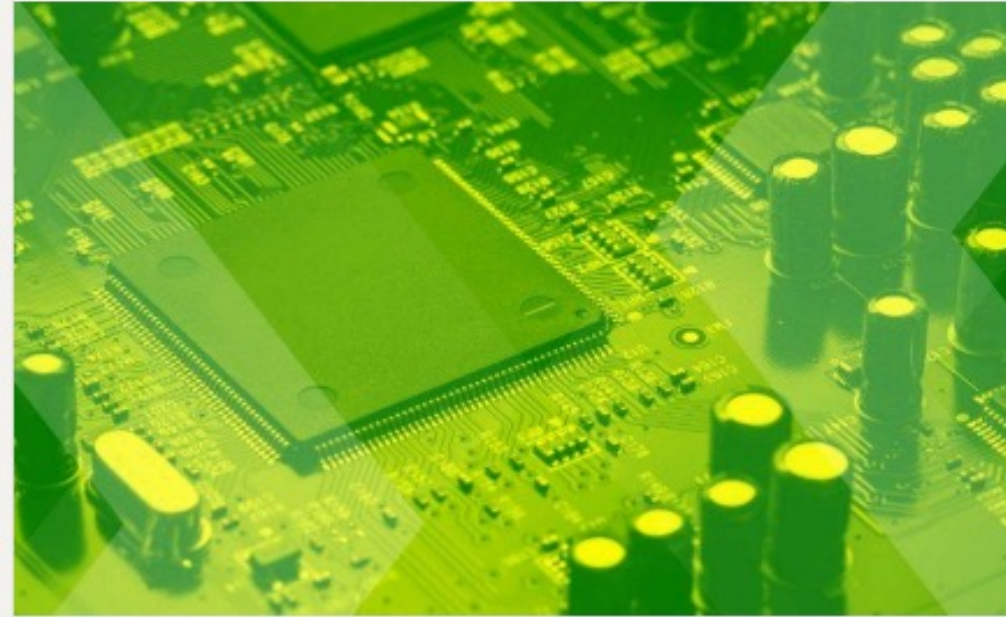


Amy Rooney · 2nd

Director, Global Accounts at RFMW Ltd.

1mo · 🌐

+ Follow



How to Survive Component Shortages in an Evolving Market | Jabil

jabil.com · 14 min read

👤 Michael Knight and 15 others

2 comments · 2 reposts



👍 Like

💬 Comment

🔄 Repost

➦ Send



Add a comment...



Most relevant ▾



Michael Knight · 1st

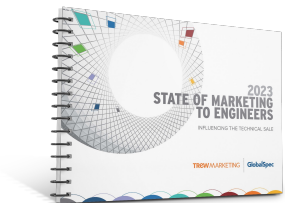
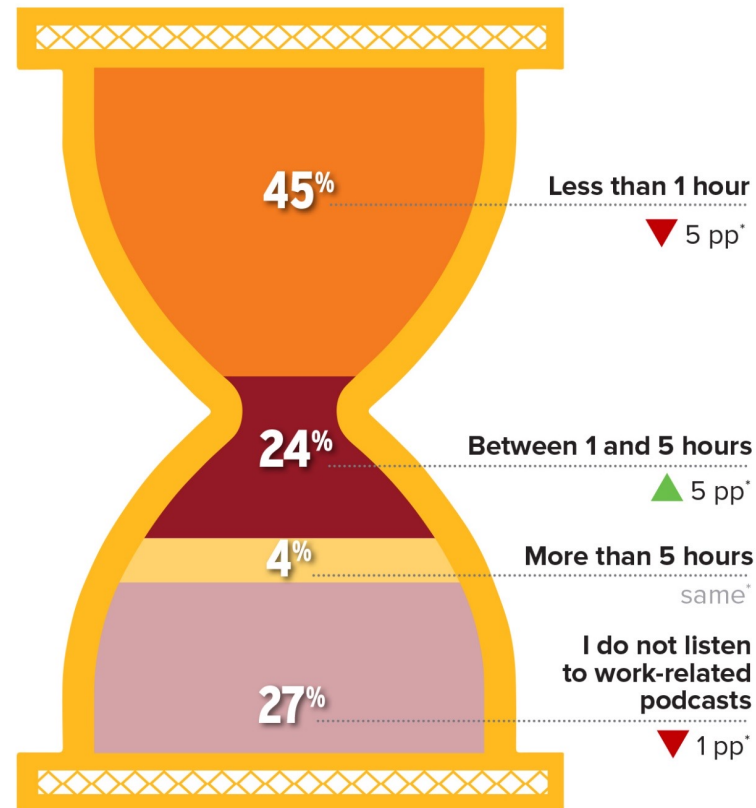
President & CEO Endries International Inc

3w ...

