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RAJANUKUNTE, BENGALURU 560 064, KARNATAKA
Phone: 080-28468191/96/97/98 * E-mail:hodece@saividya.ac.in* URL www.saividya.ac.in

PROFESSIONAL WRITING SKILLS IN ENGLISH

BPWSK206

MODULE-3

TECHNICAL READING AND WRITING PRACTICES

### 3.1 LISTENING WRITING PROCESS

Stages of the Listening Process

Listening is a skill of critical significance in all aspects of our lives, from maintaining our personal relationships, to getting our jobs done, to taking notes in class, to figuring out which bus to take to the airport. Regardless of how we're engaged with listening, it's important to understand that listening involves more than just hearing the words that are directed at us. Listening is an active process by which we make sense of, assess, and respond to what we hear.

The listening process involves five stages: receiving, understanding, evaluating, remembering, and responding. These stages will be discussed in more detail in later sections. An effective listener must hear and identify the speech sounds directed toward them, understand the message of those sounds, critically evaluate or assess that message, remember what's been said, and respond (either verbally or nonverbally) to information they've received.

Effectively engaging in all five stages of the listening process lets us best gather the information we need from the world around us.

Five Stages of the Listening Process

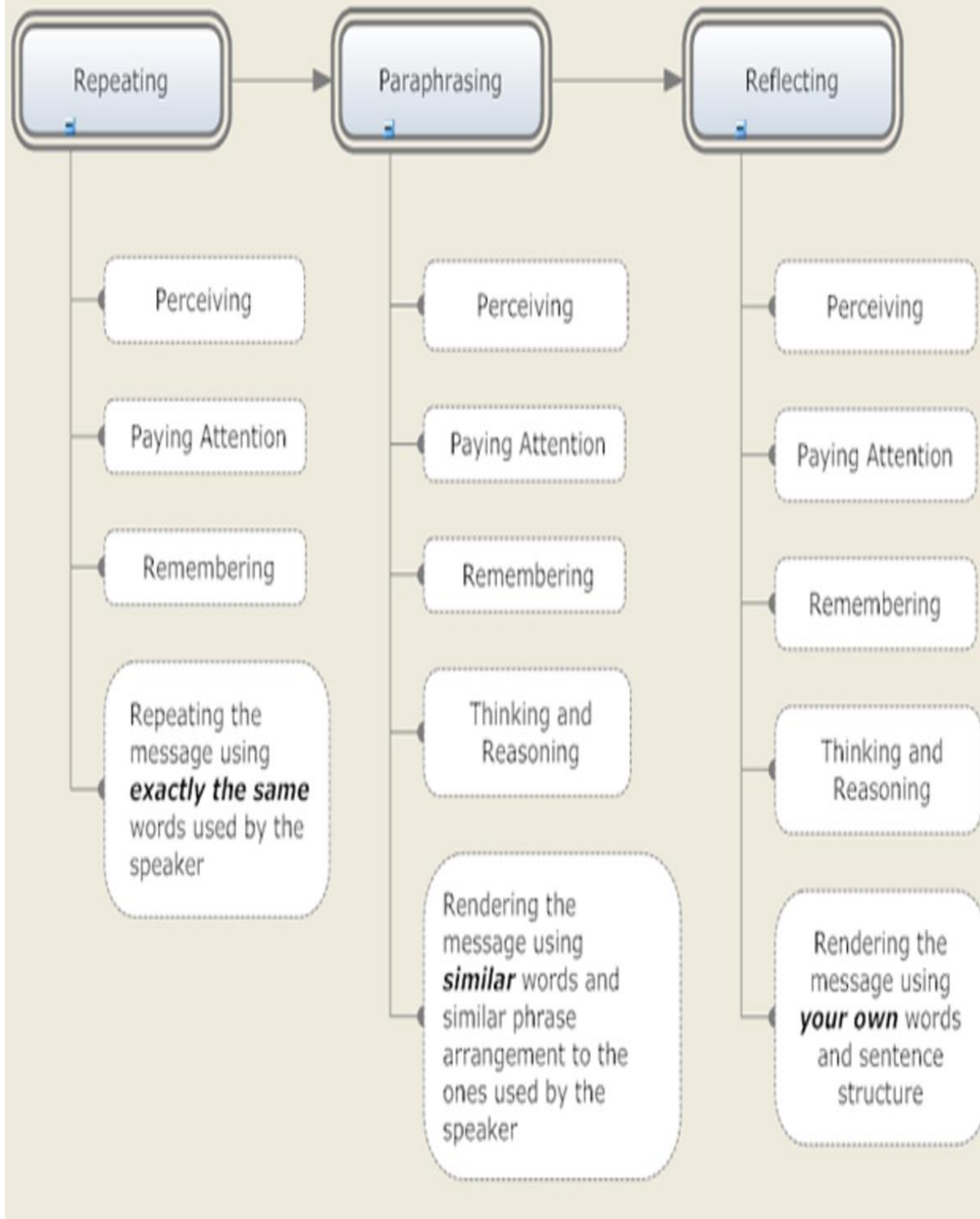| Receiving | Understanding | Evaluating | Remembering | Responding |
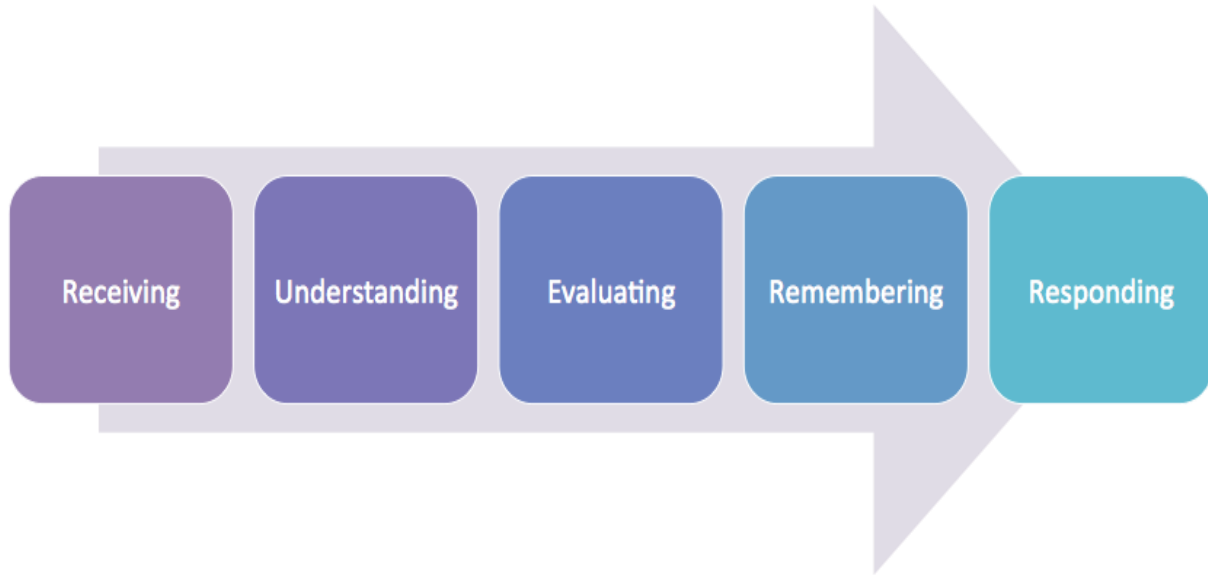
Active Listening

Active listening is a particular communication technique that requires the listener to provide feedback on what he or she hears to the speaker, by way of restating or paraphrasing what they have heard in their own words. The goal of this repetition is to confirm what the listener has heard and to confirm the understanding of both parties. The ability to actively listen demonstrates sincerity, and that nothing is being assumed or taken for granted. Active listening is most often used to improve personal relationships, reduce misunderstanding and conflicts, strengthen cooperation, and foster understanding.

When engaging with a particular speaker, a listener can use several degrees of active listening, each resulting in a different quality of communication with the speaker. This active listening chart shows three main degrees of listening: repeating, paraphrasing, and reflecting.

Degrees of Active Listening

Repeating	→	Paraphrasing	→	Reflecting

Repeating
- Perceiving
- Paying Attention
- Remembering
- Repeating the message using *exactly the same* words used by the speaker

Paraphrasing
- Perceiving
- Paying Attention
- Remembering
- Thinking and Reasoning
- Rendering the message using *similar* words and similar phrase arrangement to the ones used by the speaker

Reflecting
- Perceiving
- Paying Attention
- Remembering
- Thinking and Reasoning
- Rendering the message using *your own* words and sentence structure

Active listening can also involve paying attention to the speaker's behavior and body language. Having the ability to interpret a person's body language lets the listener develop a more accurate understanding of the speaker's message.

The Receiving Stage

The first stage of the listening process is the receiving stage, which involves hearing and attending.

Hearing is the physiological process of registering sound waves as they hit the eardrum. As obvious as it may seem, in order to effectively gather information through listening, we must first be able to physically hear what we're listening to. The clearer the sound, the easier the listening process becomes.

Paired with hearing, attending is the other half of the receiving stage in the listening process. Attending is the process of accurately identifying and interpreting particular sounds we hear as words. The sounds we hear have no meaning until we give them their meaning in context. Listening is an active process that constructs meaning from both verbal and nonverbal messages.

The Challenges of Reception

Listeners are often bombarded with a variety of auditory stimuli all at once, so they must differentiate which of those stimuli are speech sounds and which are not. Effective listening involves being able to focus on speech sounds while disregarding other noise. For instance, a train passenger that hears the captain's voice over the loudspeaker understands that the captain is speaking, then deciphers what the captain is saying despite other voices in the cabin. Another example is trying to listen to a friend tell a story while walking down a busy street. In order to best listen to what she's saying, the listener needs to ignore the ambient street sounds.

Attending also involves being able to discern human speech, also known as "speech segmentation. "[1] Identifying auditory stimuli as speech but not being able to break those speech sounds down into sentences and words would be a failure of the listening process. Discerning speech segmentation can be a more difficult activity when the listener is faced with an unfamiliar language.

The Understanding Stage

The second stage in the listening process is the understanding stage. Understanding or comprehension occurs when both the speaker and audience share an experience of meaning, and constitutes the first step in the listening process. This is the stage during which the audience determines the context and meanings of the words they hear. Determining the context and meaning of individual words, as well as assigning meaning in language, is essential to understanding sentences, and, thus, both are essential to understanding a speaker's message.

Once the listener understands the speaker's main point, they can begin to sort out the rest of the information they are hearing and decide where it belongs in their mental outline. For example, a

political candidate listens to her opponent's arguments to understand what policy decisions that opponent supports.

Before getting the big picture of a message, it can be difficult to focus on what the speaker is saying. Think about walking into a lecture class halfway through. You may immediately understand the words and sentences that you are hearing, but not immediately understand what the lecturer is proving or whether what you're hearing at the moment is the main point, side note, or digression.

Understanding what we hear is a huge part of our everyday lives, particularly in terms of gathering basic information. In the office, people listen to their superiors for instructions about what they are to do. At school, students listen to teachers to learn new ideas. We listen to political candidates give policy speeches in order to determine who will get our vote. But without understanding what we hear, none of this everyday listening would relay any practical information to us.

One tactic for better understanding a speaker's meaning is to ask questions. Asking questions allows the listener to fill in any holes he or she may have in the mental reconstruction of the speaker's message.

The Evaluating Stage

This stage of the listening process is the one during which the listener assesses the information they received, both qualitatively and quantitatively. Evaluating allows the listener to form an opinion of what they heard and, if necessary, to begin developing a response.

During the evaluating stage, the listener determines whether or not the information they heard and understood from the speaker is well constructed or disorganized, biased or unbiased, true or false, significant or insignificant. They also ascertain how and why the speaker has come up with and conveyed the message that they delivered. This process may involve considerations of a speaker's personal or professional motivations and goals. For example, a listener may determine that a co-worker's vehement condemnation of another for jamming the copier is factually correct, but may also understand that the co-worker's child is sick and that may be putting them on edge. A voter who listens to and understands the points made in a political candidate's stump speech can decide whether those points were convincing enough to earn their vote.

The evaluating stage occurs most effectively once the listener fully understands what the speaker is trying to say. While we can, and sometimes do, form opinions of information and ideas that we don't fully understand—or even that we misunderstand—doing so is not often ideal in the long run. Having a clear understanding of a speaker's message allows a listener to evaluate that message without getting bogged down in ambiguities or spending unnecessary time and energy addressing points that may be tangential or otherwise non-essential.

This stage of critical analysis is important for a listener in terms of how what they heard will affect their own ideas, decisions, actions, and/or beliefs.

The Remembering Stage

In the listening process, the remembering stage occurs as the audience categorizes and retains the information they've gathered from the speaker for future access. The result—memory—allows the person to record information about people, objects, and events for later recall. This process happens both during and after the speaker's delivery.

Memory is essential throughout the listening process. We depend on our memory to fill in the blanks when we're listening and to let us place what we're hearing at the moment in the context of what we've heard before. If, for example, you forgot everything that you heard immediately after you heard it, you would not be able to follow along with what a speaker says, and conversations would be impossible. Moreover, a friend who expresses fear about a dog she sees on the sidewalk ahead can help you recall that the friend began the conversation with her childhood memory of being attacked by a dog.

Remembering previous information is critical to moving forward. Similarly, making associations to past remembered information can help a listener understand what she is currently hearing in a wider context. In listening to a lecture about the symptoms of depression, for example, a listener might make a connection to the description of a character in a novel that she read years before.

Using information immediately after receiving it enhances information retention and lessens the forgetting curve or the rate at which we no longer retain information in our memory. Conversely, retention is lessened when we engage in mindless listening, and little effort is made to understand a speaker's message.

Because everyone has different memories, the speaker and the listener may attach different meanings to the same statement. In this sense, establishing common ground in terms of context is extremely important, both for listeners and speakers.

The Responding Stage

The responding stage is the stage of the listening process wherein the listener provides verbal and/or nonverbal reactions based on short- or long-term memory. Following the remembering stage, a listener can respond to what they hear either verbally or non-verbally. Nonverbal signals can include gestures such as nodding, making eye contact, tapping a pen, fidgeting, scratching or cocking their head, smiling, rolling their eyes, grimacing, or any other body language. These kinds of responses can be displayed purposefully or involuntarily. Responding verbally might involve asking a question, requesting additional information, redirecting or changing the focus of a conversation, cutting off a speaker, or repeating what a speaker has said back to her in order to verify that the received message matches the intended message.

Nonverbal responses like nodding or eye contact allow the listener to communicate their level of interest without interrupting the speaker, thereby preserving the speaker/listener roles. When a listener responds verbally to what they hear and remember—for example, with a question or a comment—the speaker/listener roles are reversed, at least momentarily.

Responding adds action to the listening process, which would otherwise be an outwardly passive process. Oftentimes, the speaker looks for verbal and nonverbal responses from the listener to determine if and how their message is being understood and/or considered. Based on the listener's responses, the speaker can choose to either adjust or continue with the delivery of her message. For

example, if a listener's brow is furrowed and their arms are crossed, the speaker may determine that she needs to lighten their tone to better communicate their point. If a listener is smiling and nodding or asking questions, the speaker may feel that the listener is engaged and her message is being communicated effectively.

Conclusion

In short, active listening is crucial for establishing our ethos. If we hope to be persuasive, we need to demonstrate our good will, good character, and good judgement to others by carefully listening and responding to their messages.

3.2 INTRODUCTION TO TECHNICAL REPORTS WRITING

Guide to Technical Report Writing

1 Introduction

A technical report is a formal report designed to convey technical information in a clear and easily accessible format. It is divided into sections which allow different readers to access different levels of information. This guide explains the commonly accepted format for a technical report; explains the purposes of the individual sections; and gives hints on how to go about drafting and refining a report in order to produce an accurate, professional document.

2 Structure

A technical report should contain the following sections;

Section	Details
Title page	Must include the title of the report. Reports for assessment, where the word length has been specified, will often also require the summary word count and the main text word count

Summary	A summary of the whole report including important features, results and conclusions
Contents	Numbers and lists all section and subsection headings with page numbers
Introduction	States the objectives of the report and comments on the way the topic of the report is to be treated. Leads straight into the report itself. Must not be a copy of the introduction in a lab handout.
The sections which make up the body of the report	Divided into numbered and headed sections. These sections separate the different main ideas in a logical order
Conclusions	A short, logical summing up of the theme(s) developed in the main text
References	Details of published sources of material referred to or quoted in the text (including any lecture notes and URL addresses of any websites used.
Bibliography	Other published sources of material, including websites, not referred to in the text but useful for background or further reading.
Acknowledgements	List of people who helped you research or prepare the report, including your proofreaders
Appendices (if appropriate)	Any further material which is essential for full understanding of your report (e.g. large scale diagrams, computer code, raw data, specifications) but not required by a casual reader

3 Presentation

For technical reports required as part of an assessment, the following presentation guidelines are recommended;

Script	The report must be printed single sided on white A4 paper. Hand written or dot-matrix printed reports are not acceptable.
Margins	All four margins must be at least 2.54 cm
Page numbers	Do not number the title, summary or contents pages. Number all other pages consecutively starting at 1
Binding	A single staple in the top left corner or 3 staples spaced down the left hand margin. For longer reports (e.g. year 3 project report) binders may be used.

