# Introduction

The word analytics has come into the foreground in last decade or so. The increase of the internet and information technology has made analytics very relevant in the current age. Analytics is a field which combines data, information technology, statistical analysis, quantitative methods and computer-based models into one.

This all are combined to provide decision makers all the possible scenarios to make a well thought and researched decision. The computer-based model ensures that decision makers are able to see performance of decision under various scenarios.

# Meaning

Business analytics (BA) is a set of disciplines and technologies for solving business problems using data analysis, statistical models and other quantitative methods. It involves an [iterative,](https://www.techtarget.com/searchsoftwarequality/definition/iterative) methodical exploration of an organization's data, with an emphasis on statistical analysis, to drive decision-making.

At its core, business analytics involves a combination of the following:

* + identifying new patterns and relationships with data mining;
  + using quantitative and statistical analysis to design business models;
  + conducting A/B and multi-variable testing based on findings;
  + forecasting future business needs, performance, and industry trends with predictive modelling; and
  + Communicating your findings in easy-to-digest reports to colleagues, management, and customers.

# Definition

* **Business analytics** (**BA**) refers to the skills, technologies, and practices for continuous iterative exploration and investigation of past [business](https://en.wikipedia.org/wiki/Business) performance to gain insight and drive business planning. Business analytics focuses on developing new insights and understanding of business performance based on [data](https://en.wikipedia.org/wiki/Data) and [statistical](https://en.wikipedia.org/wiki/Statistics) [methods.](https://en.wikipedia.org/wiki/Statistics)
* **Business Analytics** is the process of transforming data into insights to improve business decisions. Data management, data visualization, predictive modelling, data

mining, forecasting simulation, and optimization are some of the tools used to create insights from data.

# Scope of Business Analytics

**Business analytics has a wide range of application and usages**. It can be used for descriptive analysis in which data is utilized to understand past and present situation. This kind of descriptive analysis is used to asses’ current market position of the company and effectiveness of previous business decision.

It is used for predictive analysis, which is typical used to asses’ previous business performance.

Business analytics is also used for prescriptive analysis, which is utilized to formulate optimization techniques for stronger business performance.

**For example,** business analytics is used to determine pricing of various products in a departmental store based past and present set of information.

# How business analytics works

Before any data analysis takes place, BA starts with several foundational processes:

* + - Determine the business goal of the analysis.
    - Select an analysis methodology.
    - Get business data to support the analysis, often from various systems and sources.
    - Cleanse and integrate data into a single repository, such as a [data warehouse](https://www.techtarget.com/searchdatamanagement/definition/data-warehouse) or [data](https://www.techtarget.com/searchdatamanagement/definition/data-mart) [mart](https://www.techtarget.com/searchdatamanagement/definition/data-mart).

# Essentials of business analytics

Business analytics has many use cases, but when it comes to commercial organizations, BA is typically used to:

* Analyze data from a variety of sources. This could be anything from cloud applications to marketing automation tools and CRM software.

# Need/Importance of Business Analytics

* + **Business analytics is a methodology or tool to make a sound commercial decision**. Hence it impacts functioning of the whole organization. Therefore, business analytics can help improve profitability of the business, increase market share and revenue and provide better return to a shareholder.
  + Facilitates better understanding of available primary and secondary data, which again affect operational efficiency of several departments.
  + Provides a competitive advantage to companies. In this digital age flow of information is almost equal to all the players. It is how this information is utilized makes the company competitive. Business analytics combines available data with various well thought models to improve business decisions.
  + Converts available data into valuable information. This information can be presented in any required format, comfortable to the decision maker.

For starters, business analytics is the tool your company needs to make accurate decisions. These decisions are likely to impact your entire organization as they help you to improve profitability, increase market share, and provide a greater return to potential shareholders.

While some companies are unsure what to do with large amounts of data, business analytics works to combine this data with actionable insights to improve the decisions you make as a company

Essentially, the four main ways business analytics is important, no matter the industry, are:

* + Improves performance by giving your business a clear picture of what is and isn’t working
  + Provides faster and more accurate decisions
  + Minimizes risks as it helps a business make the right choices regarding consumer behaviour, trends, and performance
  + Inspires change and innovation by answering questions about the consumer.