As always, [Graham Scott](#) sheds a very bright light on the component supply chain. There are not many people on the planet as deep in the thick of it as Graeme.

73% of Engineers Listen to Work-Related Podcasts Weekly

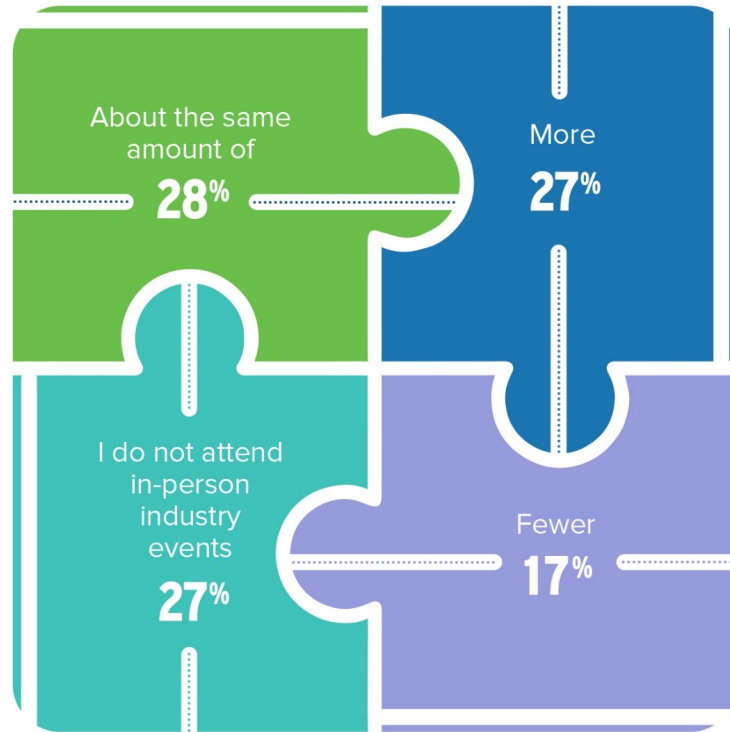
Approximately how much time per week do you spend listening to work-related podcasts?



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In-Person Events are Back

Fill in the blank. I plan to attend_____ in-person industry events in 2023 than I did in 2019 (pre-pandemic).

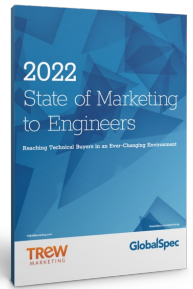


55% of Manufacturing Marketers plan to increase their in-person event investment in 2023, according to the 2023 CMI Manufacturing Content Marketing Report.