4 Planning the report

There are some excellent textbooks contain advice about the writing process and how to begin (see Section 16). Here is a checklist of the main stages;

- Collect your information. Sources include laboratory handouts and lecture notes, the University Library, the reference books and journals in the Department office. Keep an accurate record of all the published references which you intend to use in your report, by noting down the following information;

  Journal article:
  author(s)
  title of article
  name of journal (italic or underlined)
  year of publication
  volume number (bold)

issue number, if provided (in brackets)
page numbers

Book:
author(s)
title of book (italic or underlined)
edition, if appropriate
publisher
year of publication

N.B. the listing of recommended textbooks in section 2 contains all this information in the correct format.

- Creative phase of planning. Write down topics and ideas from your researched material in random order. Next arrange them into logical groups. Keep note of topics that do not fit into groups in case they come in useful later. Put the groups into a logical sequence which covers the topic of your report.

- Structuring the report. Using your logical sequence of grouped ideas, write out a rough outline of the report with headings and subheadings.

N.B. the listing of recommended textbooks in Section 16 contains all this information in the correct format.

5 Writing the first draft

Who is going to read the report? For coursework assignments, the readers might be fellow students and/or faculty markers. In professional contexts, the readers might be managers, clients, project team members. The answer will affect the content and technical level, and is a major consideration in the level of detail required in the introduction.

Begin writing with the main text, not the introduction. Follow your outline in terms of headings and subheadings. Let the ideas flow; do not worry at this stage about style, spelling or word processing. If you get stuck, go back to your outline plan and make more detailed preparatory notes to get the writing flowing again.

Make rough sketches of diagrams or graphs. Keep a numbered list of references as they are included in your writing and put any quoted material inside quotation marks (see Section 11).

Write the Conclusion next, followed by the Introduction. Do not write the Summary at this stage.

6 Revising the first draft

This is the stage at which your report will start to take shape as a professional, technical document. In revising what you have drafted you must bear in mind the following, important principle;

- the essence of a successful technical report lies in how accurately and concisely it conveys the intended information to the intended readership.

During year 1, term 1 you will be learning how to write formal English for technical communication. This includes examples of the most common pitfalls in the use of English and how to avoid them. Use what you learn and the recommended books to guide you. Most importantly, when you read through what you have written, you must ask yourself these questions;

- Does that sentence/paragraph/section say what I want and mean it to say?
  If not, write it in a different way.

- Are there any words/sentences/paragraphs which could be removed without affecting the information which I am trying to convey?
  If so, remove them.

7 Diagrams, graphs, tables and mathematics

It is often the case that technical information is most concisely and clearly conveyed by means other than words. Imagine how you would describe an electrical circuit layout using words rather than a circuit diagram. Here are some simple guidelines;

Diagrams	Keep them simple. Draw them specifically for the report. Put small diagrams after the text reference and as close as possible to it. Think about where to place large diagrams.
Graphs	For detailed guidance on graph plotting, see the 'guide to laboratory report writing'
Tables	Is a table the best way to present your information? Consider graphs, bar charts or pie charts. Dependent tables (small) can be placed within the text, even as part of a sentence. Independent tables (larger) are separated from the text with table numbers and captions. Position them as close as possible to the text reference. Complicated tables should go in an appendix.
Mathematics	Only use mathematics where it is the most efficient way to convey the information. Longer mathematical arguments, if they are really necessary, should go into an appendix. You will be provided with lecture handouts on the correct layout for mathematics.

8 The report layout

The appearance of a report is no less important than its content. An attractive, clearly organised report stands a better chance of being read. Use a standard, 12pt, font, such as Times New Roman, for the main text. Use different font sizes, bold, italic and underline where appropriate but not to excess. Too many changes of type style can look very fussy.

9 Headings

Use heading and sub-headings to break up the text and to guide the reader. They should be based on the logical sequence which you identified at the planning stage but with enough sub-headings to break up the material into manageable chunks. The use of numbering and type size and style can clarify the structure as follows;

3 Methods of harnessing wave energy ## 3.1 Shore-based systems ## 3.2 Deep-water systems **3.2.1 *"Duck"* devices** **3.2.2 Rafts**

10 References to diagrams, graphs, tables and equations

- In the main text you must always refer to any diagram, graph or table which you use.
- Label diagrams and graphs as follows;

  Figure 1.2 Graph of energy output as a function of wave height.

  In this example, the second diagram in section 1 would be referred to by "...see figure 1.2..."

- Label tables in a similar fashion;

Table 3.1 Performance specifications of a range of commercially available GaAsFET devices

In this example, the first table in section 3 might be referred to by "...with reference to the performance specifications provided in Table 3.1..."

- Number equations as follows;

$$F(dB) = 10*\log_{10}(F) \quad (3.6)$$

In this example, the sixth equation in section 3 might be referred to by "...noise figure in decibels as given by eqn (3.6)..."

11 Originality and plagiarism

Whenever you make use of other people's facts or ideas, you must indicate this in the text with a number which refers to an item in the list of references. Any phrases, sentences or paragraphs which are copied unaltered must be enclosed in quotation marks and referenced by a number. Material which is not reproduced unaltered should not be in quotation marks but must still be referenced. It is not sufficient to list the sources of information at the end of the report; you must indicate the sources of information individually within the report using the reference numbering system.

Information that is not referenced is assumed to be either common knowledge or your own work or ideas; if it is not, then it is assumed to be plagiarised i.e. you have knowingly copied someone else's words, facts or ideas without reference, passing them off as your own. This is a **serious offence**. If the person copied from is a fellow student, then this offence is known as collusion and is equally serious. Examination boards can, and do, impose penalties for these offences ranging from loss of marks to disqualification from the award of a degree

This warning applies equally to information obtained from the Internet. It is very easy for markers to identify words and images that have been copied directly from web sites. If you do this without acknowledging the source of your information and putting the words in quotation marks then your report will be sent to the Investigating Officer and you may be called before a disciplinary panel.

12 Finalising the report and proofreading

Your report should now be nearly complete with an introduction, main text in sections, conclusions, properly formatted references and bibliography and any appendices. Now you must add the page numbers, contents and title pages and write the summary.

13 The Summary

The summary, with the title, should indicate the scope of the report and give the main results and conclusions. It must be intelligible without the rest of the report. Many people may read, and refer to, a report summary but only a few may read the full report, as often happens in a professional organisation.

- Purpose - a short version of the report and a guide to the report.
- Length - short, typically not more than 100-300 words
- Content - provide information, not just a description of the report.

14 Proofreading

This refers to the checking of every aspect of a piece of written work from the content to the layout and is an absolutely necessary part of the writing process. You should acquire the habit of never sending or submitting any piece of written work, from email to course work, without at least one and preferably several processes of proofreading. In addition, it is not possible for you, as the author of a long piece of writing, to proofread accurately yourself; you are too familiar with what you have written and will not spot all the mistakes.

When you have finished your report, and before you staple it, you must check it very carefully yourself. You should then give it to someone else, e.g. one of your fellow students, to read carefully and check for any errors in content, style, structure and layout. You should record the name of this person in your acknowledgements.

15 Word processing / desktop publishing

Advantages	Disadvantages
Word processing and desktop publishing packages offer great scope for endless revision of a document. This includes words, word order, style and layout.	Word processing and desktop publishing packages never make up for poor or inaccurate content
They allow for the incremental production of a long document in portions which are stored and combined later	They can waste a lot of time by slowing down writing and distracting the writer with the mechanics of text and graphics manipulation.
They can be used to make a document look stylish and professional.	Excessive use of 'cut and paste' leads to tedious repetition and sloppy writing.
They make the process of proofreading and revision extremely straightforward	**If the first draft is word processed, it can look so stylish that the writer is fooled into thinking that it does not need proofreading and revision!**

Two useful tips;

- Do not bother with style and formatting of a document until the penultimate or final draft.
- Do not try to get graphics finalised until the text content is complete.

16 Recommended reading

- Davies J.W. *Communication Skills - A Guide for Engineering and Applied Science Students* (2nd ed., Prentice Hall, 2001)
- van Emden J. *Effective communication for Science and Technology* (Palgrave 2001)
- van Emden J. *A Handbook of Writing for Engineers* 2nd ed. (Macmillan 1998)
- van Emden J. and Easteal J. *Technical Writing and Speaking, an Introduction* (McGraw-Hill 1996)
- Pfeiffer W.S. *Pocket Guide to Technical Writing* (Prentice Hall 1998)
- Eisenberg A. *Effective Technical Communication* (McGraw-Hill 1992)

3.3 SIGNIFICANS OF REPORT

Some tutors will require you to write a report instead of an essay or research paper. And might end up feeling confused about the meaning of this assignment. In the business world, your seniors might ask you to write a report. And like most employees, you might end up struggling and getting [stressed](#) out with this assignment. Most people get confused because they don't know what to include, its writing style, the language to use, the ideal length of the document, and other important factors. By reading this article, you'll get to know what a college report is and the main purposes of writing one in the first place. Let's get started!

Defining a report

In the education world, most students are confused between essays and reports. Some use these two words interchangeably. However, in most cases, reports are usually used in business, technical and scientific subjects, especially in the workplace. So, what's the difference between a report and an essay? An essay focuses on reasoning and arguments while a report focuses on facts.

A report is a sharp, short document that is written for a specific audience. It usually sets out and analyses problems or situations. It also makes recommendations for actions to be taken in the future. It is a paper that focuses on facts. And it's supposed to be well-structured and clear. Requirements for this report will vary between departments and organizations. In the academic world, it will vary between tutor to tutor and student courses. Therefore, it's worth finding out if there are specific guidelines before starting.

Some of the common elements in a study report include:

- A description of situations or events
- Interpretation of situations or events whether under your analysis or informed by other peoples' views
- Evaluation of facts or research results
- Discussion of outcomes and future courses of action
- Recommendations
- Conclusions

You should keep in mind that you don't have to include all these elements in your report. If you are writing for your boss, you should check to ensure that there are standard structures or guidelines for you to use.

Purposes of report writing

A report has lots of purposes both in the academic and professional world. But since It's usually used in the professional world most of the time, we are going to share with you the three main purposes of this document:

1. Making decisions

In our modern world today, most individuals and business organizations need a lot of information. Reports provide huge amounts of information that is required to make important decisions. Also, individuals get to understand a specific area based on the information presented in a report.

2. Conducting investigations using report

When there is a serious problem, a study group, committee, or commission investigates the issue to find the root cause of the problem and present findings with the recommendations in a report. At school and in the business world, problems will always arise. However, how you deal with these problems determines whether you'll grow and thrive or fail miserably. Professionals who delegate this task to a report writing service will understand the problems that they are facing and come up with effective solutions.

3. Professional advancement

A report plays a huge role in professional advancement. To get promoted and improve job satisfaction, intellectual ability is essential. And this ability can be demonstrated by writing a good report and submitting it to the relevant authorities.

4. Managerial tool

Reports are essential for managers because they can be used for organizing, planning, motivating, coordinating, and controlling. All managers need reports to get essential information that will help them make informed decisions. When managers make informed decisions, the business will naturally grow and thrive.

Conclusion

A report is a popular type of assignment that most students are required to write in college. While they are quite similar to essay assignments, you need to know the key difference between the two. The purpose of a report is to provide information to people on a specific topic. And it should take around ten to fifteen minutes to present it. Apart from school, reports play an integral role in the professional world. Your seniors will require you to write good reports to see if you are ready to take on greater

responsibilities. With the writing tips that we've shared here, you will achieve your academic goals and land your dream job.

3.4 TYPES OF REPORTS

What Is The Report Definition?
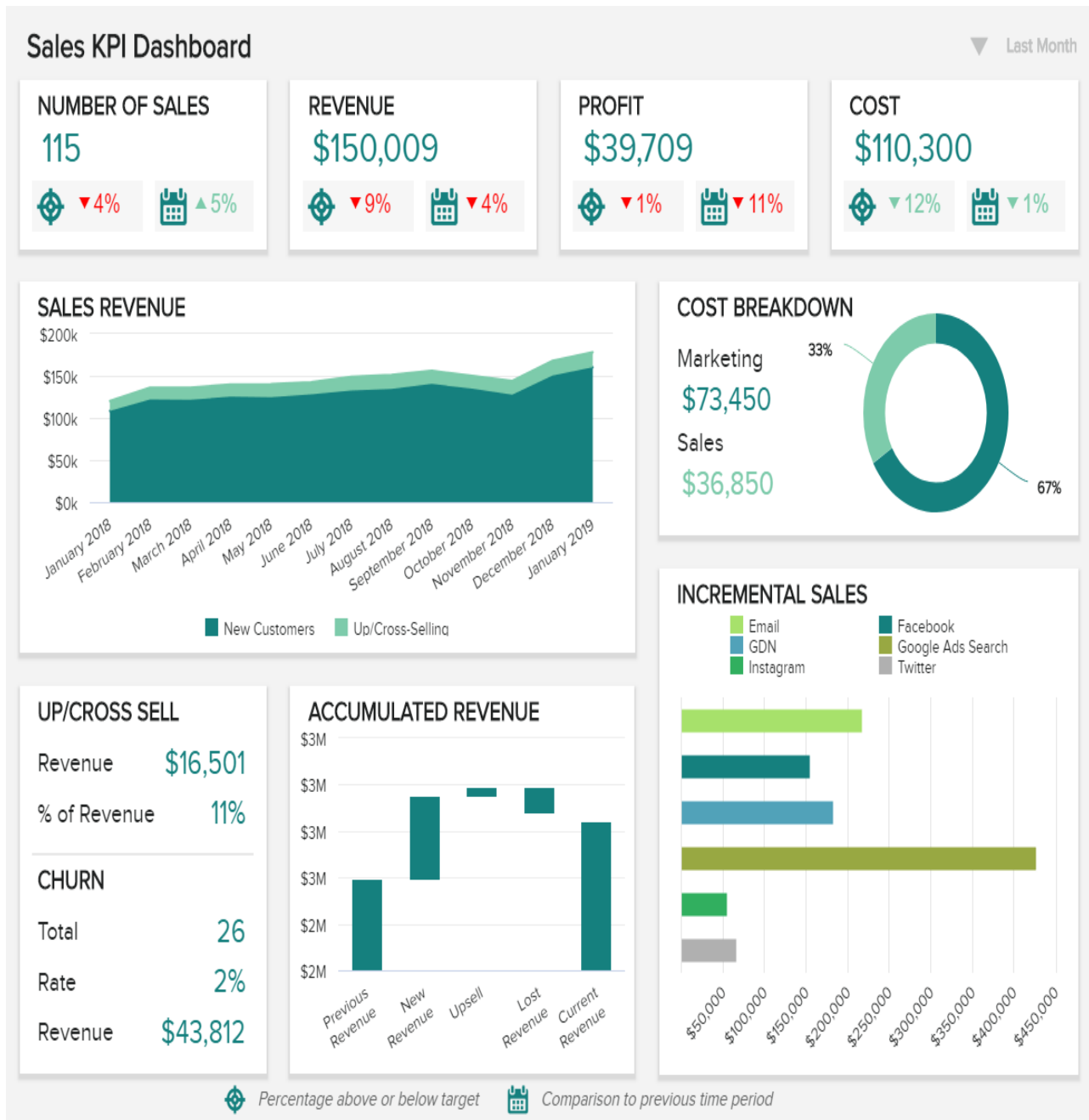
A report is a document that presents relevant business information in an organized and understandable format. Each report is aimed at a specific audience and business purpose and it summarizes the performance of different activities based on goals and objectives.

That said, there are various types of reports that can be used for different purposes, rather you want to track the progress of your strategies or stay compliant with financial laws, there is a different report for each task. To help you identify when to use them we will cover the top 14 most common report formats used for businesses today.

What Are The Different Types Of Reports?

Top 14 Types Of Reports

1. Informational reports
2. Analytical reports
3. Operational reports
4. Product reports
5. Industry reports
6. Department reports
7. Progress reports
8. Internal reports
9. External reports
10. Vertical and lateral reports
11. Strategic reports
12. Research reports
13. Project reports
14. Statutatory reports

1. Informational Reports

The first in our list of reporting types is informational reports. As their name suggests, this report type aims to give factual insights about a specific topic. This can include performance reports, expense reports, and justification reports, among others. A differentiating characteristic of these reports is their objectivity, they are only meant to inform but not propose solutions or hypotheses. Common informational reports examples are for performance tracking such as annual, monthly, or weekly reports.

