

The importance of business analysis in development process

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Abstract: *These days, we are taking part at an increasing rate of business digitization, and without a doubt, we encounter difficulties in maintaining a clear overview of the business processes within an organization.*

Considering each business flow a puzzle piece of the entire company landscape, we aim to highlight the importance of documenting each 'working piece' with no other priorities. Having this focus in mind, as business intelligence and software developers, we can't imagine this puzzle with a missing piece.

Being aware of the fact that a solid base is built piece by piece, both the image of the company and its productivity can suffer because of omissions related to essential details, details that in the context of competition in today's marketplace end up making the difference between the clients' choices. So, each piece, each workflow, no matter how small, is essential to the overall success of a company.

In this paper, we wish to emphasize the importance of proper documentation that presumes a well-pointed business analysis, the foundation upon which a successful business thrives.

Key words: Business analysis, development, documentation, processes.

JEL: O - Economic Development, Innovation, Technological Change, and Growth

1. Introduction

In the fast-paced world of business, we are aware of the fact that every detail matters and ends up making the difference in the quality of the services delivered day by day. From the initial consultation to the final product, it's important to pay close attention to every aspect of the process. Companies strive to provide exceptional services and to be recognized as the best in their field.

Whether it's a small detail that might go unnoticed or a major issue that could disrupt operations, being meticulous is essential to ensuring that clients receive quality services. In order to meet the high expectations of their customers, companies must be meticulous in their approach to every aspect of their business.

Whether it's the way they communicate with clients, the quality of their products, or the efficiency of their processes, every detail matters when it comes to maintaining a competitive edge. It's these details that make the difference between a satisfied customer and one who won't hesitate to take their business elsewhere. So, as a result, it's crucial to maintain a focus on excellence and pay attention to all the details, no matter how small they may seem.

Therefore, taking into account what we described previously, we want to focus our attention on the importance of correctness in approaching the business analysis of the existing processes, but also on the future ones that will be developed.

2. Literature review

In this world of business analysis, correctness is key. It's not just about understanding the existing processes, but also anticipating the future ones. By paying close attention to the details and ensuring that everything is accurately documented, companies can stay ahead of the competition and avoid costly mistakes. Whether we are evaluating a current system or proposing a new one, it's vital to approach the task with precision and a keen eye for detail. The importance of getting it right cannot be overstated.

Correctness must always be a top priority in these activities because experiments and trial-and-error are not always the best options when it comes to business operations. Businesses need to have confidence that they're making the right choices when it comes to evaluating existing processes and deciding on new ones. After all, success in this area can spell the difference between profitability and stagnation, or even failure. It's crucial to understand that the importance of business analysis extends beyond the present.

An important perspective stands in how a company management introduces the notions and also develops an approach of documenting a business process through an application or a specific framework valuing all kinds of involved resources. Such concepts are well detailed in a book called "Business Analysis and Valuation: Using Financial Statements" (Krishna, Palepu, Wright, 2020). This writing may be considered a comprehensive guide to understanding business from the Asia-Pacific region. With a wealth of real-life case studies and references to current research, the authors offer a practical and in-depth exploration of the issues facing businesses in this area. The book is particularly useful because it includes real-life case studies that outline

various business issues using multiple valuation tools, strategy analysis, overview analysis, ideas of how to implement accounting analysis and financial ones, prospective analysis such as forecasting, valuation theory and implementation. Moreover, beyond these tools, it presents applications from credit analysis and distress prediction, equity security analysis, merges and acquisition, communication and governance.

A well-known statement that best describes an employee who ‘plays’ the business analyst (BA) role within a company, bridges the gap between business processes and developers (Faur, 2023) because as this article states, a BA is in charge of the big picture of the entire process.

On the other hand, this analyst responsibility is not considered an easy one as it assumes different kinds of requirements, such as conducting interviews with internal or external stakeholders and discovering insights about projects, developing questionnaires – an efficient way to get input data about key areas, document analysis and prototyping (QAT, 2023) because software development projects are constantly under pressure to be completed quickly and efficiently. However, rushing into a project without proper analysis can lead to disastrous outcomes. Developers run the risk of building incomplete software that doesn’t solve the problem it was intended to, or worse, having to rebuild the entire software from scratch when it’s too late. To avoid such situations, business analysts often take on the role of product owner in agile development teams.

