

# [Culture of research and development departments](https://assignbuster.com/culture-of-research-and-development-departments/)

## Introduction

Over the past decades, companies have been organizing employees and processes under different functional areas. A firm can decide on how many functional areas it needs depending on its size and the complexity of operations. Typically, R&D, production, marketing, and finance departments are evident in any organization. The four functional areas have primary roles which can be evaluated using specific key performance indicators.

Primary Functions and Performance Measures

The R&D department has the primary function of developing new products and processes, which help in making the life cycle competitive. The R&D department ensures that thorough research is conducted before a company decides to develop a new product or process. Valuable considerations in the research phase include determination of production timeline, costs, specifications, the need for the product, as well as the impact it will have on the company’s brand name and financials (Hammer, 2015). After the research phase is complete, the R&D department still plays a central role in the development of the new product. Other functions of the R&D department include ensuring an ongoing update on the existing products, providing quality control services, as well as carrying out research and innovation that helps a firm in staying ahead of the competitors.

Several key performance indicators (KPI) can be used in evaluating the impact of the R&D department. The KPIs include patents per million dollars related to investment emanating from R&D, the number of product development projects that have been completed successfully, first to market products, and percentage of staff with advanced academic qualifications. The costs for each R&D laboratory service, the costs savings associated with R&D, cost per researcher, the number of new products per researcher, as well as the time needed to prepare patent claims are also vital KPIs for this department (Hammer, 2015). The number of processes, products, and services that a firm produces in collaboration with the customers also services as a KPI for the R&D department.

The marketing department has the primary role in promoting the mission and business activities of a firm. This department plays a vital role in letting the world know about a firm, its products and services, and all functions that lead to profitability and high reputation. Key performance indicators are social media traffic, leads, mobile traffic, organic traffic, and lending conversion rates (Yurievna, Anatolyevna, & Zivkovic, 2017). The lead-to-customer ratio, new contract rate, traffic-to-lead ratio, inbound marketing return on investment (ROI), customer lifetime value, and cost per lead are other major KPIs for the marketing department. In most cases, the sales revenue is considered the number one KPI for marketing since it can be measured directly.

The production department has the primary function of turning inputs including raw materials into saleable goods and services. The department is also involved in increasing the efficiency of the production line to meet the output expectations of the organization, as well as ensuring that the products and services exceed the expectations of customers. The major KPIs for this department is Overall Equipment Effectiveness (OEE), ration rejection, rate, task time, and the downtime (Hammer, 2017). For instance, long downtimes mean that the production department is inefficient. The same case exists for slow rates, long task times, poor OEE, and high ratio rejection.

Finance department primarily plans, organizes, audits, and takes account of the money of a company. The production of financial statements, which play a significant role in organizational decision-making, is another vital role of the finance department. This department has the most extensive list of KPIs that can be used to evaluate its department. Examples of such KPIs are the amount due per customer, accounts receivable turnover, accounts payable turnover, as well as the collection period of accounts receivable. Fixed costs, gross profits, debtor days, and days payable can also be used to define the efficiency of the finance department. As a summary, the cost incurred, the duration involved in collection of accounts receivable, and the time taken to settle accounts payable are what determine the effectiveness of the finance department.

The Interrelationships and Differences in Organizational Culture

The R&D, finance, marketing, and production departments are significantly related no matter the specific roles they each play. For instance, the R&D coordinates with the production department, helping it to execute its functions as required. The interrelatedness of the four departments can be explained using the general systems theory (GST), which asserts that organizing principles of a firm are the basis for the functioning of all components of complex systems regardless of the purpose of such elements (Rousseau, 2015). This means that irrespective of the management, the roles, and the different dynamics involved in running the four departments, they all rely on the same organizing principles. For example, all the functional areas will be defined by the same organizational culture. This means that the R&D, production, marketing, and finance departments operate as different units within a single system.

Although the four departments operate as a system, they do so in different functional areas with unique characteristics include culture. The differences in the functional areas can be associated with group cultures that each has. According to Schein (2017), it is correct to say that the different departments function based on unique group culture. Schein (2017) gives three classifications of the functional groups which are mixed cliques, vertical cliques, and horizontal cliques. In this case, the R&D, production, marketing, and finance can be described as having horizontal cliques, where they operate at the same level of the organization.

Conclusion

R&D, production, marketing, and finance departments have specific functions in a firm. The efficiency in each of the departments affects the overall performance of an organization. Each unit operates as independent functional areas with unique group cultures, but are defined by the organizing principles of the company.

## References

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