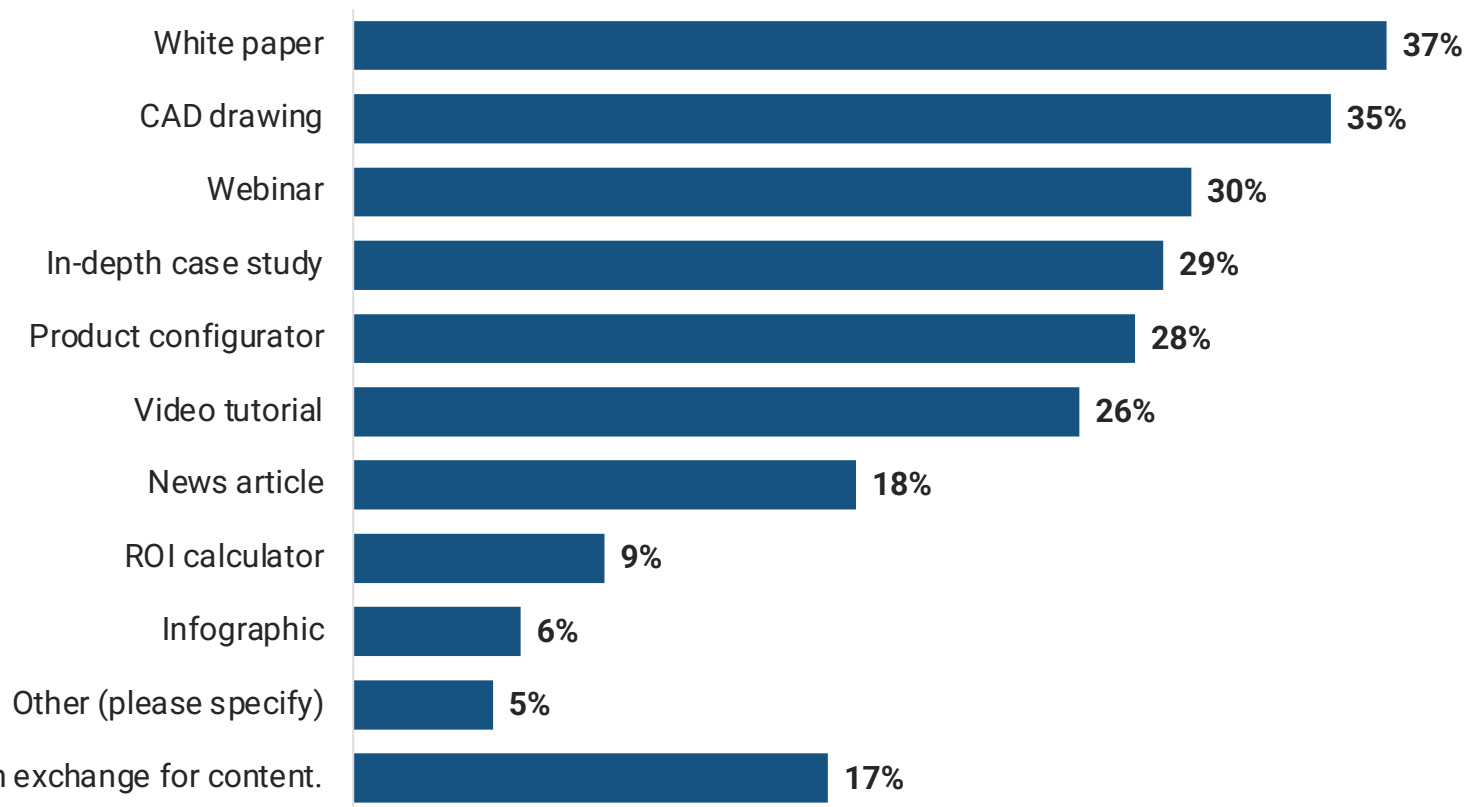
2023 State of Marketing to Engineers Report





83% of engineers WILL complete a form

When offered technical content, but asked first to complete a short form to download the material, which types of content are most likely to entice you to provide your information?