2. Analytical Reports

This report type contains a mix of useful information to facilitate the decision-making process through a mix of qualitative and quantitative insights as well as real-time and historical data. Unlike informational reports that purely inform users about a topic, this report type also aims to provide recommendations about the next steps and help with problem-solving. With this information in hand, businesses can build strategies based

on analytical evidence and not simple intuition. With the use of the right BI reporting tool businesses can generate various types of analytical reports that include accurate forecasts via predictive analytics technologies. Let's look at it with an analytical report example.
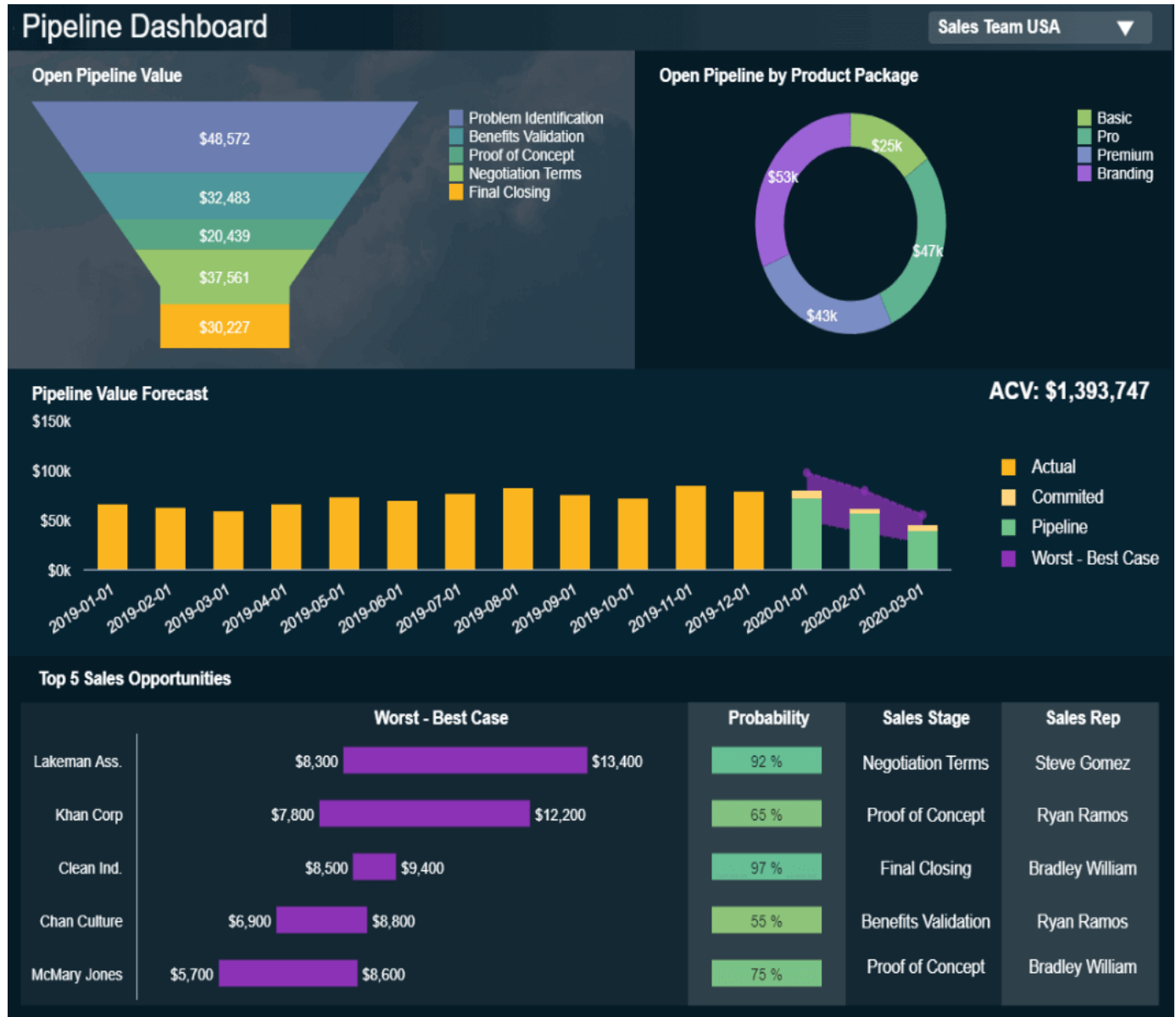
click to enlarge

The example above is the perfect representation of how analytical reports can boost a business's performance. By getting detailed information such as sales opportunities, a probability rate, as well as an accurate pipeline value forecast based on historical data, sales teams can prepare their strategies in advance, tackle any inefficiencies, and make informed decisions for increased efficiency.

3. Operational Reports

These reports track every pertinent detail of the company's operational tasks, such as its production processes. They are typically short-term reports as they aim to paint a picture of the present. Businesses use this type of report to spot any issues and define their solutions, or to identify improvement opportunities to optimize their operational efficiency. Operational reports are commonly used in manufacturing, logistics, and retail as they help keep track of inventory, production, and costs, among others.

4. Product Reports

As its name suggests, this report type is used to monitor several aspects related to product performance and development. Businesses often use them to track which of their products or subscriptions are selling the most within a given time period, calculate inventories, or see what kind of product the client values the most. Another common use case of these reports is to research the implementation of new products or develop existing ones. Let's see it more in detail with a visual example.
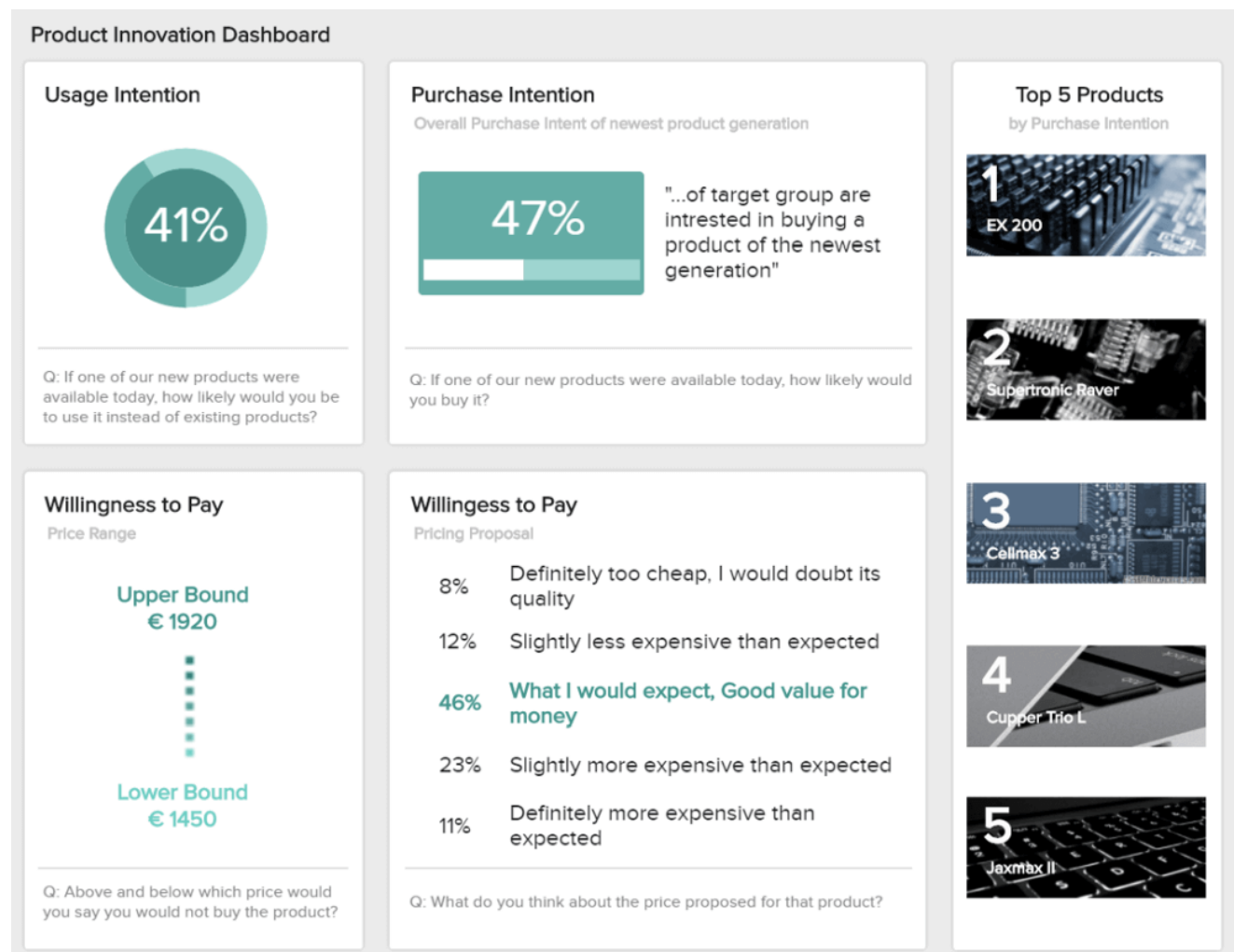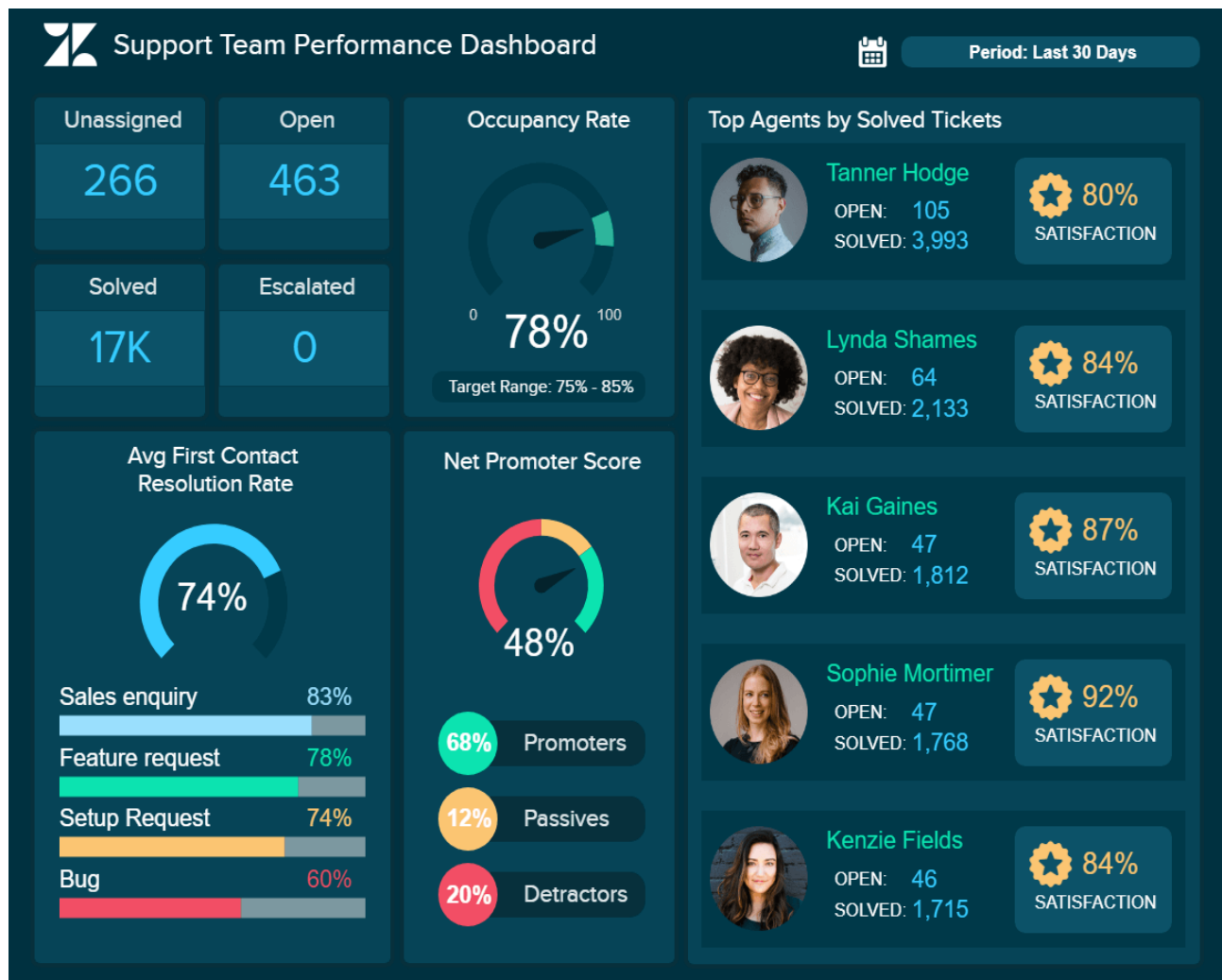
The image above is a product report that shows valuable insights regarding usage intention, purchase intention, willingness to pay, and more. In this case, the report is based on the answers from a survey that aimed to understand how the target customer would receive a new product. Getting this level of insights through this report type is very useful for businesses as it allows them to make smart investments when it comes to new products as well as set realistic pricing based on their client's willingness to pay.

5. Industry Reports

Next in our list of the most common types of reports we have industry-specific reports. Typically, these reports provide an overview of a particular industry, market, or sector with definitions, key trends, leading companies, and industry size, among others. They are particularly useful for businesses that want to enter a specific industry and want to learn how competitive it is or for companies who are looking to set performance benchmarks based on average industry values.

6. Department Reports

These reports are specific to each department or business function. They serve as a communication tool between managers and team members that need to stay connected and work together for common goals. Rather is the sales department, customer service, logistics, or finances, this specific report type help track and optimize performance on a deeper level. Let's look at it with an example of a team performance report.

Support Team Performance Dashboard

Period: Last 30 Days

Unassigned	Open
266	463

Solved	Escalated
17K	0

Occupancy Rate

0   78%   100

Target Range: 75% - 85%

Avg First Contact Resolution Rate

74%

Sales enquiry	83%
Feature request	78%
Setup Request	74%
Bug	60%

Net Promoter Score

48%

68% Promoters
12% Passives
20% Detractors

Top Agents by Solved Tickets

Tanner Hodge
OPEN: 105
SOLVED: 3,993
80% SATISFACTION

Lynda Shames
OPEN: 64
SOLVED: 2,133
84% SATISFACTION

Kai Gaines
OPEN: 47
SOLVED: 1,812
87% SATISFACTION

Sophie Mortimer
OPEN: 47
SOLVED: 1,768
92% SATISFACTION

Kenzie Fields
OPEN: 46
SOLVED: 1,715
84% SATISFACTION

click to enlarge

The image above is a department report created with an online data analysis tool and it is tracking the performance of a support team. This insightful report displays relevant metrics such as the top-performing agents, net promoter score, and first contact resolution rate, among others. Having this information in hand not only helps each member of the team to keep track of their individual performance but also allows managers to understand who needs more training and who is performing at their best.

7. Progress Reports

From the brunch of informational reports, progress reports provide critical information about the status of a project. These reports can be produced on a daily, weekly, or monthly basis by employees or managers to track performance and fine-tune tasks for the better development of the project. Progress reports are often used as visual materials to support meetings and discussions. A good example is a KPI scorecard.

8. Internal Reports

A type of report that encompasses many others on this list, internal reports refer to any type of report that is used internally in a company. They convey information between team members and departments to keep communication flowing regarding goals and business objectives.
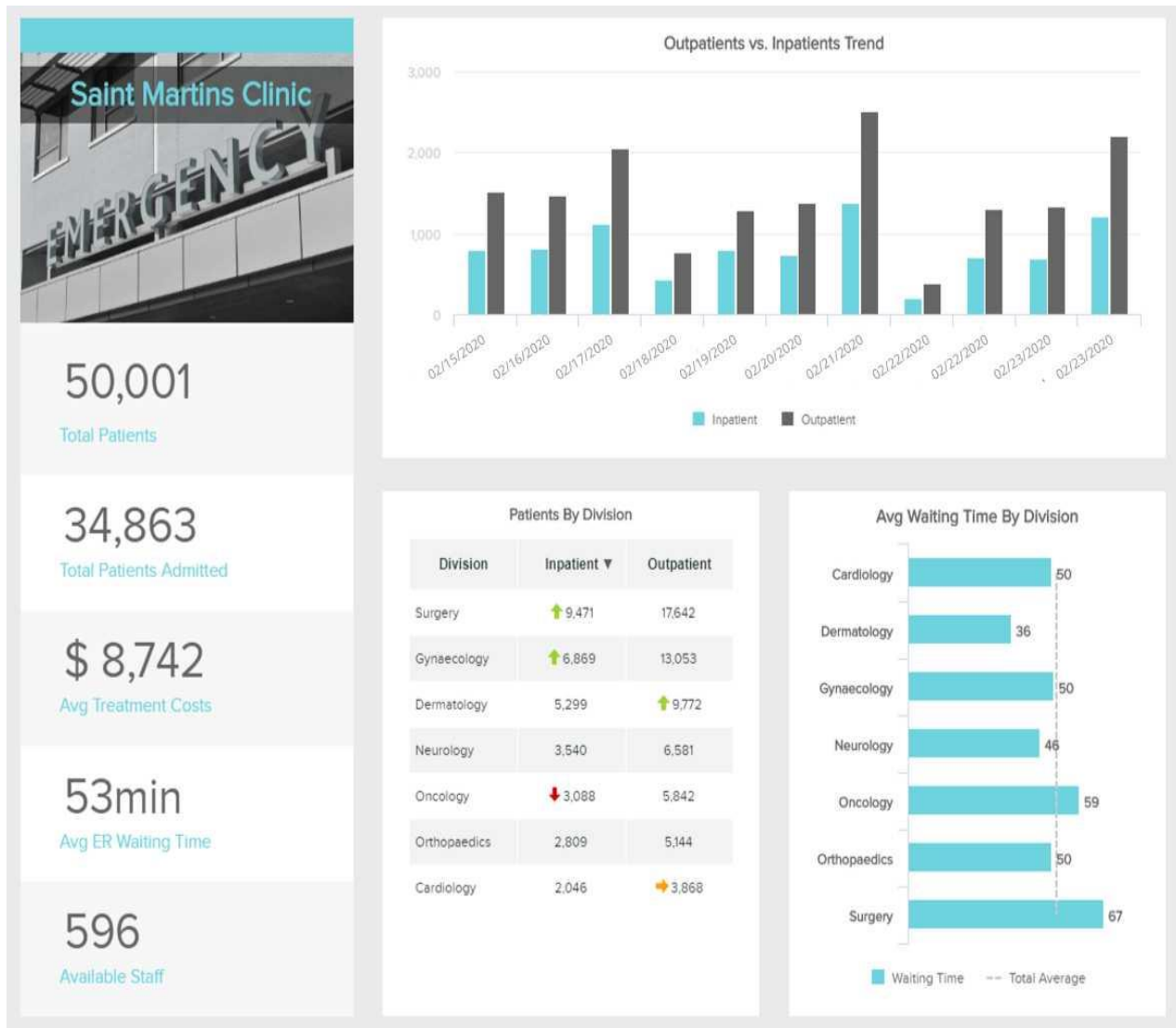
click to enlarge

As mentioned above, internal reports serve as useful communication tools to keep every relevant person in the organization informed and engaged. This [healthcare report](#) aims to do just that. By providing insights into the performance of different departments and areas of a hospital such as in and outpatients, average waiting times, treatment costs, and more, healthcare managers can allocate resources and plan the schedule accurately as well as monitor any changes or issues in real-time.

