

Operations and business development Marketing for engineers

Valuable, lasting content creates a competitive advantage by building positive, lasting relationships with potential and existing customers. Conventional marketing must work hard to persuade customers of a product's quality and value. Content marketing enhances this by demonstrating that the brand understands customers' needs, is committed to their success, and provides 'proof points' that build trust and emotional engagement with the brand.





What is content marketing?

Marketing is the whole process of identifying and delivering customer value for a target market segment. This process includes **promotion**: communications that inform and persuade customers, for example, advertising or public relations (PR).

Content marketing is a form of promotion that attracts, engages, and retains customers by creating and sharing relevant, useful content like videos, articles, podcasts, or social media posts.

Content marketing demonstrates that you are interested in your customers' success. Customers learn to trust your brand as a source of information, education, or even entertainment that helps them advance their business and career or solve a personal need.

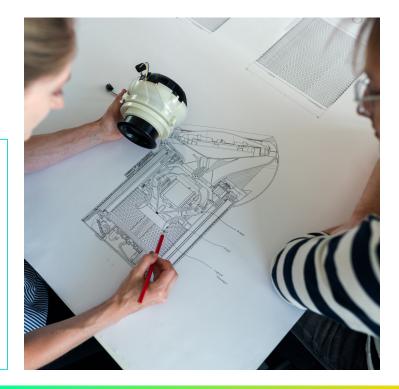
In engineering, where technical knowledge and understanding are central to personal and organisational success, content marketing can include the following.

User guides	User guides help customers use and make the most of a product or service, such as modelling software or electric motor selection.
Case studies	Case studies provide real examples of how a product or service helps an existing customer, to which potential customers can relate.
Data	Data can include industry or economic trends, or background information that can inform potential customers' decision-making or planning.
Education	Educational content builds customers' technical knowledge, understanding, and skills, to improve their employability and confidence. This can be important where technologies are rapidly evolving, such as AI, robotics, renewable energy, and sustainability.

Regular content marketing creates many points of contact over time between your brand and your potential customers. It works alongside conventional promotion, such as advertising, to build trust, goodwill, and a sense of connection, which all add to your competitive advantage.

Check your understanding:

- 1. Suggest what content might appeal for a consumer product like a fitness tracker.
- 2. Suggest what content might appeal for a business-to-business product like a CNC machine.
- 3. What might these two types of customers both find useful and relevant?







Choosing media formats

The right media formats for your content will maximise its reach and impact. These can include the following.

Blog	A blog is a web page to which content is added at regular intervals. Readers can search posts' tags to find relevant content and add comments.
Infographic	An infographic presents a range of data or information as an easy-to-read image with visualisations like charts and icons.
Newsletter	A newsletter provides regular reports on key developments within an industry or business, as email content or a PDF attachment.
Paid content	Paid content is advertising where a brand pays for page or site space, where it can share case study or white paper content.
Podcast	A podcast is an audio programme that can be streamed or downloaded, to which listeners can subscribe.
Social media	Social media posts can provide concise content or announce content in other forms, such as a video, white paper, or webinar.
Video	Videos can be used for user guides, case studies, or education, hosted on the company's website or a platform like YouTube.
Webinar	A webinar is an online meeting used for product announcements, training, case studies, education, or question-and-answer sessions.
White paper	A white paper explores and summarises a relevant issue, to help readers understand the problem and make informed decisions.

The right media matches when and how your customers will prefer, or need, to consume your content, and the level of technical complexity it will include.

How often you publish new content matters: frequently enough to keep engagement, but not so often that customers feel overwhelmed by it.

You must also choose which content to share without the need to register or subscribe, and which content you will retain for subscribers only. For example:

- A social media post may show some brief how-to video clips and promote the company's YouTube channel, where subscribers can watch more in-depth content.
- A brand's blog may include infographics on the benefits of a product, but technical details and advice are contained in a user guide.

Check your understanding:

4. Think about the media content you enjoy. What types of content engage you and why? Reflect on how you might use these insights to promote an engineering startup, bearing in mind what would be appropriate for your audience.





Creating high-quality evergreen content

Strong content is topical, with up-to-date insights and analysis customers will appreciate. However, this form of content will naturally go out of date. **Evergreen content provides information that remains relevant** and so will always be sought by potential customers.

Example

Evergreen content might include:

- fundamental theory and formulae for electric motors
- reference tables and data for material properties
- introductory guides to using standard programming tools in robotics
- an overview of the main forms of automation in food manufacturing
- best practice for commissioning a new CNC machine
- core nutritional knowledge for fitness tracker users
- UK laws for drone operators
- a glossary of electric vehicle terms to help customers interpret performance data.

Evergreen content starts with a deep and detailed understanding of your customers' needs: their **persona** (the profile and goals of a typical customer or user) and their **pain points** (common or persistent problems they need to overcome).

Evergreen content needs to be high quality:

well written, with specific help that readers can put into action. The six Cs of communication in the resource **5. Communication skills for entrepreneurs** will improve your content.

Evergreen content needs to be discoverable:

it must be easily found on the web or in apps. Search engine optimisation (SEO) improves the visibility and ranking of your content in search engines. SEO is a distinct specialism but simple steps can make your content more likely to appear near the top of a relevant search:

- use a relevant, engaging title that includes key words or phrases customers might search for
- include a strong opening paragraph that clearly outlines your content and the problem it solves
- ensure your content is readable and authoritative
- add metadata tags to your content's web page: key words and search terms that describe your content.

Check your understanding:

- 5. What would a customer want to know when choosing a microcontroller system?
- 6. Suggest titles, key words, and opening sentences that would make evergreen web content about microcontroller systems and components easily discoverable and appealing, resulting in clicks to the content.