* Use advanced analytics and statistics to find patterns within datasets. These patterns can help you predict trends in the future and access new insights about the consumer and their behaviour.
* Monitor KPIs and trends as they change in real-time. This makes it easy for businesses to not only have their data in one place but to also come to conclusions quickly and accurately.
* Support decisions based on the most current information. With BA providing such a vast amount of data that you can use to back up your decisions, you can be sure that you are fully informed for not one, but several different scenarios.

# Benefits of implementing BA in your organization

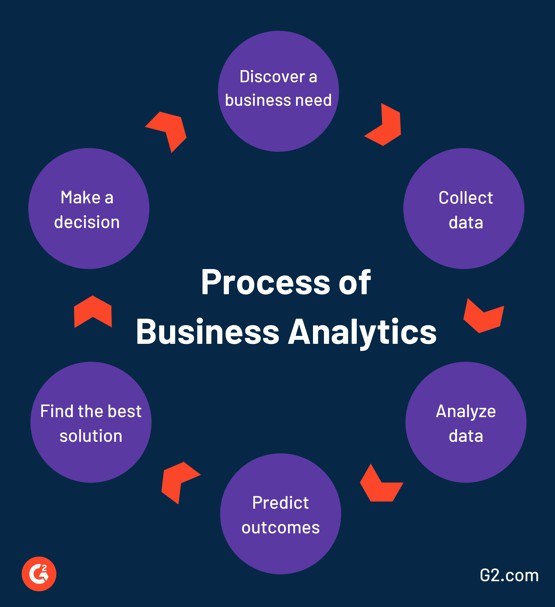
Apart from having applications in various arenas, following are the benefits of Business Analytics and its impact on business –

* + Accurately transferring information
  + Consequent improvement in efficiency
  + Help portray Future Challenges
  + Make Strategic decisions
  + As a perfect blend of data science and analytics
  + Reduction in Costs
  + Improved Decisions
  + Share information with a larger audience
  + Ease in Sharing information with stakeholders

# Challenges

Moreover, any technology is subject to its own set of problems and challenges. Following are the challenges in implementing business analytics in an organization.

* + Lack of technical skills in employees
  + Fuss over acceptance of BA by staff
  + Data Security and Maintenance
  + Integrity of Data
  + Delivering relevant information in the given time
  + Inability to address complex issues
  + Costs involved in implementing BA
  + Investment of staff time in implementation of BA
  + Lack of a proper strategy to implement BA
* Business analytics can be possible only on large volume of data. It is sometime difficult obtain large volume of data and not question its integrity.
* Business analytics depends on sufficient volumes of high-quality data.
* The difficulty in ensuring data quality is integrating and reconciling data across different systems, and then deciding what subsets of data to make available.
* Previously, analytics was considered a type of after-the-fact method of [forecasting](https://en.wikipedia.org/wiki/Forecasting) [consumer behaviour](https://en.wikipedia.org/wiki/Consumer_behavior) by examining the number of units sold in the last quarter or the last year. This type of data warehousing required a lot more storage space than it did speed.
* Now business analytics is becoming a tool that can influence the outcome of customer interactions. When a specific customer type is considering a purchase, an analytics- enabled enterprise can modify the sales pitch to appeal to that consumer. This means the storage space for all that data must react extremely fast to provide the necessary data in real-time.



# Application

Business analytics has a wide range of application from [customer relationship](https://www.managementstudyguide.com/customer-relationship-management.htm) [management,](https://www.managementstudyguide.com/customer-relationship-management.htm) [financial management](https://www.managementstudyguide.com/financial-management.htm), and [marketing,](https://www.managementstudyguide.com/marketing-for-21st-century.htm) [supply-chain management](https://www.managementstudyguide.com/supply-chain-management-definition.htm), [human-](https://www.managementstudyguide.com/human-resource-management.htm) [resource management](https://www.managementstudyguide.com/human-resource-management.htm), pricing and even in sports through team game strategies.