9. External Reports

Although most of the reports types listed here are used for internal purposes, not all reporting is meant to be used behind closed doors. External reports are created with the aim of sharing information with external stakeholders such as clients or investors for budget or progress accountability as well as to governmental bodies to stay compliant with the law requirements.

	Planning	Design	Development	Testing	Projected Launch Date
	Completed	Completed	67% In Progress	Waiting	107 Days Friday, December 15

Project Budget

Total Budget	$52,000
Remaining	$8,770
Currently	8.1% Over Target

- Total Budget
- Budget Amount Used
- Target Amount Used

Overdue Tasks

Overdue	Task	Deadline	Employee
1 Day	Update facebook profile	2017-08-15	Paula
4 Days	Update testing plan	2017-08-06	Kate
10 Days	Configure desktop	2017-08-01	Nancy
24 Days	Set up new database	2017-07-18	Georg

Workload

- Georg 67%
- Nancy 55%
- Richard 48%
- Kate 45%
- Paula 30%

Upcoming Deadlines

Employee	Task	Deadline	Workload
Kate	Update twitter profile	2017-08-15	34%
Georg	E-Commerce Dashboard	2017-08-06	56%
Nancy	Set up dev environment	2017-08-01	15%
Paula	Hire Data Scientist	2017-07-18	11%

click to enlarge

The image above is the perfect example of an external client report from an IT project. This insightful report provides a visual overview of every relevant aspect regarding the development of the project. From deadlines, budget usage, completion stage, and task breakdown, clients can be fully informed and involved in the project.

10. Vertical & Lateral Reports

Next, in our rundown of types of reports, we have vertical and lateral reports. This reporting type refers to the direction in which a report travels. A vertical report is meant to go upward or downward the hierarchy, for example, a management report. While a lateral report assists in organization and communication between groups that are at the same level of the hierarchy, such as the financial and marketing departments.

11. Research Reports

Without a doubt, one of the most vital reporting types for any modern business is centered on research. Being able to collect, collate, and drill down into insights based on key pockets of your customer base or industry will give you the tools to drive innovation while meeting your audience's needs head-on.

click to enlarge

The image above is a [market research analytics](#) report example for customer demographics. It serves up a balanced blend of metrics that will empower you to boost engagement as well as retention rates. Here, you can drill down into your audience's behaviors, interests, gender, educational levels, and tech adoption life cycles with a simple glance.

What's particularly striking about this dashboard is the fact that you can explore key trends in brand innovation with ease, gaining a working insight into how your audience perceives your business. This invaluable type of report will help you get under the skin of your consumers, driving growth and loyalty in the process.

12. Strategic Reports

Strategy is a vital component of every business, big or small. Strategic analytics tools are perhaps the broadest and most universal of all the different types of business report imaginable.

These particular tools exist to help you understand, meet, and exceed your most pressing company goals consistently by serving up top-level metrics on a variety of initiatives or functions.
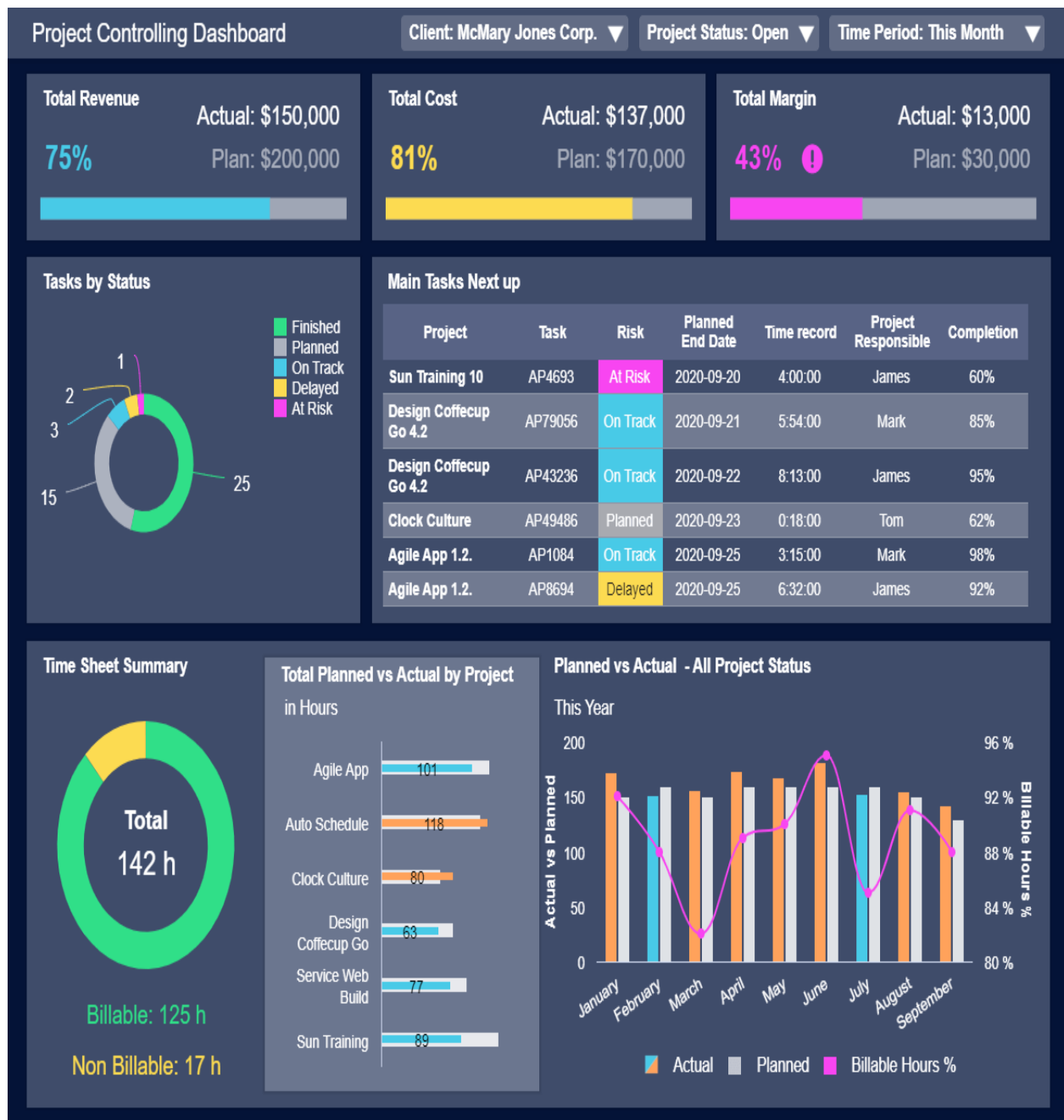
By working with strategic-style tools, you will:

- Improve internal motivation and engagement
- Refine your plans and strategies for the best possible return on investment (ROI)
- Enhance internal communication and optimize the way your various departments run
- Create more room for innovation and creative thinking

13. Project Reports

Projects are key to keeping a business moving in the right direction while keeping innovation and evolution at the forefront of every plan, communication, or campaign. But without the right management tools, a potentially groundbreaking project can turn into a resource-sapping disaster.

A project management report serves as a summary of a particular project's status and its various components. It's a visual tool that you can share with partners, colleagues, clients, and stakeholders to showcase your project's progress at multiple stages. Let's look at our example and dig a little deeper.

Project Controlling Dashboard

Client: McMary Jones Corp. ▼   Project Status: Open ▼   Time Period: This Month ▼

Total Revenue
75%
Actual: $150,000
Plan: $200,000

Total Cost
81%
Actual: $137,000
Plan: $170,000

Total Margin
43% ❗
Actual: $13,000
Plan: $30,000

Tasks by Status

- Finished
- Planned
- On Track
- Delayed
- At Risk

1
2
3
15
25

Main Tasks Next up

Project	Task	Risk	Planned End Date	Time record	Project Responsible	Completion
Sun Training 10	AP4693	At Risk	2020-09-20	4:00:00	James	60%
Design Coffecup Go 4.2	AP79056	On Track	2020-09-21	5:54:00	Mark	85%
Design Coffecup Go 4.2	AP43236	On Track	2020-09-22	8:13:00	James	95%
Clock Culture	AP49486	Planned	2020-09-23	0:18:00	Tom	62%
Agile App 1.2.	AP1084	On Track	2020-09-25	3:15:00	Mark	98%
Agile App 1.2.	AP8694	Delayed	2020-09-25	6:32:00	James	92%

Time Sheet Summary

Total
142 h

Billable: 125 h
Non Billable: 17 h

Total Planned vs Actual by Project
in Hours

- Agile App — 101
- Auto Schedule — 118
- Clock Culture — 80
- Design Coffecup Go — 63
- Service Web Build — 77
- Sun Training — 89

Planned vs Actual - All Project Status

This Year

Actual vs Planned: 200, 150, 100, 50, 0
Billable Hours %: 96%, 92%, 88%, 84%, 80%

January, February, March, April, May, June, July, August, September

■ Actual   ■ Planned   ■ Billable Hours %

click to enlarge

To ensure consistent success across the board, the kinds of reports you need to work with are based on project management.

Our example is a [project management dashboard](#) equipped with a melting pot of metrics designed to improve the decision-making process while keeping every facet of your company's most important initiatives under control. Here, you can spot pivotal trends based on costs, task statuses, margins, costs, and overall project revenue. With this cohesive visual information at your fingertips, not only can you ensure the smooth

end-to-end running of any key project, but you can drive increased operational efficiency as you move through every significant milestone.

14. Statutory Reports

It may not seem exciting or glamorous, but keeping your business's statutory affairs in order is vital to your ongoing commercial health and success.

When it comes to submitting such vital financial and non-financial information to official bodies, one small error can result in serious repercussions. As such, working with statutory types of report formats is a water-tight way of keeping track of your affairs and records while significantly reducing the risk of human error.

Armed with interactive insights and dynamic visuals, you will keep your records clean and compliant while gaining the ability to nip any potential errors or issues in the bud.

Your Chance: [Want to test a modern reporting software for free?](#) Try our 14-day free trial & start building interactive reports today!

What Does A Report Look Like?

Now that we've covered the most relevant types of reports, we will answer the question: what does a report look like?

As mentioned at the beginning of this insightful guide, static reporting is a thing of the past. With the rise of modern technologies like [self service BI tools](#), the use of interactive reports in the shape of business dashboards has become more and more popular among companies.

Unlike static reports that take time to be generated and are difficult to understand, modern reporting tools are intuitive. Their visual nature makes them easy to understand for any type of user, and they provide businesses with a central view of their most important performance indicators for an improved decision-making process. Here we will cover 15 useful dashboard examples from different industries and functions to put the value of [dashboard reporting](#) into perspective.

1. Financial Report

Financial KPI Dashboard

Current Working Capital

Current Assets	$129,000
Cash	$34,000
Accounts Receivable	$59,000
Inventory	$31,000
Pre-Paid Expenses	$5,000

−

Current Liabilities	$68,000
Accounts Payable	$25,000
Credit Card Debt	$2,000
Bank Operating Credit	$27,000
Accrued Expenses	$9,000
Taxes Payable	$5,000

=

Working Capital	$61,000
Current Ratio	1.90

Cash Conversion Cycle in Days - Last 3 Years

59.0 DSO	+	36.0 DIO	−	48.3 DPO	=	46.8 CCC

	2016	2017	2018	2019
DIO	37	41	37	36
DSO	66	61	61	59
DPO	-45	-48	-52	-48

■ DSO ■ DIO ■ DPO —●— CCC

Vendor Payment Error Rate - Last 12 Months

— Vendor Payment Error Rate   — Average Vendor Payment Error Rate

(2018 June, 2018 July, 2018 August, 2018 September, 2018 October, 2018 November, 2018 December, 2019 January, 2019 February, 2019 March, 2019 April)

click to enlarge

Keeping finances in check is critical for success. This financial report offers an overview of the most important financial metrics that a company needs to monitor its economic activities and answer vital questions to ensure healthy finances.

With insights about liquidity, invoicing, budgeting, and general financial stability, managers can extract long and short-term conclusions to reduce inefficiencies, make accurate forecasts about future performance, and keep the overall financial efficiency of the business flowing. For instance, getting a detailed calculation of the business working capital can allow you to understand how liquid is your company. If it's higher than expected it means you have the potential to invest and grow. Definitely, one of the most valuable types of finance reports.

2. Marketing Report
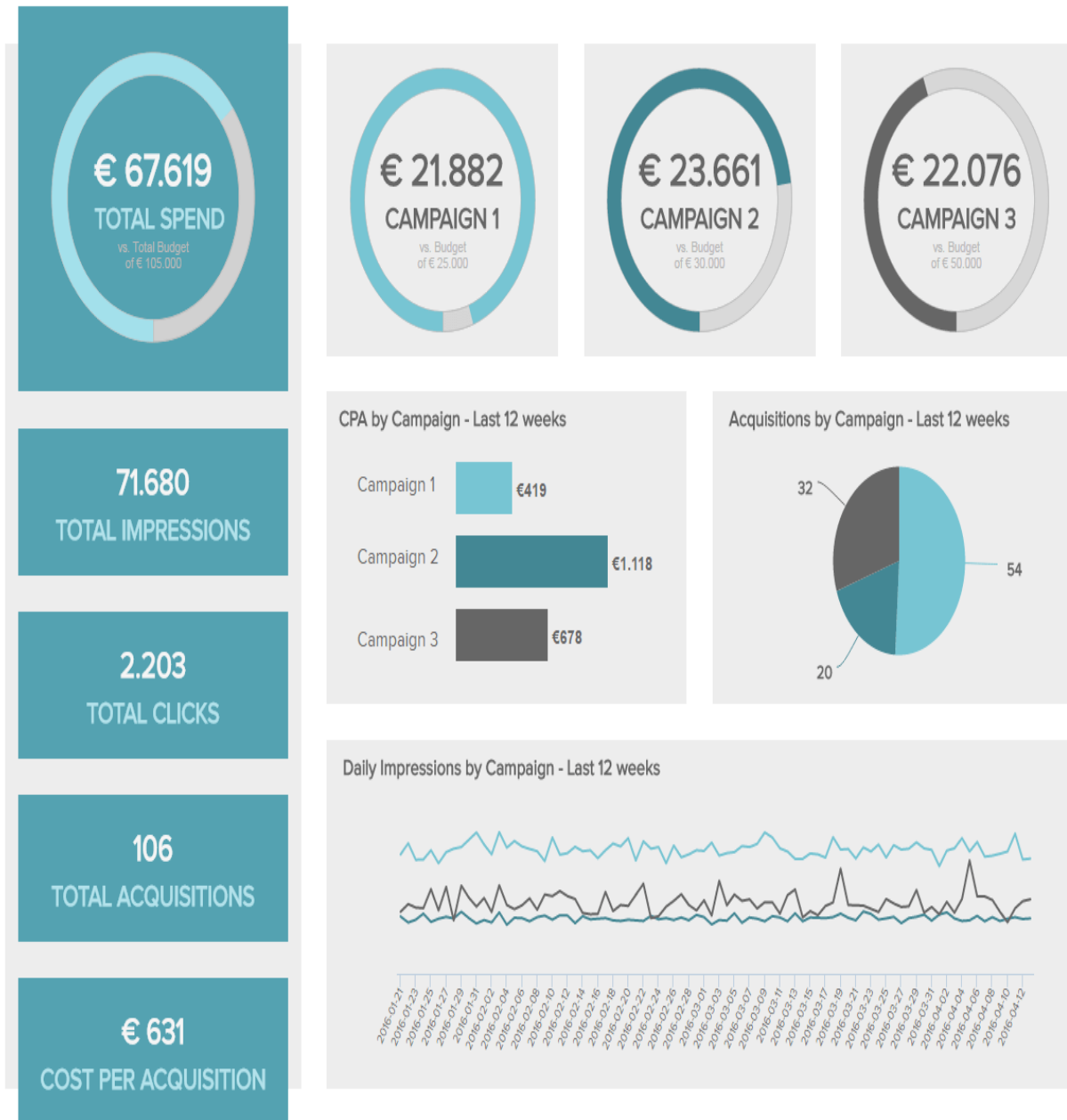
click to enlarge

Our next example is a [marketing report](#) that ensures a healthy return on investment from your marketing efforts. This type of report offers a detailed overview of campaign performance over the last 12 weeks. Having access to this information enables you to maximize the value of your promotional actions keeping your audience engaged by providing a targeted experience.