Other writings emphasize the advantages this matter brings – business analysis aim to increase the return of investment (ROI), decreases the costs, helps in decision making, opt for a cost-effective solution while focusing on the real business value, all these can be considered amplified in the context in which a dedicated application is used (Naranh, 2023). Another essential aspect that the author explains is the benefits of business analysis certification, for example one of the most recognized is from the International Institute of Business Analysis (IIBA). It is a renowned global association dedicated to advancing the business analysis profession and supporting the growth of business analysts worldwide. By developing certifications that reflect the most in-demand skills in the current market, IIBA enables certificate holders to stand out in a crowded field and demonstrate their expertise. By earning a BA certification, an employee can demonstrate proficiency in a variety of areas, such as requirements analysis, stakeholder management, and enterprise analysis. This can be really helpful, not only does it require a significant investment of time and money, but it can also open up new career opportunities.

As an employer, following statistics from IIBA’s Global Business Analysis Salary Survey (IIBA, 2023), helps in increasing credibility of job applicants who have such accreditation, who are interviewed for a position in this area of expertise, also possible future company employees. This certification adheres to global standards outlined in the BABOK Guide, providing a benchmark for commonly accepted practices in business analysis. This one not only shows prospective employers that you have the necessary skills, but also the ability to bring the best and most up-to-date practices to the table.

Besides this previously mentioned distinctive aspect, the approach and implementation techniques can be taken as a standard that makes the difference between the different existing methods. With statistics and advanced technologies, business analytics techniques allow companies to gain knowledge about their operations, demographics, and market trends (Mansoor, 2023).

There are three forms of business analytics: descriptive, predictive, and prescriptive. Descriptive analytics uses past data to provide insights into what has already happened. Predictive analytics relies on data and statistical models to forecast future trends. Prescriptive analytics uses data and algorithms to suggest actionable solutions for business problems (Cadle, 2023). These ones cover everything from gathering data to analyzing it and making impactful choices. To fully understand the process of business analytics, it's vital to have a grasp of its various forms.

All these aspects and details related to this area of activity, put together, end up forming, as author George M. Giaglis mentions in his article (Giaglis, 2001), a taxonomy of business analysis modeling.

3. In depth

Creating an overview of the role of business analyst we can say that in the software development lifecycle this resource is critical in ensuring the success of any project. Typically, the business analyst communicates with various stakeholders and identifies their requirements. After gathering this information, the business analyst analyses, documents and communicates the requirements to the development team. This process helps in bridging the gap between the technical team and the business team. It is not always easy to measure the performance of a business analyst, but there are certain indicators like the quality of requirements, customer satisfaction, project timeline, and the success of the project that business analysts can use to measure their performance.

Analytical techniques in business are essential for the success of any organization. Among the wide array of techniques available, Strengths, Weaknesses, Opportunities, and Threat (SWOT), Customers, Actors, Transformation process, World view, Owners, Environmental constraints (CATWOE), Mission, Objectives, Strategies and Tactics (MOST), Political, Economic, Social, Technological, Environmental, and Legal (PESTLE), Business Process Management (BPM), and Six Hats thinking are some of the most popular ones (CPrime, 2023). These techniques are versatile and can be applied across various projects and industries. By effectively analyzing business requirements, these strategies can optimize operations and align them with the business mission. However, to excel as a business analyst or pursue a career in this field, one must have an in-depth knowledge of the top techniques. The top 10 business analysis techniques are a must-know for any aspiring business analyst.

Following techniques above, a basic piece that supports a large part of them is represented by the design of representative diagrams for the targeted processes (Marshall, 2000). One of the key aspects of successfully implementing efficient processes is the design of representative diagrams. Creating clear and easy-to-understand diagrams is essential for facilitating communication and collaboration within a technical process development. From flowcharts to swimlane diagrams, visual representations of processes provide a common language for all involved parties. By ensuring that everyone is on the same page and understands the steps involved, teams can work together more effectively to achieve their goals. These diagrams are a key tool in understanding and troubleshooting processes (Becker, 2000).