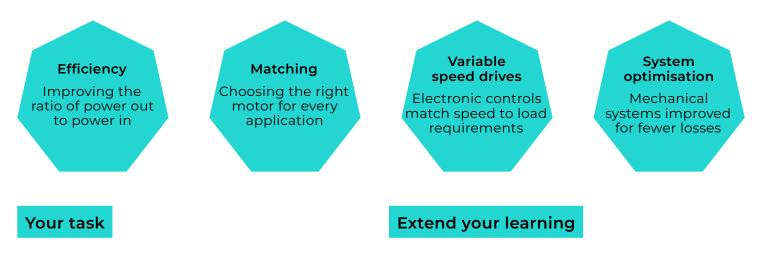


Case study: Sustainable solutions

Background

Industrial electric-motor-driven systems around the world account for nearly 50% of the global total of 22.9 TWh electrical consumption and 13.2 Gt carbon emissions from electricity (IEA, 2011).

Four engineering approaches make a 25% reduction in this demand possible:



You have been tasked with creating content marketing for an electric motor startup that produces a more efficient type of electric motor.

- 1. Sketch an infographic that uses charts and simple icons to bring the data above to life.
- 2. Write a social media post that would link to the infographic on your company blog page.
- 3. Suggest what in-depth evergreen content could help your customers use your motors to apply these four approaches and reduce their own energy use and carbon emissions.

Search for and review more examples of content marketing from a range of engineering companies and startups. Identify how each one demonstrates an understanding of customers' needs, personas, and pain points.

• Find out if you can help develop and publish content marketing for a college partner business.





Answers: Check your understanding

These are example answers – your own suggestions may differ.

What is content marketing?

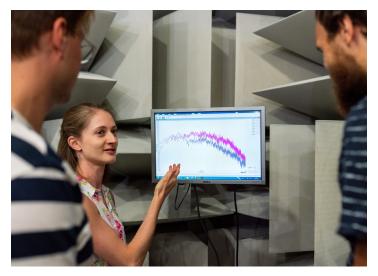
- Fitness tracker customers might appreciate content that shows how to get the most from the tracker's different functions, activity ideas and routines, related content about eating healthily or stretching, or fun motivational content that encourages users to be active.
- 2. CNC machine customers will want to use their machines efficiently and might appreciate detailed videos on programming, operation, safety, maintenance, and tool selection/ replacement, for example.
- 3. Both sets of customers will be interested to know about new products, firmware updates, and accessories.

Choosing media formats

4. Your answer will be dependent on your own content choices. Discuss your ideas and examples with other learners to identify how you might apply some of these ideas to promote an engineering enterprise.

Creating high-quality evergreen content

- 5. When choosing a microcontroller system, customers are likely to want to know that the system will integrate with their automation equipment, can deliver the automation they require, and can be easily programmed and scaled up.
- 6. Suitable content titles should reflect the questions customers ask:
 - 'Choosing the right microcontroller system for your needs'



- · 'What microcontroller system do I need?'
- 'Everything you need to know about choosing and programming microcontrollers for automation'

Key words or phrases must also reflect variations of these words and phrases, for example, 'microcontrollers', 'microcontroller system', 'microcontroller automation', 'programmable logic controller', 'PLC', etc.

Good opening sentences will encourage users to click on the search result and will demonstrate that the content answers their questions, for example:

- 'Here's how to choose the right microcontroller system for your manufacturing business.'
- 'Discover everything you need to know about microcontrollers, PLCs, and automation.'
- 'Wondering how to choose the microcontroller system for your manufacturing business? Here's what you need to know.'
- 'Automate for efficiency and quality with a microcontroller system that's right for you.'

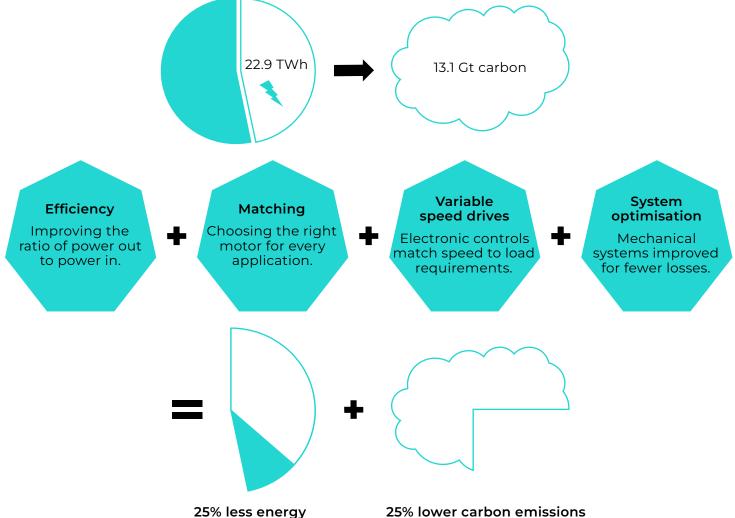




Answers: Case study

These are example answers – your own suggestions may differ.

1. Example infographic:



- 2. A social media post that would link to the infographic on your company blog page might show a low-resolution version of the infographic and say:
 - 'Electric-motor-driven systems release 13Gt of carbon a year. Together we can reduce this by 25%. Find out how: [link].'
- 3. Suitable in-depth evergreen content might include:
 - global or UK data on electric-motor-driven systems

25% lower carbon emissions

- background information about how reducing carbon emissions also delivers lower energy costs for customers - a business advantage
- · data on the efficiency of the company's motors compared to their main competitors' product ranges
- technical advice on efficiency matching and system optimisation
- core engineering knowledge about the theory, operation, and choosing of variable speed drives.