For instance, you can implement different campaign formats as a test and then compare which one is most successful for your business. This is possible thanks to the monitoring of important marketing metrics such as the click-through rate (CTR), cost per click (CPC), cost per acquisition (CPA), and more.

The visual nature of this report makes it easy to understand important insights at a glance. For example, the four gauge charts at the top show the total spending from all campaigns and how much of the total budget of each campaign has been used. In just seconds you can see if you are on target to meet your marketing budgets for every single campaign.

3. Sales Report
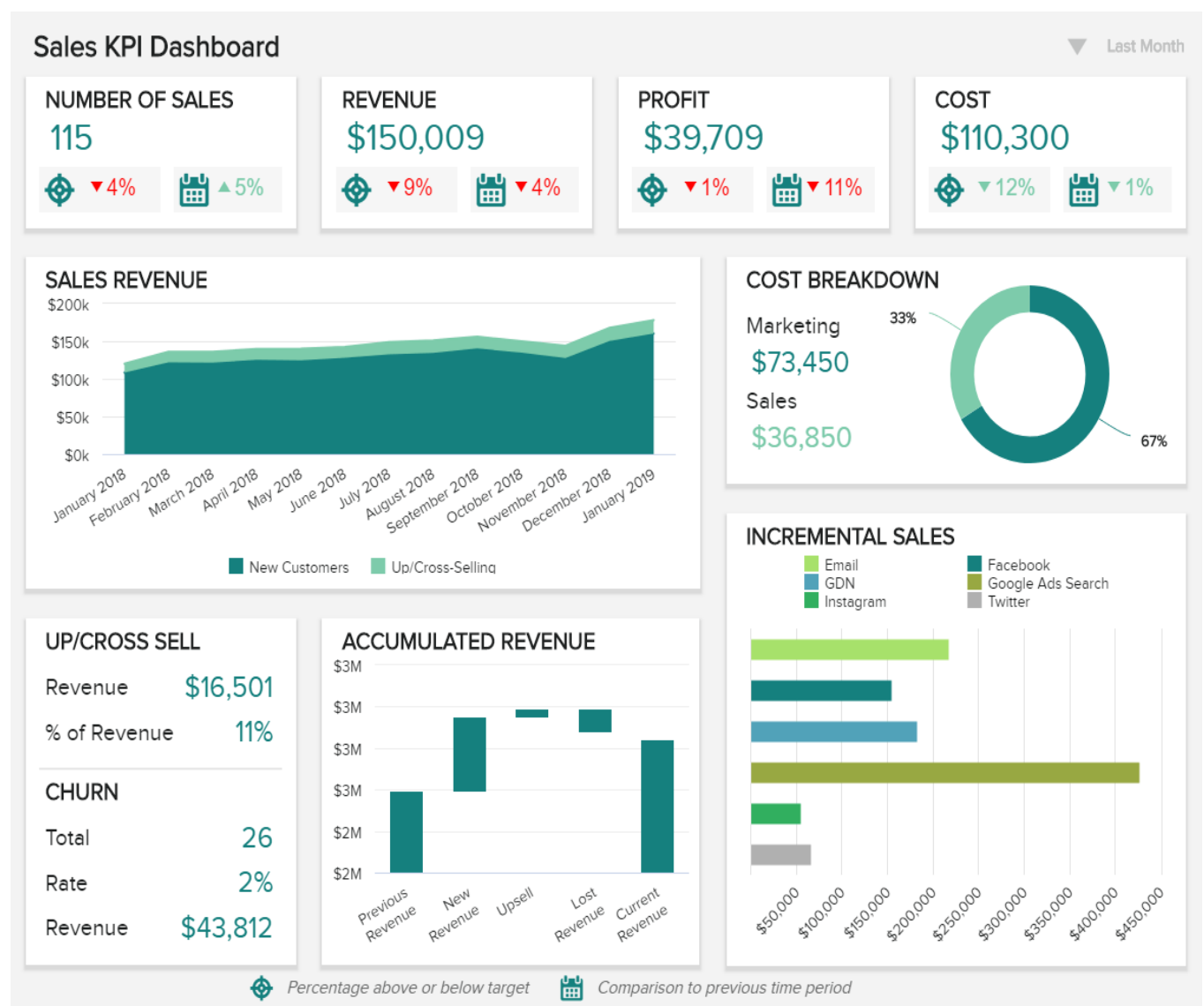
click to enlarge

An intuitive [sales dashboard](#) like the one above is the perfect analytical tool to monitor and optimize sales performance. Armed with powerful high-level metrics, this report type is especially interesting for managers, executives, and sales VPs as it provides relevant information to ensure strategic and operational success.

The value of this [sales report](#) lies in the fact that it offers a complete and comprehensive overview of relevant insights needed to make smart sales decisions. For instance, at the top of an analysis tool, you get important metrics such as the number of sales, revenue, profit, and costs, all compared to a set target and to the previous time period. The use of historical data is fundamental when building successful sales strategies as they provide a picture of what could happen in the future. Being able to filter the key metrics all in one screen is a key benefit of modern reporting.

4. HR Report
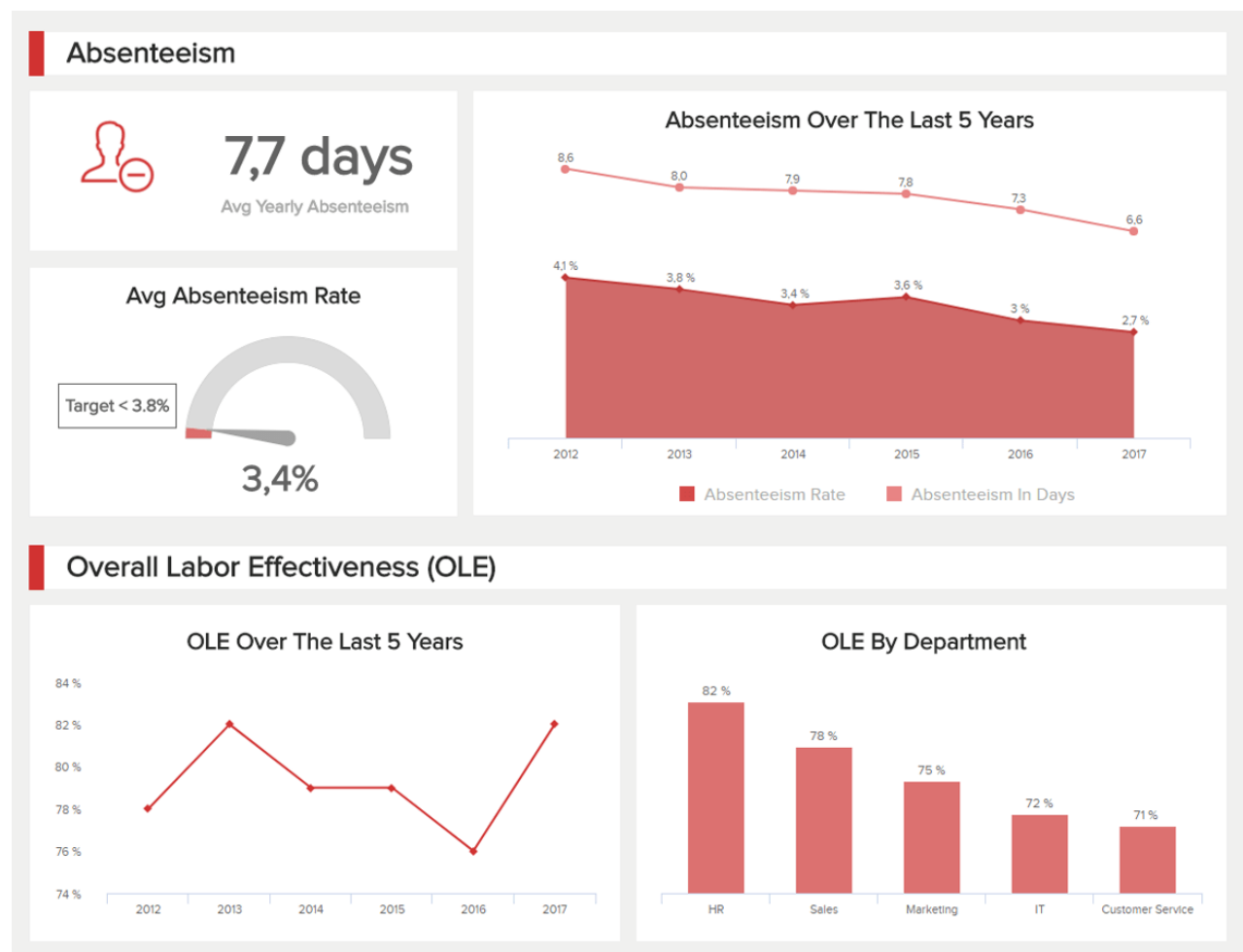
click to enlarge

Our next example of a report is about [human resources analytics](). The HR department needs to track a lot of data such as employee performance and effectiveness. But overall they need to ensure that employees are happy and working in a healthy environment since an unhappy workforce can significantly damage a company. This is all possible with the help of this intuitive dashboard.

Providing a comprehensive mix of metrics, this employee-centric report drills down into every major element needed to ensure successful workforce management. For example, the top portion of the dashboard covers absenteeism in 3 different ways: yearly average, absenteeism rate with a target of 3.8%, and absenteeism over the last 5 years. Tracking absenteeism rates in detail is helpful as it can tell you if your employees are skipping days of work. If the rate is over the expected target, then you need to dig deeper into the reasons and find sustainable solutions.

On the other hand, the second part of the dashboard covers the overall labor effectiveness (OLE). This can be tracked based on specific criteria that HR predefined and it helps them understand if workers are achieving their targets or if they need extra training or help.

5. Management Report
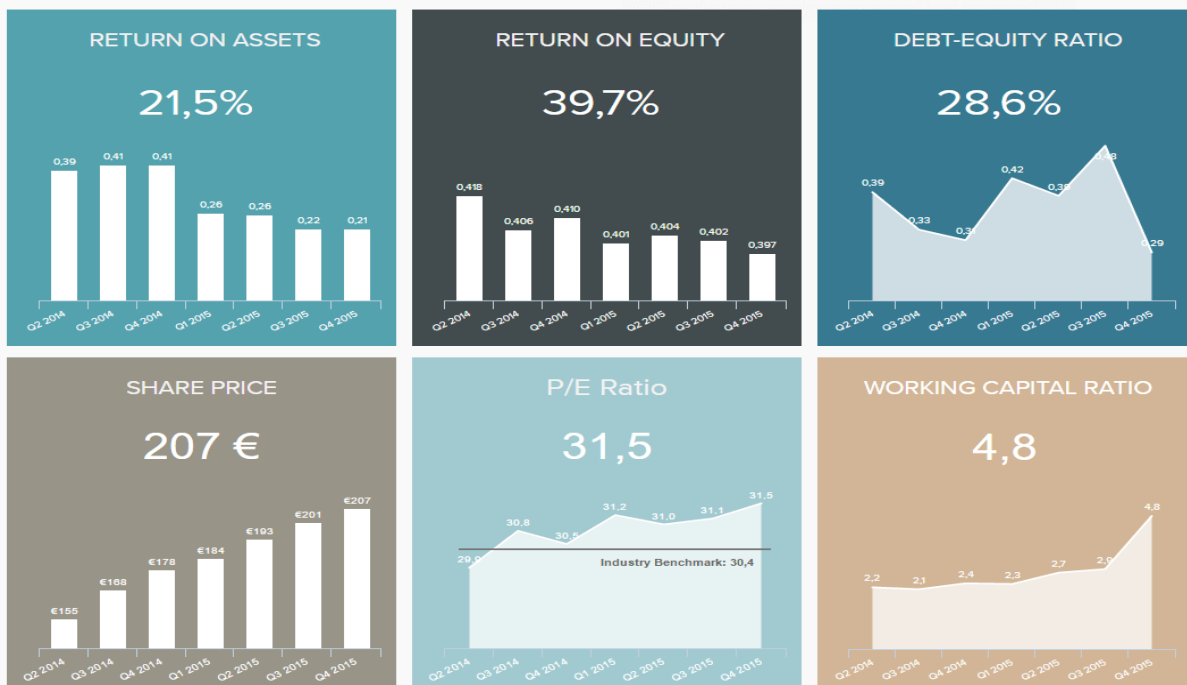
click to enlarge

Managers need to monitor big amounts of information to ensure that the business is running smoothly. One of them being investor relationships. This management dashboard focuses on high-level metrics that shareholders need to look at before investing such as the return on assets, return on equity, debt-equity ratio, and share price, among others.

By getting an overview of these important metrics, investors can easily extract the needed information to make an informed decision regarding an investment in your company. For instance, the return on assets measures how efficiently are the company's assets being used to generate profit. With this information, investors can understand how effectively your company deploys available resources in comparison to others in the market. Another great indicator is the share price, the higher the increase in your share price the more money your shareholders are making from their investment.

6. IT Report
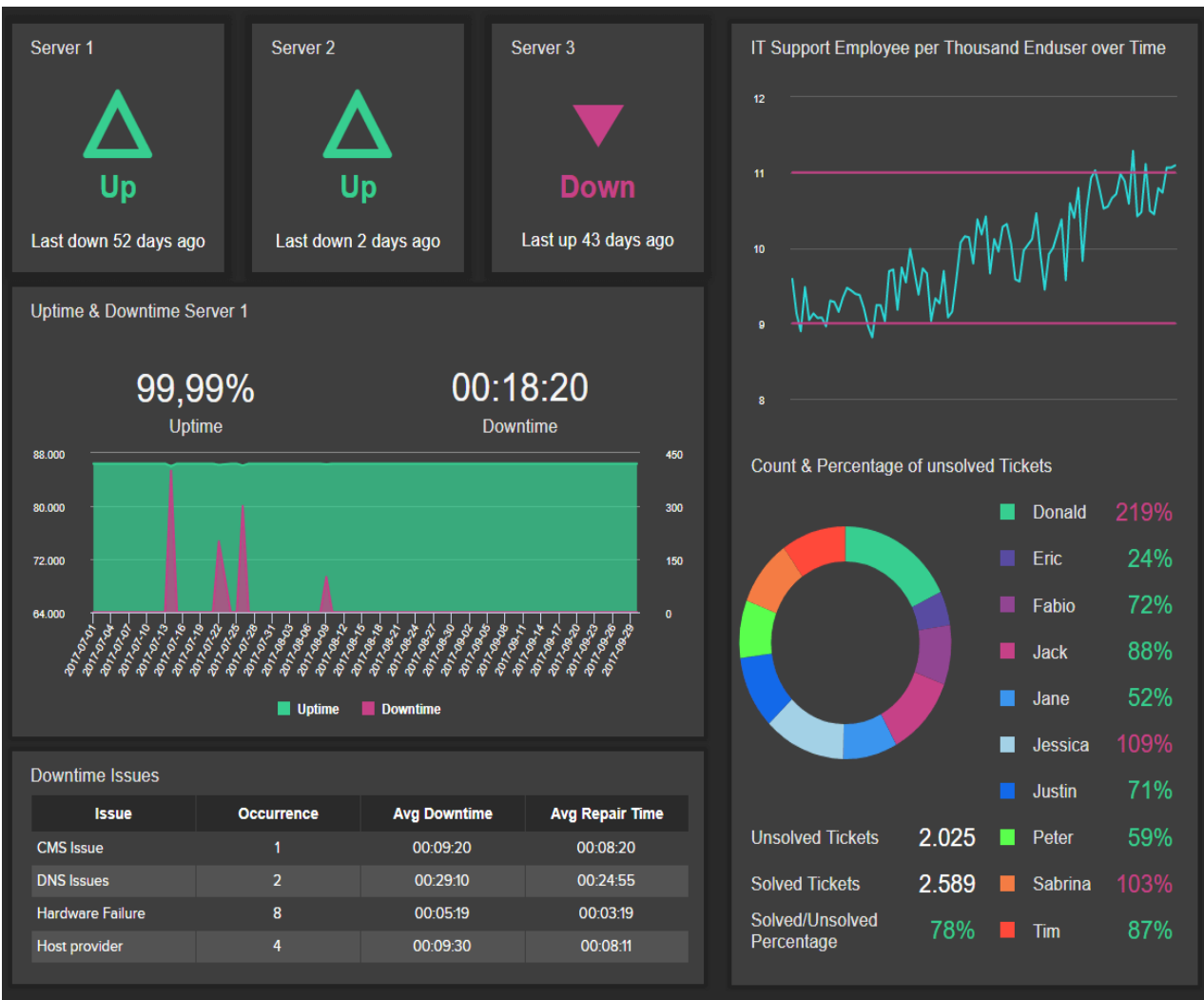
Just like all the other departments and sections covered in this list, the IT department is one that can especially benefit from these types of reports. With so many technical issues to solve, the need for a visual tool to help IT specialists stay on track with all their workload becomes critical.