In healthcare, business analysis can be used to operate and manage clinical information systems. It can transform medical data from a bewildering array of analytical methods into useful information. Data analysis can also be used to generate contemporary reporting systems which include the patient's latest key indicators, historical trends and reference values.

* + **Decision analytics**: supports human decisions with visual analytics that the user models to reflect reasoning.
  + **Descriptive analytics:** gains insight from historical data with [reporting,](https://en.wikipedia.org/wiki/Reporting_(disambiguation)) scorecards, [clustering](https://en.wikipedia.org/wiki/Cluster_analysis) etc.
  + [**Predictive analytics**](https://en.wikipedia.org/wiki/Predictive_analytics)**:** employs [predictive modelling](https://en.wikipedia.org/wiki/Predictive_modelling) using statistical and [machine](https://en.wikipedia.org/wiki/Machine_learning) [learning](https://en.wikipedia.org/wiki/Machine_learning) techniques
  + [**Prescriptive analytics**](https://en.wikipedia.org/wiki/Prescriptive_analytics)**:** recommends decisions using optimization, simulation, etc.
  + [Behavioural analytics](https://en.wikipedia.org/wiki/Behavioral_analytics)
  + [Cohort analysis](https://en.wikipedia.org/wiki/Cohort_analysis)
  + Competitor analysis
  + Cyber analytics
  + [Enterprise optimization](https://en.wikipedia.org/wiki/Enterprise_optimization)
  + [Financial services](https://en.wikipedia.org/wiki/Financial_service) analytics
  + [Fraud](https://en.wikipedia.org/wiki/Fraud) analytics
  + [Health care analytics](https://en.wikipedia.org/wiki/Health_care_analytics)
  + Key Performance Indicators (KPI's)
  + [Marketing](https://en.wikipedia.org/wiki/Marketing) analytics
  + [Pricing](https://en.wikipedia.org/wiki/Pricing) analytics
  + [Retail sales](https://en.wikipedia.org/wiki/Retail_sales) analytics
  + [Risk & Credit](https://en.wikipedia.org/wiki/Credit_risk) analytics
  + [Supply chain](https://en.wikipedia.org/wiki/Supply_chain) analytics
  + [Talent](https://en.wikipedia.org/wiki/Aptitude) analytics
  + [Telecommunications](https://en.wikipedia.org/wiki/Telecommunications)
  + [Transportation](https://en.wikipedia.org/wiki/Transportation) analytics
  + [Customer Journey](https://en.wikipedia.org/wiki/Customer_journey) Analytics
  + [Market Basket Analysis](https://en.wikipedia.org/wiki/Market_Basket_Analysis)

## Business Analytics: Definition and Its Applications

[**Business analytics**](https://intellipaat.com/blog/what-is-business-analytics/)is also known as data analytics. It is a process of collecting, evaluating, and drawing valuable outcomes from the enormous amount of data available. Business analytics is widely used in the following applications:

* + Finance
  + Marketing
  + HR
  + CRM
  + Manufacturing
  + Banking and Credit Cards

Business analytics is performed by Data Scientists and Data Analysts.

# Business Analytics

* + It aims at data and reporting.
  + It is widely practiced to reckon further stats and make decisions to bring improvements in the business.
  + Here, the tasks are carried out by Data Scientists and Data Analysts.
  + Mathematical, statistical, and programming skills are needed for executing business analytics.
  + The architectural domains for business analytics include data architecture, technology architecture, and information architecture.

# Types of Business Analytics

There are mainly four types of Business Analytics, each of these types are increasingly complex. They allow us to be closer to achieving real-time and future situation insight application. Each of these types of business analytics have been discussed below.

1. **Descriptive Analytics**
2. **Diagnostic Analytics**
3. **Predictive Analytics**
4. **Prescriptive Analytics**

# **Descriptive Analytics**

It summarizes an organisation’s existing data to understand what has happened in the past or is happening currently. Descriptive Analytics is the simplest form of analytics as it employs data aggregation and mining techniques. It makes data more accessible to members of an organisation such as the investors, shareholders, marketing executives, and sales managers.

It can help identify strengths and weaknesses and provides an insight into customer behaviour too. This helps in forming strategies that can be developed in the area of targeted marketing.