A rather controversial side these days, which is essential to be addressed as a chapter of the

subject, is the one related to security. Both in the analysis of the process and in the implementation of the targeted solution, the aspects related to the security of the information and data with which the process works is vital, especially in the context where these inputs are sensitive, like customer data. Security in business processes is a crucial aspect that needs to be taken into consideration. Numerous empirical studies have shown that customers, end users, and business analysts are capable of expressing their security needs at the business process level. Thus, it becomes essential to propose an integration of security requirements through business process modeling. This proposal aims to use the Business Process Modeling Notation extension for modeling secure business processes through Business Process Diagrams (Rodriguez, Fernandez-Medina, Piattini, 2007). By incorporating security needs into the initial stages of business process modeling, organizations can ensure that their systems and data are protected from potential threats. This not only increases the level of security but also enhances the overall efficiency of the business process.

These aspects related to security must be integrated both in process documentation, but especially, when it comes to software development in process design document (PDD) and software design document (SDD). PDD is a document that outlines everything about a particular product, including its features, target audience, and value proposition. This document is crucial for stakeholders, as it helps them to understand the product's scope and objectives. SDD, on the other hand, is used to describe the software's architecture, design, and functionality. This document is essential for developers as it helps them to easily understand how to build the software effectively. These documents serve as a guiding roadmap for the development team, ensuring that everyone is on the same page and moving in the same direction.

Two overviews without which a software solution cannot take SDD documentation into account are those of the process in AS IS form and its projection in desired state, TO BE. The 'as is' form outlines the current state of the process, including any existing systems and structures, while the 'to be' projection predicts how the process will look after the proposed software solution is implemented. Without a clear understanding of the current process, it is impossible to identify areas for improvement or potential roadblocks and without projecting the process into its future state, there is no way to design a solution that will meet the needs of the organization. By taking the time to thoroughly analyze the current process and consider its ideal state beforehand, a software solution can be designed to best fit the unique needs of the business, ensuring a successful outcome.

One way to achieve the goal of staying ahead of the market competition is by implementing a Center of Excellence (CoE) that's specifically dedicated to business analysis area within a company.

Such a CoE can bring various advantages to a company, such as ensuring standardization of processes and methodologies across different business areas (Roland, 2023). Additionally, a CoE can provide a centralized and efficient approach to training and development for business analysts, which can result in a highly skilled and motivated workforce (Casey, 2013). Some other advantages are that it allows for a centralised repository of knowledge and expertise, mapping process portfolio, identifying and articulating keen eye details (Schedlbauer, 2023) while providing a standard approach to be utilised throughout the company and can help companies to quickly identify and resolve issues that could impact their bottom line. This can in turn lead to a significant increase in efficiency and productivity. It also can help in ensuring consistency in terms of quality and results, as well as facilitate sharing of best practices.

4. Results and discussions

Proper analysis of existing processes lays the groundwork for future ones, and a misstep along the way can be costly. We always have to strive to approach business analysis with accuracy and precision in mind.

By centralizing business analysis expertise, companies will reduce duplication of effort, better align business strategies with IT initiatives, and identify opportunities for innovation and growth. The research's results make it clear: a business analysis center of excellence (BACoE) is a pathway to excellence. Having this in mind, it is clear that such a center can help businesses of all sizes to achieve greater success and thrive in today's competitive marketplace.

In order to keep pace with the rapidly changing landscape, it is crucial for businesses to have a thorough understanding of their internal and external environment. This is where business analysis plays a critical role in the development process. By carefully analyzing and evaluating various aspects of their business, such as market trends, customer behavior, and critical success factors, businesses can identify key areas of improvement.

A significant contribution to this result can be brought by the contribution of the implementation and gradual development of a CoE focused on business analysis - a valuable asset for any company looking to optimise their operations and maximise success.

A well implemented business strategy can help in driving organizational growth and achieve strategic objectives. The study found that companies that prioritize business analysis throughout the development process see an increase in efficiency, a reduction in errors and defects, and ultimately, better outcomes. When business analysts are included in the planning stage, they are better able to understand the organization's needs and translate them into actionable strategies. This leads to more effective communication, streamlined processes, and a better final product.

5. Conclusions

Business analysis is a vital element of the development process for any company. With the role of technology increasing every day, businesses need to keep up with the changing perspectives of market demands.