As seen in the image above, this IT dashboard offers detailed information about different system indicators. For starters, we get a visual overview of the status of each server, followed by a detailed graph displaying the uptime & downtime of each week. This is complemented by the most common downtown issues and some ticket management information. Getting this level of insight helps your IT staff to know what is happening and when it is happening and find proper solutions to avoid these issues from repeating themselves. Keeping constant track of these metrics will ensure robust system performance.

7. Procurement Report
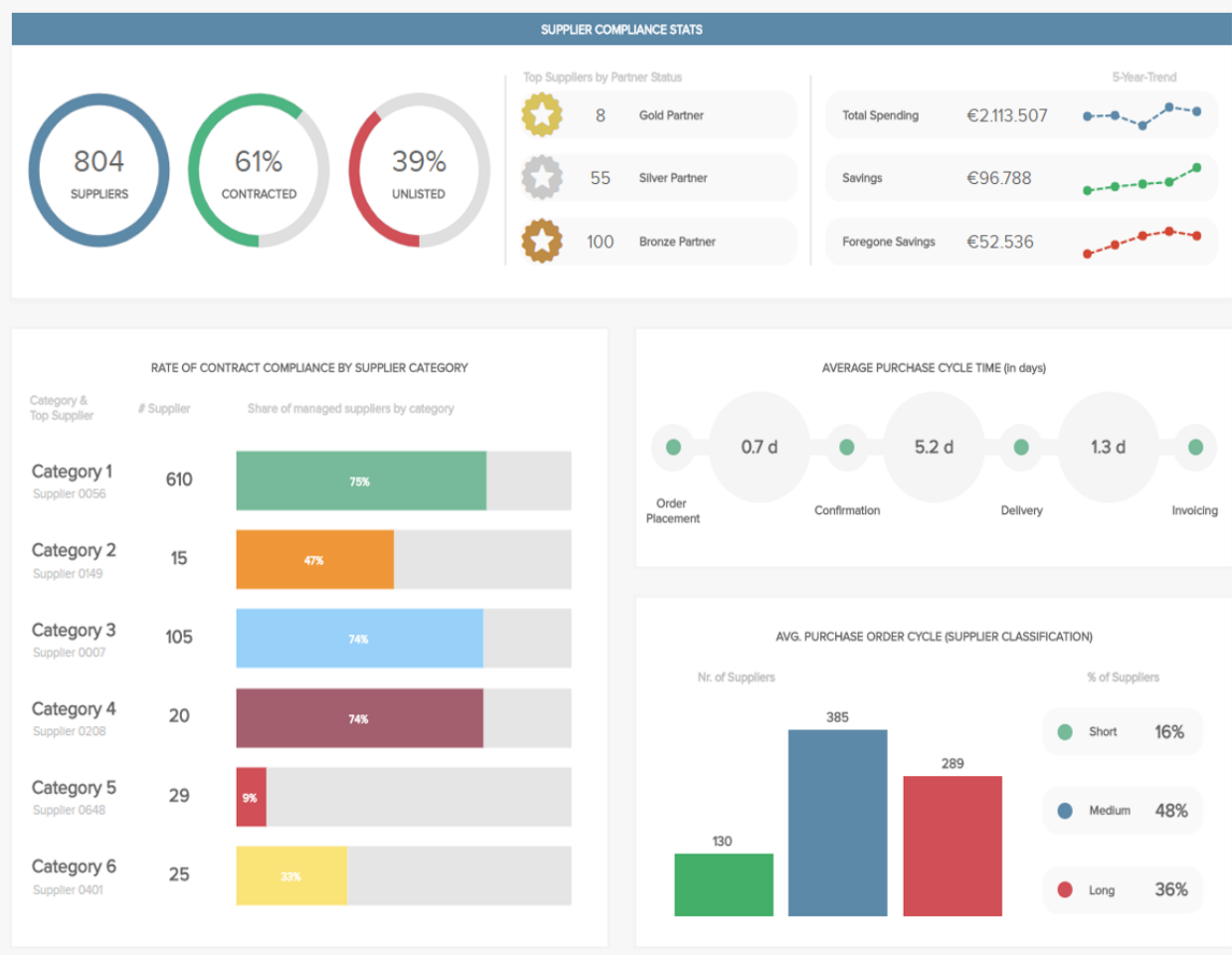
This next example of a report was built with intuitive [procurement analytics software](#) and it gives a general view of various metrics that the procurement department needs to work with on a regular basis.

With the possibility to filter, drill down, and interact with the data, this intuitive [procurement dashboard](#) offers key information to ensure a healthy relationship with suppliers. With metrics such as compliance rate, the number of suppliers, or the purchase order cycle time, the procurement team can classify the different suppliers, define the relationship each of them has with the company, and optimize processes to ensure the company stays profitable.

8. Customer Service Report
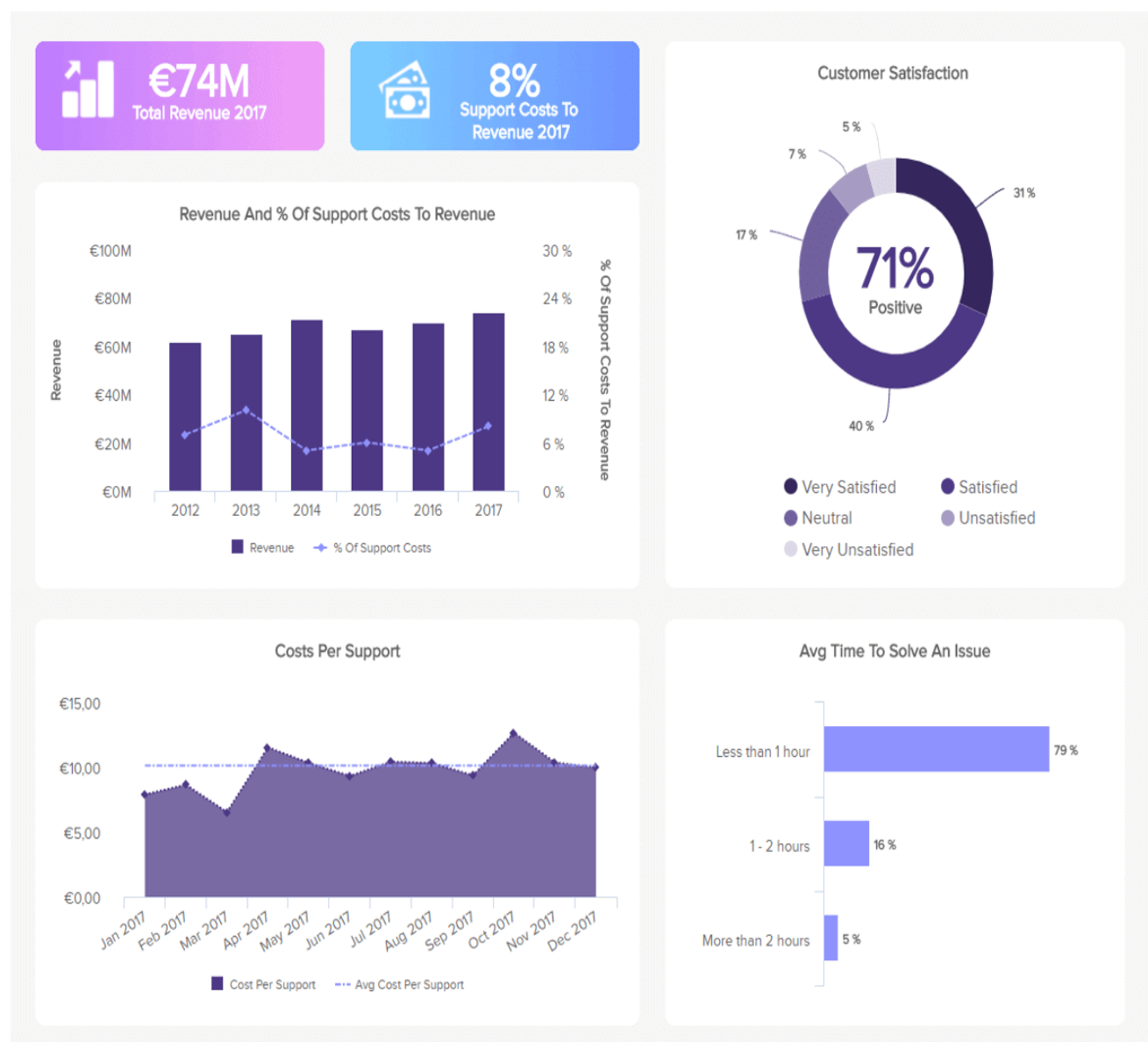
Following our list of examples of reports is one from the support area. Armed with powerful customer service KPIs, this dashboard is a useful tool to monitor performance, spot trends, identify strengths and weaknesses, and improve the overall effectiveness of the customer support department.

Covering aspects such as revenue and costs from customer support as well as customer satisfaction, this complete analysis tool is the perfect tool for managers that need to keep an eye on every little detail from a performance and operational perspective. For example, by monitoring your customer service costs and comparing them to the revenue you can understand if you are investing the right amount into your support processes. This can be directly related to your agent's average time to solve issues, the longer it takes to solve a support ticket the more money it will cost and the less revenue it will bring. If you see that your agents are taking too long to solve an issue you can think of some training instances to help them reduce this number.
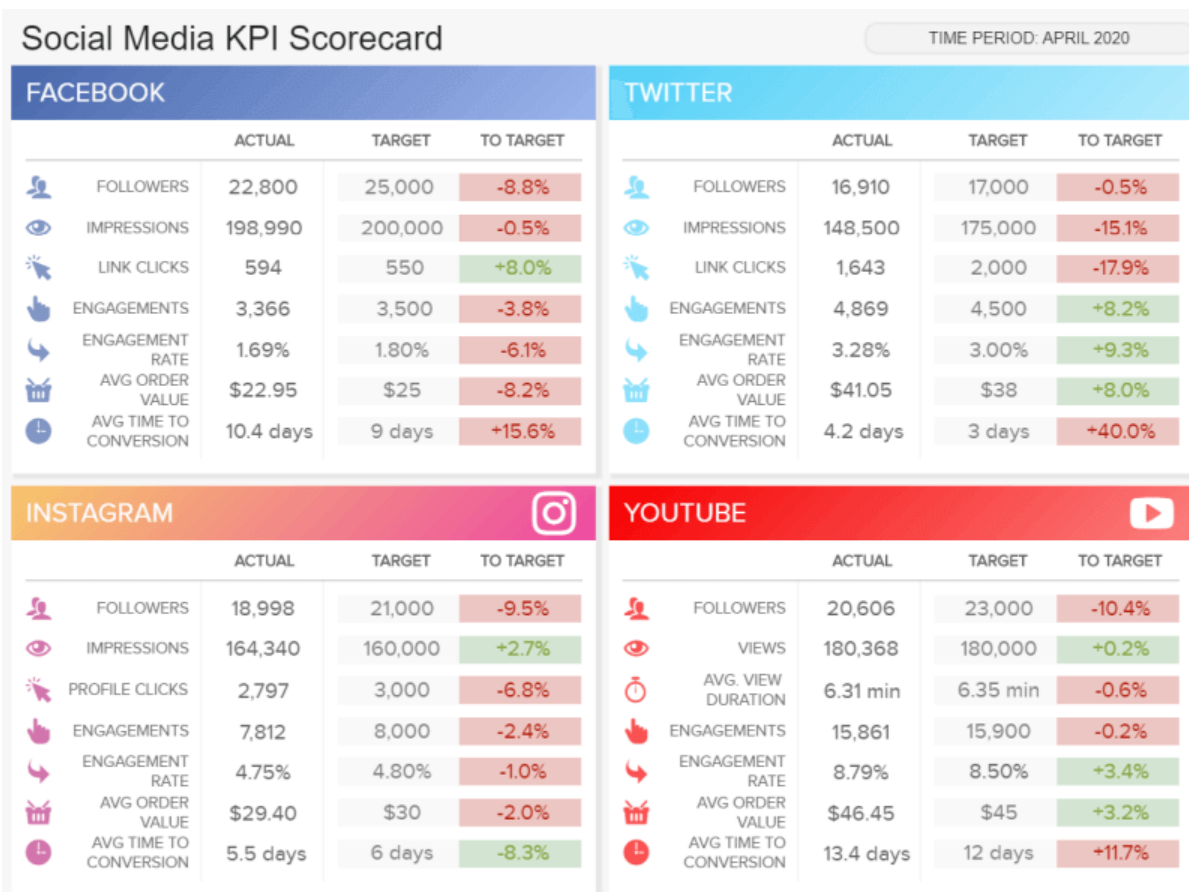
9. Market Research Report
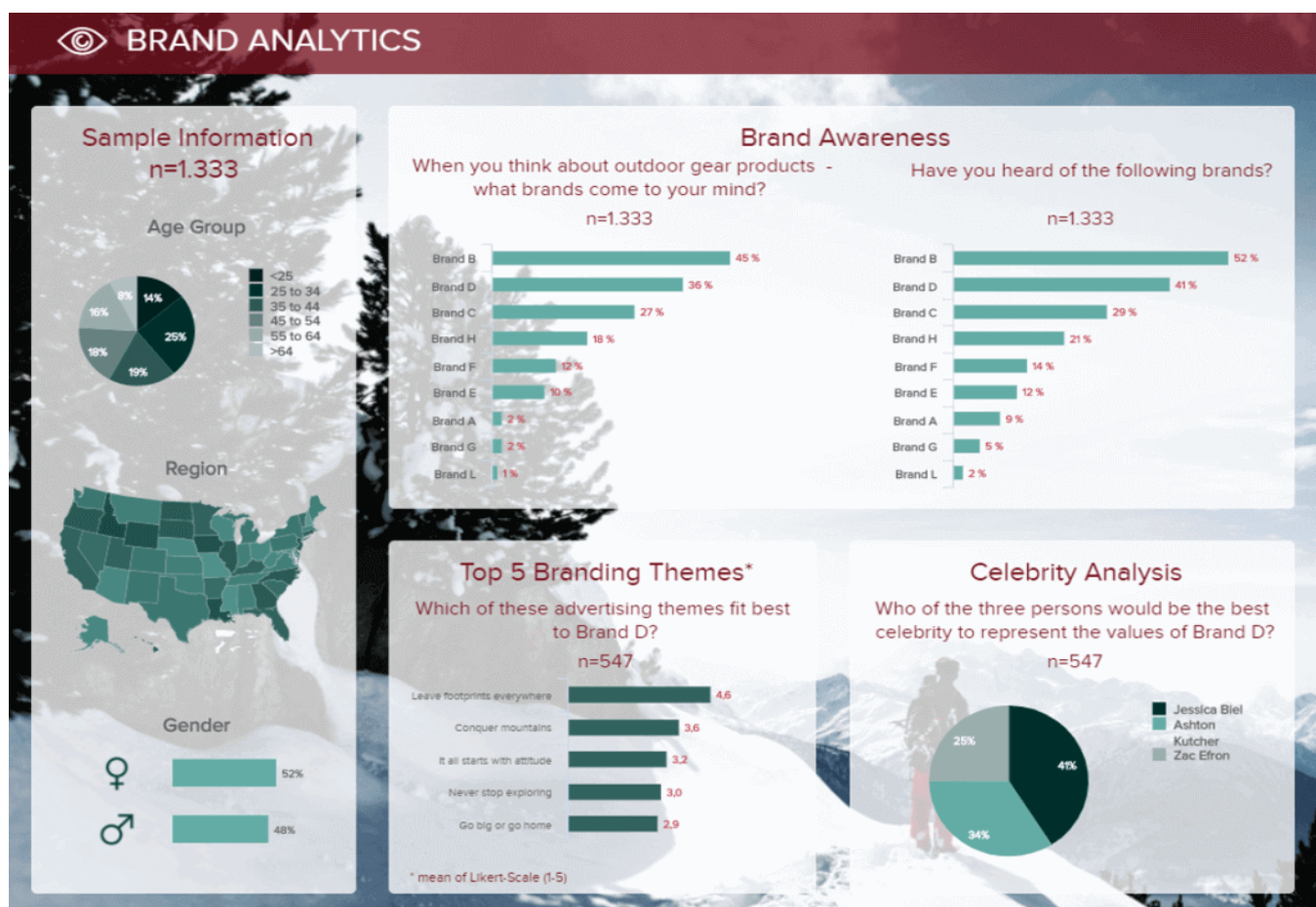
This list of report types examples would not be complete without a [market research report](#). Market research agencies deal with a big amount of information coming from surveys and other research sources. Taking all this into account, the need for reports that can be filtered for deeper interaction becomes more necessary for this industry than any other.

The image above is a brand analytics dashboard that displays the results of a survey about how a brand is perceived by the public. This savvy tool contains different chart types that make it easy to visually understand the information. For instance, the map chart with the different colors lets you quickly understand in which regions each age range is located. The charts can be filtered further to see the detailed answers from each group for a deeper analysis.