# **Diagnostic Analytics**

This type of Analytics helps shift focus from past performance to the current events and determine which factors are influencing trends. To uncover the root cause of events, techniques such as data discovery, data mining and drill-down are employed. Diagnostic analytics makes use of probabilities, and likelihoods to understand why events may occur. Techniques such as sensitivity analysis and training algorithms are employed for classification and regression.

# **Predictive** **Analytics**

This type of Analytics is used to forecast the possibility of a future event with the help of statistical models and ML techniques. It builds on the result of descriptive analytics to devise models to extrapolate the likelihood of items. To run predictive analysis, Machine Learning experts are employed. They can achieve a higher level of accuracy than by business intelligence alone.

One of the most common applications is sentiment analysis. Here, existing data collected from social media and is used to provide a comprehensive picture of an users opinion. This data is analysed to predict their sentiment (positive, neutral or negative).

# **Prescriptive Analytics**

Going a step beyond predictive analytics, it provides recommendations for the next best action to be taken. It suggests all favourable outcomes according to a specific course of action and also recommends the specific actions needed to deliver the most desired result. It mainly relies on two things, a strong feedback system and a constant iterative analysis. It learns the relation between actions and their outcomes. One common use of this type of analytics is to create recommendation systems.

# Business Analytics Tools

Business Analytics tools help analysts to perform the tasks at hand and generate reports which may be easy for a layman to understand. These tools can be obtained from open source platforms, and enable business analysts to manage their insights in a comprehensive manner. They tend to be flexible and user-friendly. Various business analytics tools and techniques like.

* + **Python** is very flexible and can also be used in web scripting. It is mainly applied when there is a need for integrating the data analyzed with a web application or the statistics is to be used in a database production. The I Python Notebook facilitates and makes it easy to work with Python and data. One can share notebooks with other people without necessarily telling them to install anything which reduces code organizing overhead
  + **SAS** The tool has a user-friendly GUI and can churn through terabytes of data with ease. It comes with an extensive documentation and tutorial base which can help early learners get started seamlessly.
  + **R** is open source software and is completely free to use making it easier for individual professionals or students starting out to learn. Graphical capabilities or data visualization is the strongest forte of R with R having access to packages like GGPlot, RGIS, Lattice, and GGVIS among others which provide superior graphical competency.
  + **Tableau** is the most popular and advanced data visualization tool in the market. Story-telling and presenting data insights in a comprehensive way has become one of the trademarks of a competent business analyst Tableau is a great platform to develop customized visualizations in no time, thanks to the drop and drag features.

Python, R, SAS, Excel, and Tableau have all got their unique places when it comes to usage.

# Tasks and duties can include:

* + Identifying and prioritizing the organization's functional and technical needs and requirements
  + Using [SQL](https://www.coursera.org/articles/sql-certifications-for-your-data-career) and Excel to analyze large data sets
  + Compiling charts, tables, and other elements of data visualization
  + Creating financial models to support business decisions
  + Understanding business strategies, goals, and requirements
  + Planning enterprise architecture (the structure of a business)
  + Forecasting, budgeting, and performing both variance analysis and financial analysis.

# Business analyst skills

The key skills business analysts need are:

* + **Technical skills:** These skills include stakeholder management, data modeling and knowledge of IT.
  + **Analytical skills:** Business analysts have to analyze large amounts of data and other business processes to form ideas and fix problems.
  + **Communication:** These professionals must communicate their ideas in an expressive way that is easy for the receiver to understand.
  + **Problem-solving:** It is a business analyst’s primary responsibility to come up with solutions to an organization’s problems.
  + **Research skills:** Thorough research must be conducted about new processes and software to present results that are effective.