THOSE LEADS WERE SO COLD

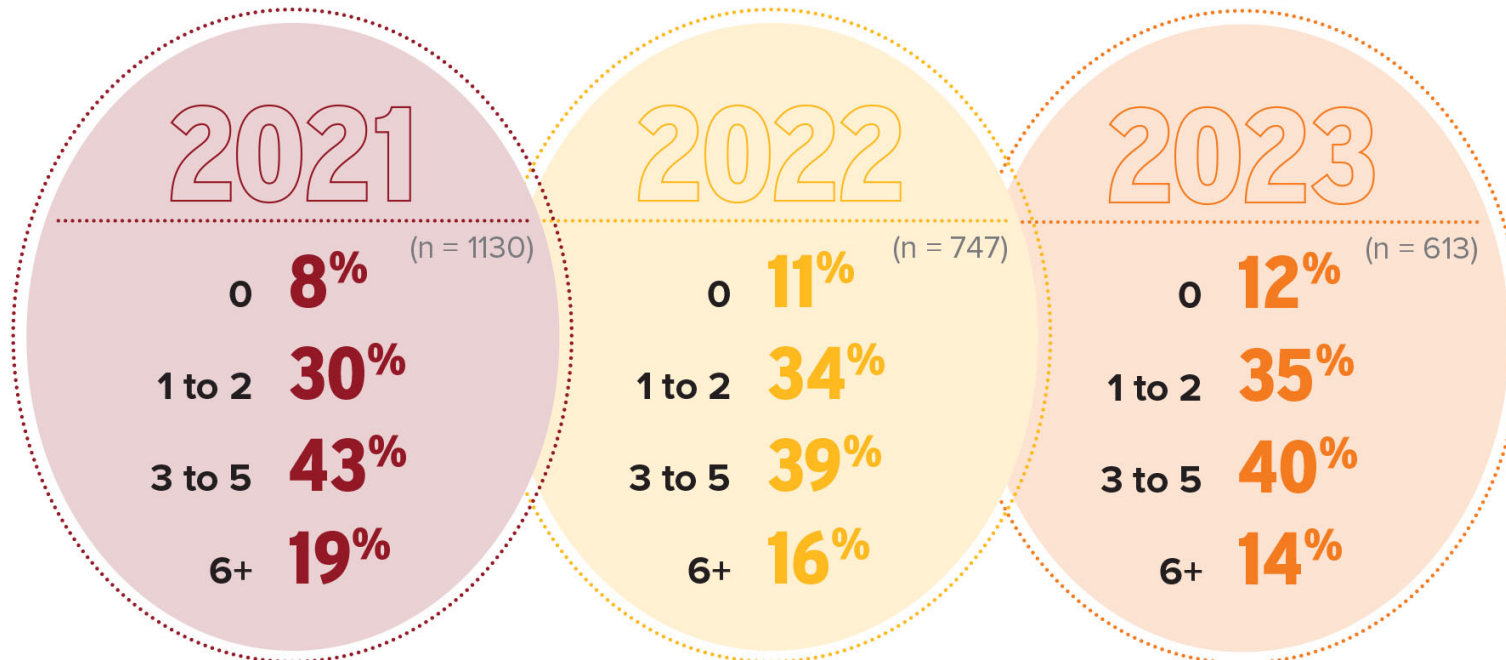


I HAD TO DEFROST THEM FIRST

J. Knox

Newsletters

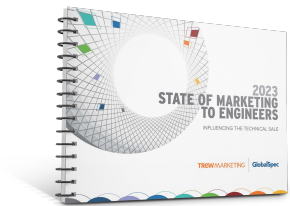
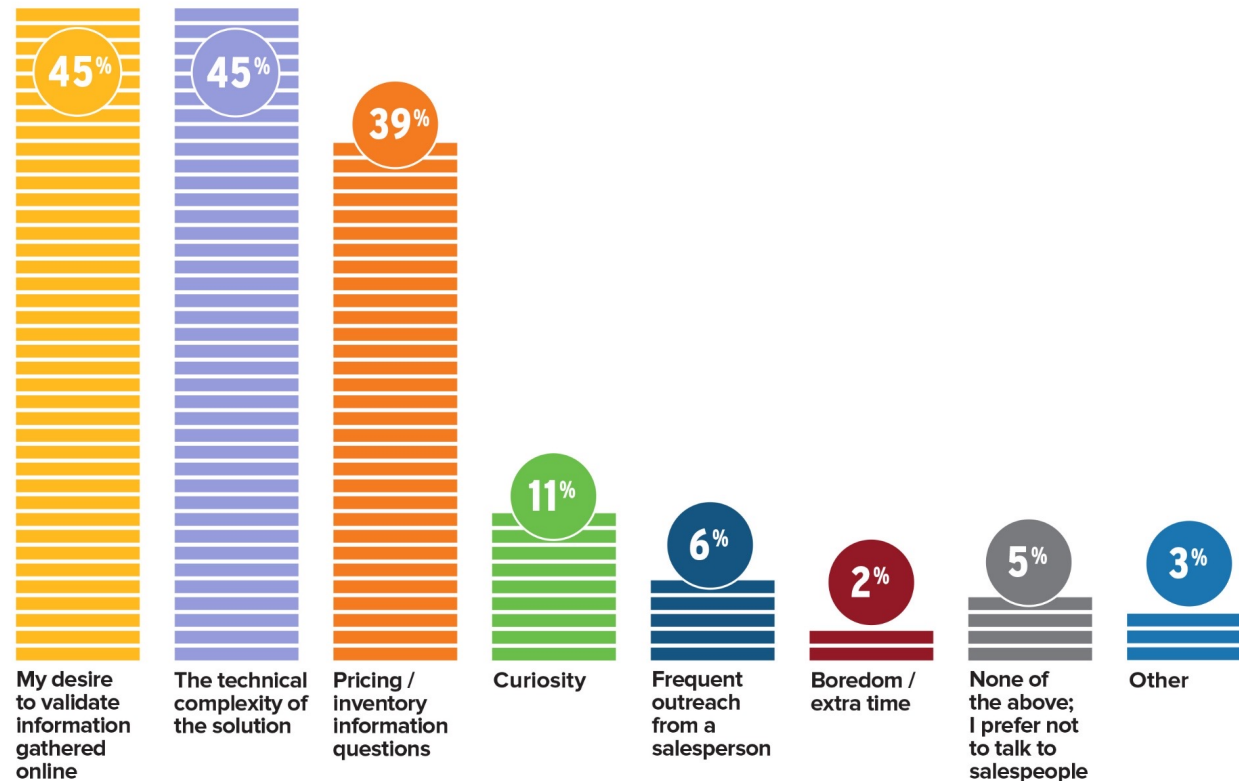
Approximately how many work-related newsletters do you subscribe to?