10. Social Media Report

Social Media KPI Scorecard

TIME PERIOD: APRIL 2020

FACEBOOK

	ACTUAL	TARGET	TO TARGET
FOLLOWERS	22,800	25,000	-8.8%
IMPRESSIONS	198,990	200,000	-0.5%
LINK CLICKS	594	550	+8.0%
ENGAGEMENTS	3,366	3,500	-3.8%
ENGAGEMENT RATE	1.69%	1.80%	-6.1%
AVG ORDER VALUE	$22.95	$25	-8.2%
AVG TIME TO CONVERSION	10.4 days	9 days	+15.6%

TWITTER

	ACTUAL	TARGET	TO TARGET
FOLLOWERS	16,910	17,000	-0.5%
IMPRESSIONS	148,500	175,000	-15.1%
LINK CLICKS	1,643	2,000	-17.9%
ENGAGEMENTS	4,869	4,500	+8.2%
ENGAGEMENT RATE	3.28%	3.00%	+9.3%
AVG ORDER VALUE	$41.05	$38	+8.0%
AVG TIME TO CONVERSION	4.2 days	3 days	+40.0%

INSTAGRAM

	ACTUAL	TARGET	TO TARGET
FOLLOWERS	18,998	21,000	-9.5%
IMPRESSIONS	164,340	160,000	+2.7%
PROFILE CLICKS	2,797	3,000	-6.8%
ENGAGEMENTS	7,812	8,000	-2.4%
ENGAGEMENT RATE	4.75%	4.80%	-1.0%
AVG ORDER VALUE	$29.40	$30	-2.0%
AVG TIME TO CONVERSION	5.5 days	6 days	-8.3%

YOUTUBE

|	ACTUAL	TARGET	TO TARGET
FOLLOWERS	20,606	23,000	-10.4%
VIEWS	180,368	180,000	+0.2%
AVG. VIEW DURATION	6.31 min	6.35 min	-0.6%
ENGAGEMENTS	15,861	15,900	-0.2%
ENGAGEMENT RATE	8.79%	8.50%	+3.4%
AVG ORDER VALUE	$46.45	$45	+3.2%
AVG TIME TO CONVERSION	13.4 days	12 days	+11.7%

__click to enlarge__

Last but not least, we have a [social media report](#). This scorecard format dashboard monitors the performance of 4 main social media channels: Facebook, Twitter, Instagram, and YouTube and it serves as a perfect visual overview to track the performance of different social media efforts and achievements.

Tracking relevant metrics such as followers, impressions, clicks, engagement rates, and conversions, this report type serves as a perfect progress report to show to managers or clients that need to see the status of their social channels. Each metric is shown in its actual value and compared to a set target. The colors green and red from the fourth column let you quickly understand if a metric is over or under its expected target.

If you feel inspired by this list then we recommend you to take a look at our dashboard examples library where you will find over 80+ templates from different industries, functions, and platforms for extra inspiration!

11. Logistics Report

Logistics are the cornerstone of an operationally fluent and progressive business. If you deal with large quantities of goods and tangible items, in particular, maintaining a solid logistical strategy is vital to ensuring you maintain your brand reputation while keeping things flowing in the right direction.
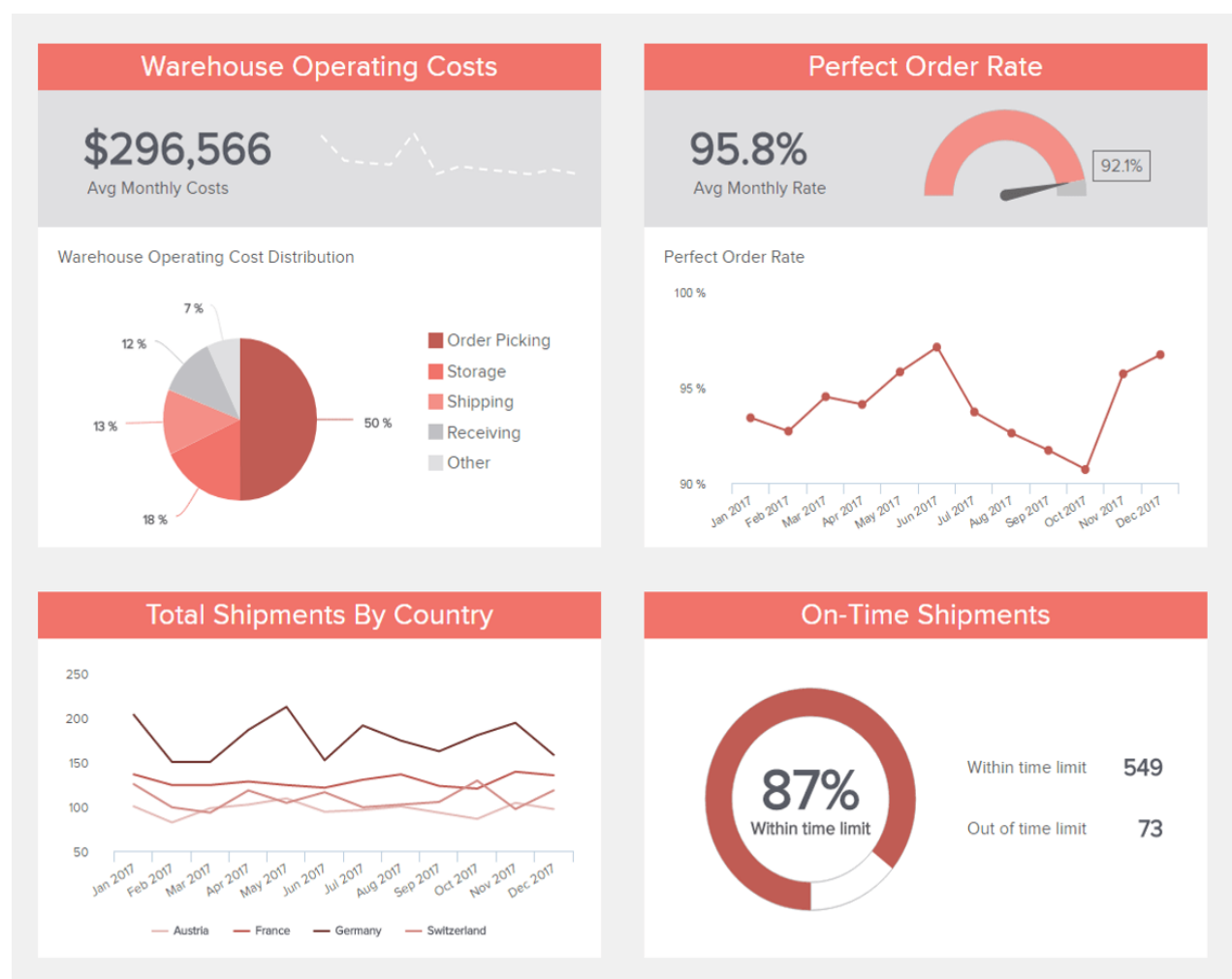
click to enlarge

A prime example of the types of data reporting tool designed to improve logistical management, our [warehouse KPI dashboard](#) is equipped with metrics required to maintain strategic movement while eliminating any unnecessary costs or redundant processes. Here, you can dig into your shipping success rates across regions while accessing warehouse costs and perfect order rates in real time. If you spot any potential inefficiencies, you can track them here and take the correct course of action to refine your strategy. This is an essential tool for any business with a busy or scaling warehouse.

12. Manufacturing Report

Next in our essential types of business reports examples, we're looking at tools made to improve your business's various manufacturing processes.
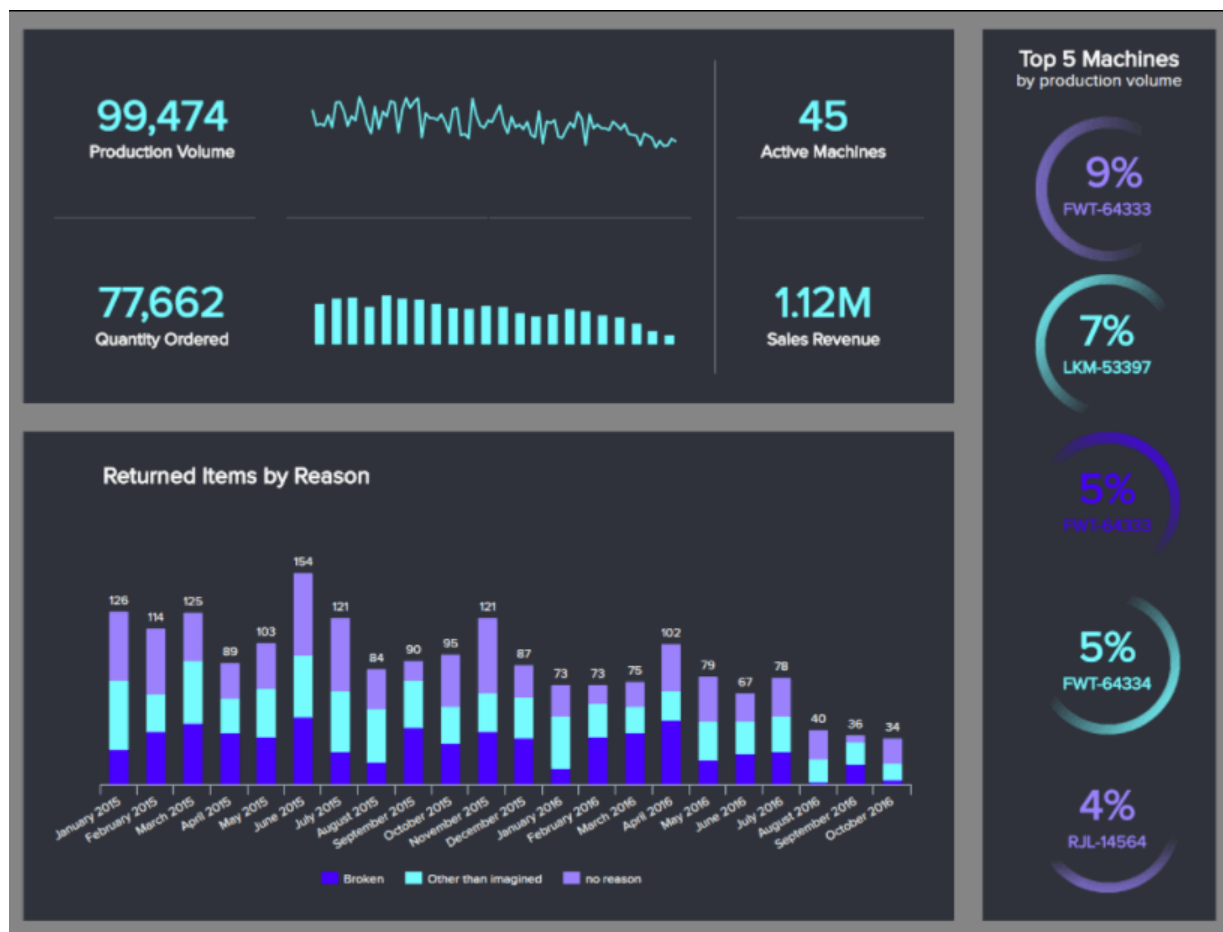
click to enlarge

Our clean and concise production tool is a sight to behold and serves up key [manufacturing KPIs](#) that improve the decision-making process when it comes to costs, volume, and machinery.

Here, you can hone in on historical patterns and trends while connecting with priceless real-time insights that will not only help you make the right calls concerning your manufacturing process at the moment but will also help you formulate predictive strategies that will ultimately save money, boost productivity, and result in top-quality products across the board.
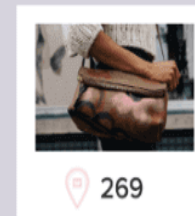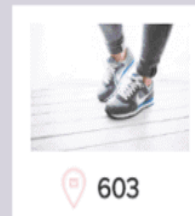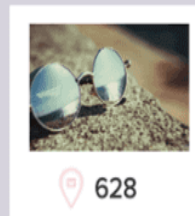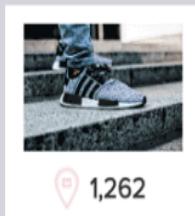
13. Retail Report

As a retailer with so many channels to consider and so many important choices to make, working with the right metrics and visuals is absolutely essential. Fortunately, we live in an age where there are different types of reporting designed for this very reason.
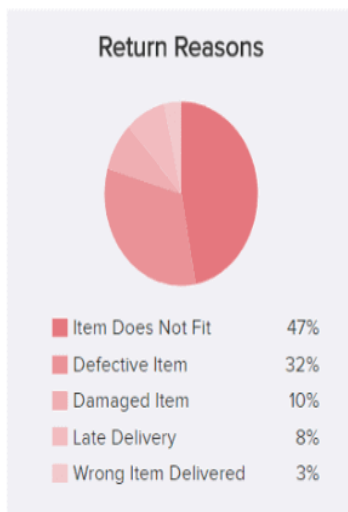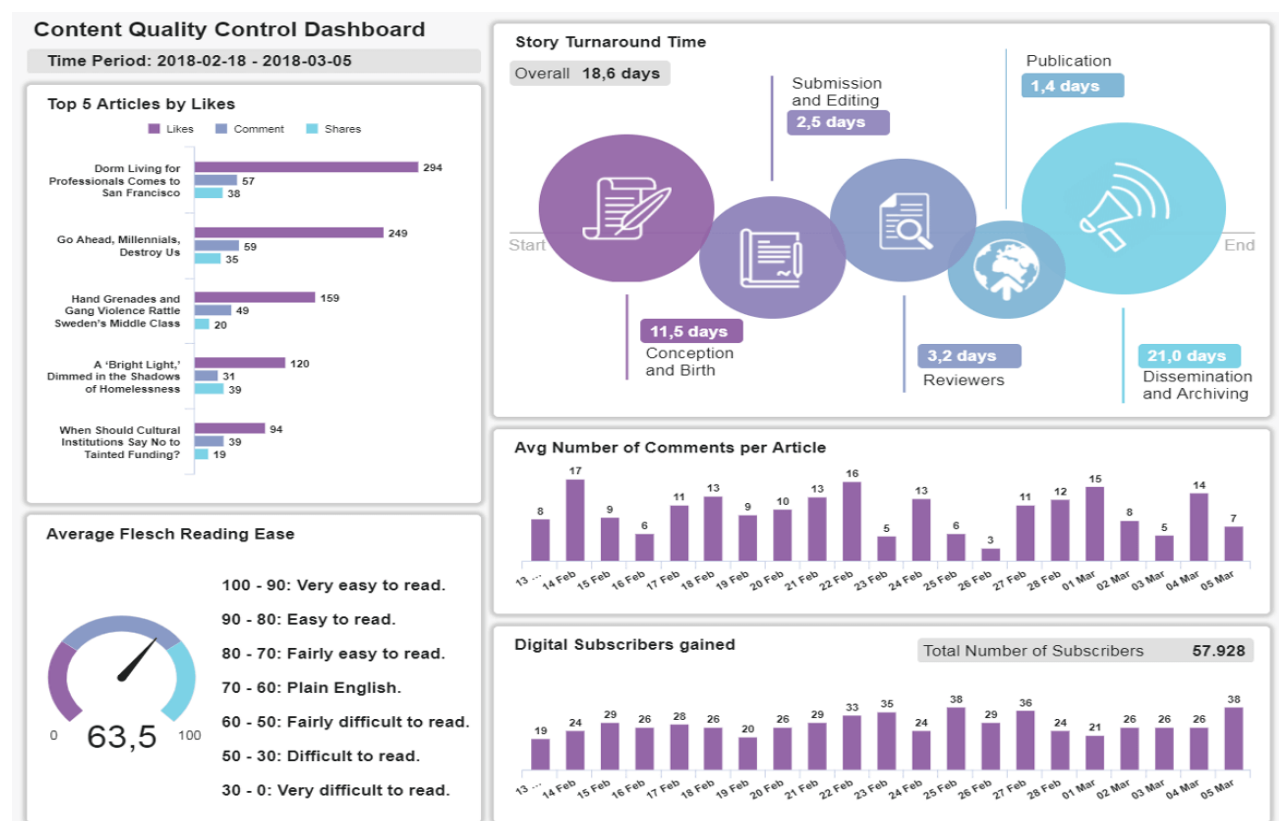

click to enlarge

Our sales and order example, generated with [retail analytics software](#), is a dream come true for retailers as it offers the visual insights needed to understand your product range in greater detail while keeping a firm grip on your order volumes, perfect order rates, and reasons for returns.

By gaining access to this invaluable access in one visually presentable space will allow you to track increases or decreases in orders over a set timeframe (and understand whether you're doing the right things to drive engagement) while plowing your promotional resources into the products that are likely to offer the best returns.

Plus, by gaining an accurate overview of why people are returning your products, you can omit problem items or processes from your retail strategy, improving your brand reputation as well as revenue in the process.