# Business analyst responsibilities

* + Analyzing and evaluating the current business processes a company has and identifying areas of improvement
  + Researching and reviewing up-to-date business processes and new IT advancements to make systems more modern
  + Presenting ideas and findings in meetings
  + Training and coaching staff members
  + Creating initiatives depending on the business’s requirements and needs
  + Developing projects and monitoring project performance
  + Collaborating with users and stakeholders
  + Working closely with senior management, partners, clients and technicians

# ROLES OF A BUSINESS ANALYST

**1. BA LEVELS**

## There are four levels that a business analyst in an organization comprises of:

* **Strategic management:** This is the analysis level, where a business analyst evaluates and calculates the strategic where about if a company. This is one of the most critical levels because unless the evaluation is done on the point, none of the further steps can work appropriately.
* **Analysis of business model:** This level has to do with evaluating policies that are currently being employed by the company. This not only enables us to implement what’s new but also helps in checking the previous ones.
* **Designing the process:** Like an artist creates his imagination, business analysts do that with their skills. The step includes modelling the business processes, which comes out to be designing and modelling.
* **Analysis of technology:** Technical systems need a thorough analysis too. This is something that, if not taken care of, leads to severe consequences.

# The key business analyst roles and responsibilities:

* + **What does a business needs:** As a business analyst, it is his key responsibility to understand what stakeholders need and pass these requirements to the developers, and also give on the developer’s expectations to the stakeholders. A business analyst’s skill for this responsibility is the communication skills that can impress everyone across. While he transfers the information, he is the one who needs to put these in such words that make a difference. This responsibility is no doubt tome taking because he needs to listen and execute, which might seem easy, but only a skilled professional can handle all this.
  + **Conducting meetings with developing team and stakeholders:** Business analysts are supposed to coordinate with both stakeholders and the development team whenever a new feature or update is added to a project. This may vary from project to project. This facilitates the collection of client feedback and the resolution of issues encountered by the development team when implementing new features. The **business analyst role** is to understand and explain the new feature updates to clients and take feedback for further development. Based on client feedback, Business Analyst instructs the development team to make amendments or continue as is. At times, the client requests an additional feature be added to a project, and the BA must determine whether or not it is feasible, and then assign resources if necessary to implement it.

**System possibilities:** A business analyst might be considered one among those working in the software team, but their key responsibility Is not what the team does. He has to ensure that he figures out what a project needs. He is the one who leads the path to the goals. He might be the one who dreams of targets, but he is also the one who knows how to make those dreams a reality. Looking for the opportunities and grabbing them before they go is what a business analyst is good at.

* + **Present the company:** He can be called the face of a business. A business analyst is responsible for putting a business’s thoughts and goals in front of the stakeholders. In short, he is the one who needs to impress the stakeholders with his presentation skills and the skill to present what the person on the other side is looking for and not what the company has in store for them.
  + **Present the details:** A project brings with itself hundreds of minute details that might be left unseen. A business analyst is the one who is responsible for elaborating the project with the tiniest of the loopholes or hidden secrets. This is considered the most crucial role of a business analyst because unless the details are put across the stakeholders, they won’t take an interest, and unless they show the part, the project is likely to take a pause.
  + **Implementation of the project:** After going through all the steps mentioned above, the next and the most important role of a business analyst in agile is to implement whatever has been planned. Execution is not easy unless the previous steps have been taken care of in a systemized fashion.
  + **Functional and non-functional requirements of a business:** As an organization, the main goal is to receive an end product that is productive and gives a company a long time. The role of business analyst in it company is to take care of the business’s functional aspect, which includes the steps and ways to ensure the working of the project. Sideways he is also supposed to take care of the non-functional that comprise how a project or a business is supposed to work.
  + **Testing:** The role of a business analyst is way longer than expected. Once the product is prepared, the next step is to test it among the users to know it’s working capacity and quality. The Business Analyst tests the prototype/interface by involving some clients and recording their experiences with the model that has been developed, according to the role description. Based on their feedback, Business Analyst intends to make some changes to the model that will make it even better. They conduct UAT (user acceptance test) to determine whether or not the prototype meets the requirements of the project under consideration.
  + **Decision making and problem-solving:** The **responsibilities of business analyst** range from developing the required documents to making decisions in the most stringent circumstances, job role of business analyst is **to** do it all. Moreover, a business analyst is expected to be the one who tackles things most easily and calmly because he should also be good at problem-solving, even if that’s related to the stakeholders, employees, or the clients.
  + **Maintenance:** Like they say that care is as essential as building something new. No matter how much human resources, energy, or finds you spend on a project, if the maintenance part is not taken care of properly or is neglected, it tends to spoil the entire hard work put across. What is the role of a business analyst here? Is it just limited to the maintenance of the clients or sales; it also has to ensure that the quality and the promised products are maintained throughout.
  + **Building a team:** Everyone is born with varied skills. As a business analyst, the business analyst’s responsibility is to make the team with people possessing different skills required for the project. Not only the hiring but retaining them is as essential. A well united and skilled team can do wonders. The things that are required in a great

section inside co combination, structuring, and skills. A good team tends to take the

company to the heights of success.