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Why Engineers Engage With Sales

Think about your most recent work-related vendor purchases and fill in the blank.
_____ motivated me to interact with a salesperson for the first time?



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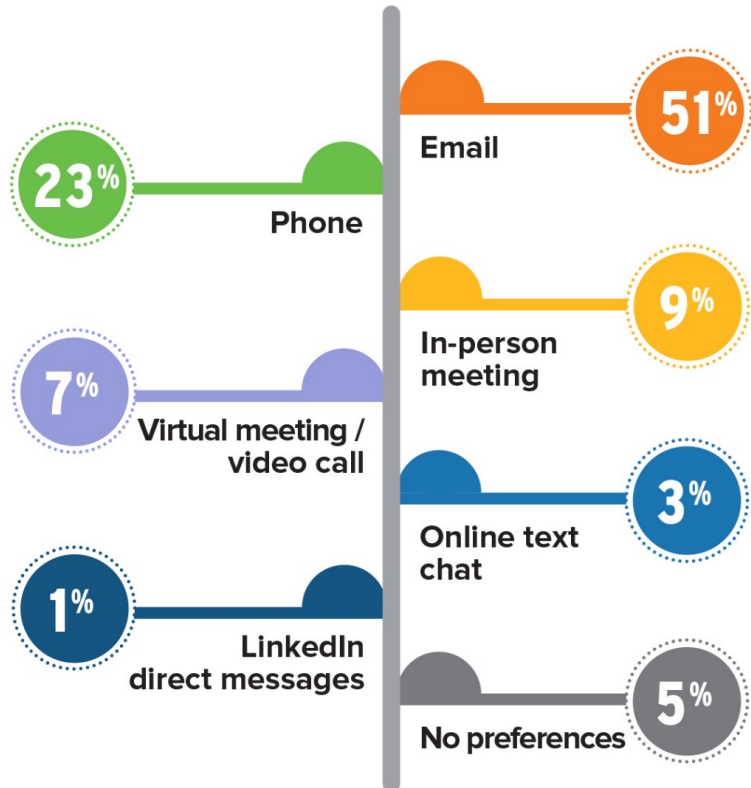
WHEN YOU CHANGE YOUR TITLE FROM SALES



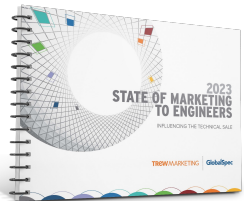
TO PRODUCT EXPERT CONSULTANT MANAGER

Engineers Prefer Email for Early Sales Engagement

When you are ready to speak with a salesperson at a vendor company for the first time, which of the following is your preferred method of communication?



	Email	Phone	In-person meeting	Virtual meeting / video call	Online text chat	LinkedIn direct messages	No preference
35 and under (n = 75)	51%	19%	8%	13%	7%	0%	3%
36 – 45 (n = 94)	63%	11%	9%	9%	3%	1%	5%
46 – 55 (n = 114)	59%	17%	7%	8%	4%	2%	4%
56 – 65 (n = 204)	49%	27%	11%	4%	3%	1%	6%
66+ (n = 114)	39%	37%	11%	7%	2%	1%	4%



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**WHEN THE CUSTOMER YOU'VE BEEN
TALKING TO FOR MONTHS**

FINALLY BUYS

HD

UMMM YEAH

**IF YOU COULD JUST UPDATE
CRM, THAT'D BE GREAT**

imgflip.com

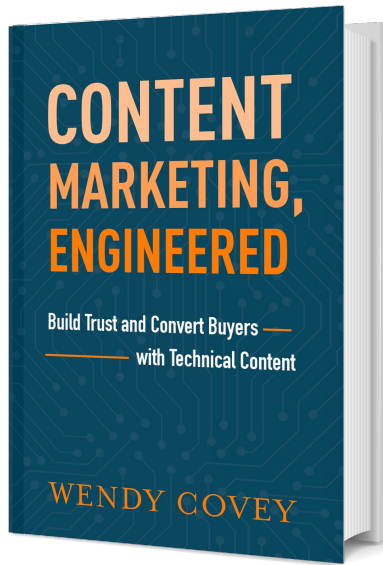
Getting Started with Content Marketing

1. Create your core brand messaging and points of differentiation
2. Evaluate & shore up your marketing foundation: website, CRM, marketing automation
3. Build campaigns with theme-specific topic clusters
4. Create content along the buyer's journey
5. Publish and promote content
6. Nurture and engage prospects

TREW MARKETING



trewmarketing.com



Book



Podcast



Research



Writing Training