The analysis provides insights into how a company can tap into the target audience and create excellent products as well as delivered services. By conducting a thorough analysis, companies can understand their strengths and weaknesses and create strategies to improve their implementation approaches. The significance of business analysis cannot be overstated, and companies that invest in this area can expect to see significant improvements in their development processes.

Summing up, incorporating business analysis into the development process ensures that a company remains competitive in the day to day marketplace area. It allows companies to tailor their products and services to meet the standard needs of their audience customers and gain a needed competitive advantage. It can be considered an indispensable tool that every business should embrace in their development process.

REFERENCES:

1. Krishna, G., Palepu, G., Healy, P.M., Wright, S., Bradbury, M., Coulton, J.: "Business Analysis and Valuation: Using Financial Statements", 3rd Edition, Cengage AU, (Sep 24, 2020).
2. Faur, A., "Why Business Analysis is the Stepping Stone of Software Development", Fabrit Global, <https://blog.fabritglobal.com/business-analysis-software-development/>, last accessed: 2023/09/30.
3. QAT Global, "Business Analysis in Software Development Workflow – The importance of business analysis in software development", <https://qat.com/importance-business-analysis-software-development/>, last accessed: 2023/09/30.
4. Naranh, M., "Business Analysis Importance: A detailed Guide", Business Management, Knowledgehut (Sep 29, 2023), <https://www.knowledgehut.com/blog/business-management/business-analysis-importance#what-does-a-business-analyst-do-and-why-is-their-role-so-important?%C2%A0>, last accessed: 2023/09/30.
5. International Institute of Business Analysis, IIBA.org, Global State of Business Analysis Survey, <https://www.iiba.org/professional-development/career-centre/global-ba-salary-survey/>, last accessed: 2023/09/30.
6. Mansoor, M., "Top 10 Effective Business Analysis Techniques", Business Management, Knowledgehut, (Sep 08, 2023), <https://www.knowledgehut.com/blog/business-management/business-analysis-techniques>, last accessed: 2023/09/30.
7. Cadle, F., Paul, D., Turner, P., "Business Analysis techniques – 72 essential tools for success", ISBN 978-1-906124-23-6, BCS The Chartered Institute for IT, (2010).
8. Giaglis, G.M. A Taxonomy of Business Process Modeling and Information Systems Modeling Techniques. International Journal of Flexible Manufacturing Systems 13, 209–228 (2001). <https://doi.org/10.1023/A:1011139719773>, Springer.
9. CPrime, "Why is Business Analysis important in software design?", <https://www.cprime.com/resources/blog/why-is-business-analysis-important-in-software-design/>, last accessed: 2023/09/30.
10. Marshall, C., "Enterprise Modeling with UML - Designing Successful Software through Business Analysis", Addison-Wesley Longman, ISBN 0-201-43313-3, (2000).
11. Becker, J., Kugeler, M., Rosemann, M., "Process Management – A guide for the Design of Business Processes – with 83 Figures and 34 Tables", ISBN 3-540-43499-2, Springer, (2003).
12. Rodriguez, A., Fernandez-Medina, E., Piattini, M., "A BPMN Extension for the Modeling of Security Requirements in Business Processes", IEICE Transactions of Information and Systems, Vol. E90-D, No. 4, pp. 745-752, (Apr 01, 2007), ISSN 1745-1361, https://search.ieice.org/bin/summary.php?id=e90-d_4_745, last accessed: 2023/09/30.
13. Roland, R., "Is a Business Analysis Center of Excellence (BA CoE) still relevant?", Modern Analyst, <https://www.modernanalyst.com/Resources/Articles/tabid/115/ID/3058/Is-a-Business-Analysis-Center-of-Excellence-BA-CoE-Still-Relevant.aspx>, last accessed: 2023/09/30.
14. Schedlbauer, M., "Create a Business Analysis Center of Excellence", Corporate Education Group, <https://www.corpedgroup.com/mobile/ba/DefiningBAExcellence.asp>, last accessed: 2023/09/30.
15. Casey, G., "How a Business Analysis Center of Excellence Helps You – Center of Excellence", EnFocus Solutions, (Apr 08, 2013), <https://enfocussolutions.com/how-a-business-analysis-center-of-excellence-helps-you-center-on-excellence/>, last accessed: 2023/09/30.