* + **Presentation and Documentation of the Final Project**: After the business project is completed, the Business Analyst must document the details of the project and share the project’s findings with the client. In most cases, **BA roles and responsibilities** include preparing reports and presenting the results of a project to key stakeholders and clients. During building the project, they must also record all of the lessons learned and challenges they encountered in a concise form. This step aids the business analyst in making better decisions in the future.

**Software Development Life cycle**

Software Development Life Cycle (SDLC) is a process used by the software industry to design, develop and test high quality softwares. The SDLC aims to produce a high-quality software that meets or exceeds customer expectations, reaches completion within times and cost estimates.

* SDLC is the acronym of Software Development Life Cycle.
* It is also called as Software Development Process.
* SDLC is a framework defining tasks performed at each step in the software development process.
* ISO/IEC 12207 is an international standard for software life-cycle processes. It aims to be the standard that defines all the tasks required for developing and maintaining software.

**What is SDLC?**

SDLC is a process followed for a software project, within a software organization. It consists of a detailed plan describing how to develop, maintain, replace and alter or enhance specific software. The life cycle defines a methodology for improving the quality of software and the overall development process.

The following figure is a graphical representation of the various stages of a typical SDLC.



A typical Software Development Life Cycle consists of the following stages –

**Stage 1: Planning and Requirement Analysis**

Requirement analysis is the most important and fundamental stage in SDLC. It is performed by the senior members of the team with inputs from the customer, the sales department, market surveys and domain experts in the industry. This information is then used to plan the basic project approach and to conduct product feasibility study in the economical, operational and technical areas.

Planning for the quality assurance requirements and identification of the risks associated with the project is also done in the planning stage. The outcome of the technical feasibility study is to define the various technical approaches that can be followed to implement the project successfully with minimum risks.

**Stage 2: Defining Requirements**

Once the requirement analysis is done the next step is to clearly define and document the product requirements and get them approved from the customer or the market analysts. This is done through an **SRS (Software Requirement Specification)** document which consists of all the product requirements to be designed and developed during the project life cycle.

**Stage 3: Designing the Product Architecture**

SRS is the reference for product architects to come out with the best architecture for the product to be developed. Based on the requirements specified in SRS, usually more than one design approach for the product architecture is proposed and documented in a DDS - Design Document Specification.

This DDS is reviewed by all the important stakeholders and based on various parameters as risk assessment, product robustness, design modularity, budget and time constraints, the best design approach is selected for the product.

A design approach clearly defines all the architectural modules of the product along with its communication and data flow representation with the external and third party modules (if any). The internal design of all the modules of the proposed architecture should be clearly defined with the minutest of the details in DDS.

**Stage 4: Building or Developing the Product**

In this stage of SDLC the actual development starts and the product is built. The programming code is generated as per DDS during this stage. If the design is performed in a detailed and organized manner, code generation can be accomplished without much hassle.

Developers must follow the coding guidelines defined by their organization and programming tools like compilers, interpreters, debuggers, etc. are used to generate the code. Different high level programming languages such as C, C++, Pascal, Java and PHP are used for coding. The programming language is chosen with respect to the type of software being developed.

**Stage 5: Testing the Product**

This stage is usually a subset of all the stages as in the modern SDLC models, the testing activities are mostly involved in all the stages of SDLC. However, this stage refers to the testing only stage of the product where product defects are reported, tracked, fixed and retested, until the product reaches the quality standards defined in the SRS.