14. Digital Media Report

The content and communications you publish are critical to your ongoing success, regardless of your sector, niche, or specialty. Without putting out communications that speak directly to the right segments of your audience at the right times in their journey, your brand will swiftly fade into the background.
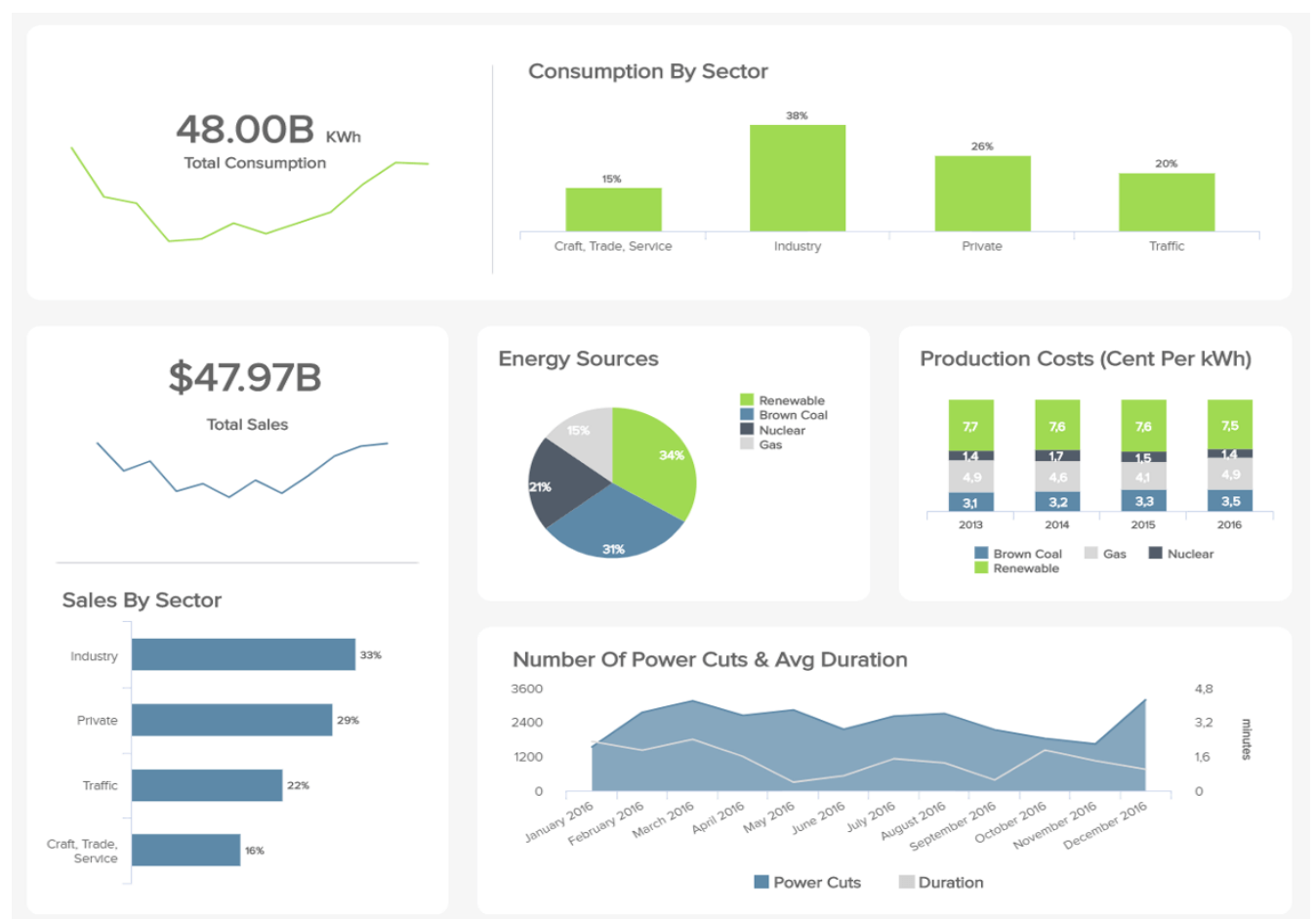

click to enlarge

To ensure your brand remains inspiring, engaging, and thought-leading across channels, working with media types of a business report is essential. You have to ensure your communications cut through the noise and scream 'quality' from start to finish—no ifs, no buts, no exceptions.

Our content quality control tool is designed with a logical hierarchy that will tell you if your content sparks readership if the language you're using is inclusive and conversational, and how much engagement-specific communications earn. You can also check your most engaged articles with a quick glance to understand what your users value most. Armed with this information, you can keep creating content that your audience loves and ultimately drives true value to the business.

15. Energy Report

In the age of sustainability and in the face of international fuel hikes, managing the energy your business uses effectively is paramount. Here there is little room for excess or error and as such, working with the right metrics is the only way to ensure successful energy regulation.

click to enlarge

If your company has a big HQ or multiple sites that require power, our energy management analytics tool will help you take the stress out of managing your resources. One of the most striking features of this dashboard is the fact that it empowers you to compare your company's energy usage against those from other sectors and set an accurate benchmark.

Here, you can also get a digestible breakdown of your various production costs in terms of energy consumption as well as the main sources you use to keep your organization running. Regularly consulting these metrics will not only help you save colossal chunks of your budget, but it will also give you the intelligence to become more sustainable as an organization. This, in turn, is good for the planet as well as your brand reputation. A real win-win-win.

Your Chance: [Want to test a modern reporting software for free?](#) Try our 14-day free trial & start building interactive reports today!

Types Of Reporting For Every Business & Purpose

As we've seen throughout our journey, there are different report formats that are used by businesses for diverse purposes in their everyday activities. Whether you're talking about types of reports in research, types of reports in management, or anything in between, these dynamic tools will get you where you need to be (and beyond).

In this post, we covered the top 14 most common ones and explored key examples of how different report types are changing the way businesses are leveraging their most critical insights for internal efficiency and ultimately, external success.

With modern tools and solutions, reporting doesn't have to be a tedious task. Anyone in your organization can rely on data for their decision-making process without the need for technical skills. Rather you want to keep your team connected or show progress to investors or clients. There is a report type for the job. To keep your mind fresh, here are the top 14 types of data reports covered in this post:

1. Informational reports
2. Analytical reports
3. Operational reports
4. Product reports
5. Industry reports
6. Department reports
7. Progress reports
8. Internal reports
9. External reports
10. Vertical and lateral reports

3.5 INTRODUCTION TO TECHNICAL PROPOSALS WRITING AND TYPES

What is a technical proposal?

A technical proposal is a type of document that outlines the precise details of a proposed product or service.

This document may contain any of the following:

- Technical requirements

- Design considerations

- Functional specifications

- Bills of materials

- Overall cost estimation

Technical proposals are often tailored for specific projects and must be comprehensive in order to be successful.

In addition to outlining the core elements of the project, a technical proposal should also include supporting evidence such as data from research studies or reports from industry experts.

By leveraging data and professional experience in a precise way, a technical proposal introduces products and initiatives while also explaining how they address the recipient's problem and the company's execution plan.

While this type of proposal is often brief, it can quickly become very complex.

While writing, remember that the proposal needs to explain a complex product in relatively simple terms.

What is technical proposal writing?

Technical proposal writing is translating technical requirements into a customer-facing proposal used to pitch your solution or offerings.

Considering the situation in which your proposal occurred and depending on its nature, technical proposal writing might encompass only a small section of the proposal — particularly regarding project execution, the intended scope of work, and the equipment or materials involved.

Types of technical proposals

There are four main types of proposals.

Types of technical proposals

Solicited proposals

Unsolicited proposals

External proposals

Internal proposals

When writing a technical proposal, the type of proposal you intend to write will have a major impact on the technicalities you should provide and the language you need to use in order to win the contract.

1. Solicited proposals

Solicited proposals are proposals that have been requested from another party.

A potential client or project stakeholder has reached out to your team or business and requested information on how you might solve a problem.

2. Unsolicited proposals

Unsolicited proposals are proposals that you have arranged and sent based on a need or opportunity that you have discovered.

Rather than being ask, your business has approached an organization with the intent to provide a product or a service.

3. External proposals

External proposals are sent to an individual or company external to your own organization.

These proposals will rely on details, information, and project specifications from the external party and are usually done for profit.

4. Internal proposals

Internal proposals are used to pitch projects, ideas, and initiatives to stakeholders within your own organization.

These initiatives could include changes in policy, new modes of business operation, or ventures into a new sector of business.

They are not usually done for profit, aside from budget allocations and financial approvals within the company.

Each of these proposals can be technical in nature, depending on the type of business and the work that needs to be done.

Often, technical proposals are created in [response to a request for proposal (RFP) document](#), which outlines the need of the organization and the requirements or specifications that any solution must entail.

Internal requests don't often contain formal RFP documents, but proposals may be created in response to a summary list of needs (sometimes sent via email or discovered through meetings and internal conversations).

In some sense, any kind of proposal you write has the potential to be a technical proposal. However, some proposals will be more technical than others.

Here's a closer look at several common proposal types and how they may be written in a technical way.

5. Business proposal or sales proposal

[Sales proposals](#) and [business proposals](#) are external documents delivered to buyers or consumers outside of the company.

They vary greatly in style and form, ranging from [short, one-page proposals](#) to [full-length, detailed documents](#) that offer much greater specificity.

At the short end, these types of proposals can be very simple.

However, when the external organization requires very specific solutions or the project is very competitive, a greater level of technical expertise may be required to explain why your organization should win the contract.

The RFP for a project may also require technical documentation that demonstrates how a solution will work, including details surrounding past successes, expected results, and statements of work detailing what must be done.

The stakeholder may need to know about key personnel involved, the equipment or facilities you intend to you to complete the project, and much more.

As the requirements begin to accumulate, you may find yourself supplying highly technical documentation in the middle of your sales or business proposal!

However, though the documentation may be complex, it is often repeatable.

In fact, most organizations that rely on RFPs as a means of profit use proposal template software tools like the PandaDoc content library and document builder to accelerate the speed at which proposals can be compiled and sent.

See our solution in action

Transform your workflow with a PandaDoc demo. See how to create and customize your technical proposals.

Book your demo
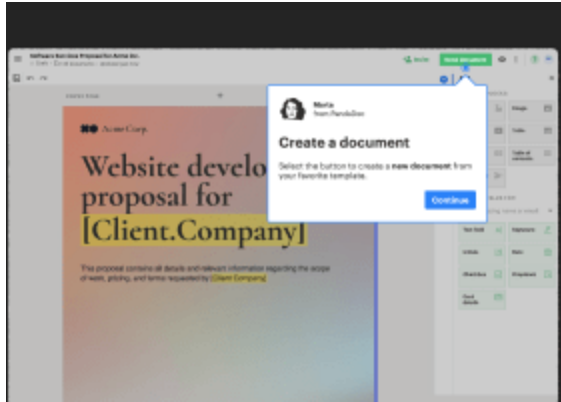
6. Research proposals

A research proposal is a document outlining the scope of a project, including the research questions or hypotheses to be answered, the methodology, and any potential outcomes.

It may also include a budget estimate for conducting the research work and an indication of how much time it will take to complete.

These proposals are most common in academia and in the non-profit sector, where funding may come from external sources like foundational or government grants.

In this case, the grant-providing organization will typically post a call for project submissions based on a theme or initiative, then fund projects that further their organizational directives.

Because of the competition surrounding these projects and the specific nature of the research, these proposals can become very technical in very short order.

(Check out our research proposal template for a comprehensive proposal layout that you can use for your next research project.)

Winning research proposals need to explain, often in a technical manner, why a project is important, how it aligns with organizational goals, the nature of the work involved, and how that work will be performed.

It must be carefully planned out and written with precision so that all stakeholders can understand its purpose and assess whether or not it should receive their support.

See also

[Research] 5 ways to increase the close rate of your proposal

7. Real estate development

Designing even a single building can quickly become a multimillion dollar project, so you won't have to go very far in this field to begin feeling the pressure for technical details.

Real estate development proposals (template here) need to cover aspects of construction, suppliers, government regulations, and more.

It needs to have solid construction timelines, specify what materials will be used, where those materials will be sourced, how projects will be financed, and more.

All aspects of a project like this require a measure of technical expertise.

Because these projects are typically financed by a bank or similar third-party backer, major development projects will be heavily scrutinized for flaws and cost-saving opportunities.

3.6 SCIENTIFIC WRITING PROCESS

 (PDF IS THERE)

3.7 VOICES AND REPORTED SPEECH

What Is Reported Speech?

Reported speech is the form in which one can convey a message said by oneself or someone else, mostly in the past. It can also be said to be the third person view of what someone has said. In this form of speech, you need not use quotation marks as you are not quoting the exact words spoken by the speaker, but just conveying the message.

Now, take a look at the following dictionary definitions for a clearer idea of what it is.

Definition of Reported Speech

Reported speech, according to the Oxford Learner's Dictionary, is defined as "a report of what somebody has said that does not use their exact words." The Collins Dictionary defines reported speech as "speech which tells you what someone said, but does not use the person's actual words." According to the Cambridge Dictionary, reported speech is defined as "the act of reporting something that was said, but not using exactly the same words." The Macmillan Dictionary defines reported speech as "the words that you use to report what someone else has said."

Rules to be Followed When Using Reported Speech

Reported speech is a little different from direct speech. As it has been discussed already, reported speech is used to tell what someone said and does not use the exact words of the speaker. Take a look at the following rules so that you can make use of reported speech effectively.

- The first thing you have to keep in mind is that you need not use any quotation marks as you are not using the exact words of the speaker.
- You can use the following formula to construct a sentence in the reported speech.

Subject said that (report whatever the speaker said)

- You can use verbs like said, asked, requested, ordered, complained, exclaimed, screamed, told, etc. If you are just reporting a declarative sentence, you can use verbs like told, said, etc. followed by 'that' and end the sentence with a full stop. When you are reporting interrogative sentences, you can use the verbs – enquired, inquired, asked, etc. and remove the question mark. In case you are reporting imperative sentences, you can use verbs like requested, commanded, pleaded, ordered, etc. If you are reporting exclamatory sentences, you can use the verb exclaimed and remove the exclamation mark. Remember that the structure of the sentences also changes accordingly.
- Furthermore, keep in mind that the sentence structure, tense, pronouns, modal verbs, some specific adverbs of place and adverbs of time change when a sentence is transformed into indirect/reported speech.

Transforming Direct Speech into Reported Speech

As discussed earlier, when transforming a sentence from direct speech into reported speech, you will have to change the pronouns, tense and adverbs of time and place used by the speaker. Let us look at the following tables to see how they work.

Table 1 – Change of Pronouns

Direct Speech	Reported Speech
I	He, she
Me	Him, her
We	They
Us	Them
You	He, she, they
You	Him, her, them
My	His, her

Mine	His, hers
Our	Their
Ours	Theirs
Your	His, her, their
Yours	His, hers, theirs

Table 2 – Change of Adverbs of Place and Adverbs of Time

Direct Speech	Reported Speech
This	That
These	Those
Adverbs of Place	
Here	There
Adverbs of Time	
Now	Then
Today	That day
Tomorrow	The next day / The following day

Yesterday	The previous day
Tonight	That night
Last week	The week before
Next week	The week after
Last month	The previous month
Next month	The following month
Last year	The previous year
Next year	The following year
Ago	Before
Thus	So

Table 3 – Change of Tense

Direct Speech	Reported Speech
Simple Present Example: Preethi said, "I cook pasta."	Simple Past Example: Preethi said that she cooked pasta.
Present Continuous Example: Preethi said, "I am cooking pasta."	Past Continuous Example: Preethi said that she was cooking pasta.
Present Perfect	Past Perfect

Example: Preethi said, "I have cooked pasta."	Example: Preethi said that she had cooked pasta.
Present Perfect Example: Preethi said, "I have been cooking pasta."	Past Perfect Continuous Example: Preethi said that she had been cooking pasta.
Simple Past Example: Preethi said, "I cooked pasta."	Past Perfect Example: Preethi said that she had cooked pasta.
Past Continuous Example: Preethi said, "I was cooking pasta."	Past Perfect Continuous Example: Preethi said that she had been cooking pasta.
Past Perfect Example: Preethi said, "I had cooked pasta."	Past Perfect (No change) Example: Preethi said that she had cooked pasta.
Past Perfect Continuous Example: Preethi said, "I had been cooking pasta."	Past Perfect Continuous (No change) Example: Preethi said that she had been cooking pasta.

Table 4 – Change of Modal Verbs

Direct Speech	Reported Speech
Will	Would
May	Might
Can	Could
Shall	Should

Has/Have	Had

Tips to Practise Reported Speech

Here are some tips you can follow to become a pro in using reported speech.

- Select a play, a drama or a short story with dialogues and try transforming the sentences in direct speech into reported speech.
- Write about an incident or speak about a day in your life using reported speech.
- Develop a story by following prompts or on your own using reported speech.

Examples of Reported Speech

Given below are a few examples to show you how reported speech can be written. Check them out.

- Santana said that she would be auditioning for the lead role in *Funny Girl.*
- Blaine requested us to help him with the algebraic equations.
- Karishma asked me if I knew where her car keys were.
- The judges announced that the Warblers were the winners of the annual acapella competition.
- Binsha assured that she would reach Bangalore by 8 p.m.
- Kumar said that he had gone to the doctor the previous day.
- Lakshmi asked Teena if she would accompany her to the railway station.
- Jibin told me that he would help me out after lunch.
- The police ordered everyone to leave from the bus stop immediately.
- Rahul said that he was drawing a caricature.

(PLAY THE video)