**Stage 6: Deployment in the Market and Maintenance**

Once the product is tested and ready to be deployed it is released formally in the appropriate market. Sometimes product deployment happens in stages as per the business strategy of that organization. The product may first be released in a limited segment and tested in the real business environment (UAT- User acceptance testing).

Then based on the feedback, the product may be released as it is or with suggested enhancements in the targeting market segment. After the product is released in the market, its maintenance is done for the existing customer base.

**Agile Sprint**

The Agile sprint cycle, or workflow, is the repetitive process that developers use to tackle a development project. A software project can take as many as ten sprint cycles.

Although there is room for variation, most sprint cycles break down like this:

**Planning**

The team covers the top priority user stories, deciding what the spring can and will deliver. This stage includes items found in the backlog. The team also decides on the specific tasks necessary to complete the cycle.

**Backlog**

The backlog is a finalized list, agreed upon by the whole team, that defines what the development team will complete during the sprint. This backlog includes tasks and possible

changes to the product.

**The Sprint**

This part is the time frame in which the actual incremental work must be completed and doesn’t exceed 30 days. The ideal sprint takes two weeks.

**Daily Scrum**

The Scrum is a short daily meeting led by the Scrum master, where the team comes to talk about the assignments they are working on, what they have finished, and any issues or obstacles that are blocking the work.

**Outcome**

The sprint’s outcome is just another way to say the result, which usually is a hypothetically usable product. The product owner gets the last word to decide if the product is ready or if it needs additional features.

**Sprint End**

At the conclusion of a sprint cycle, the team gets together for two final meetings:

* Sprint review. The team shows the completed work to the product owner, who ideally gives it the thumbs up.
* Sprint retrospective. The team talks about what it can do to improve processes in the future, in the spirit of continuous improvement. Consider this as self-evaluation.

**Benefits of Sprint in Agile Development**

We finally come down to the big question: How can sprint Agile sprint benefit your organization? Here is a list of the advantages that the methodology brings to the table:

**Cost-effectiveness**

Thanks to an approach that involves fixed timescales and evolving requirements, teams have a clearer idea of the project’s recommended budget. By dividing the project into smaller pieces, the team knows the real costs (instead of guessing) and can stay on-budget.

**Agility/Flexibility**

Sometimes a customer wants changes to their product, adding or removing features, or even changing its entire focus. A team using Agile sprint development tactics can react faster to unexpected changes.

**Higher Quality**

Developers maintain product quality through rigorous testing. Sprints encourage increased testing since each stage and process gets tested during development. Instead of creating an entire project, then testing it upon completion, each component, designed with sprints, gets tested before the whole application is rolled out.

**Transparency**

Product owners and stakeholders stay in the loop when teams use sprints. This transparency ensures fewer surprises for the product owners, as they can see the application development process at every stage and make corrections as the need arises.

**Risk Mitigation**

When teams use sprints, they break the project into smaller increments, making it easier to identify risks and deal with them before they grow. Risk mitigation works in tandem with transparency, as stakeholders are alerted about possible trouble spots and suggest mid-course corrections. Therefore, it’s less likely that a project will fail.

**Better Customer Satisfaction/Business Engagement**

Is there anything more disheartening than pouring your heart, soul, and sweat into developing an application, only to have the product owner be disappointed and say, “This is not what I had in mind”? The increased participation and transparency that Agile sprints bring results in fewer miscommunications and failed expectations and a happier customer. Increased satisfaction could lead to the customer giving you more design business and recommending you to their associates!

**Increased Revenue**

Each sprint's end produces a potentially releasable increment of a product or application before the scheduled release date. These early releases allow a complete version of the product to go on sale sooner. Incremental delivery means greater profits.

**Better Speed to Market**

If you want to dominate the market, you need to get your product out first. Agile sprints make it possible to release the original product and subsequent updates/revisions either ahead of schedule or right on time. Considering how many software companies (especially gaming companies) suffer delays, this benefit is a difference-maker.

**Higher Team Morale**

Agile sprints bring the team together for regular progress reports, work assignments, and brainstorming sessions. The collaborative, cooperative environment makes team members happier and more motivated, keeping morale high, manifested by a better attitude, and increased quality and quantity of work.