# SECURING REGIONAL BUY-IN FOR ANALYTICS INITIATIVES IN GLOBAL ENTERPRISES: STRATEGIES FOR DEMONSTRATING VALUE AND FINANCIAL JUSTIFICATION

ISSN No: 2349-5677

Manoj Gudala manojgudala31@gmail.com

#### Abstract

This paper talks about the regional buy-in of analytics initiatives in global enterprises. More precisely, it showcases how evidence could be provided to the region with corresponding financial justification to overcome any kind of regional resistance against analytics initiatives. Strategies laid down in this paper include mapping analytics initiatives with regional business goals, demonstrating ROI, and using financial justification techniques. The implementation frameworks and future trends also help handhold the organization toward successful regional buy-in for analytics initiatives. Value demonstration and financial justification enable global enterprises to transcend cultural and organizational boundaries in realizing a data-driven decision-making culture across different regional contexts. Finally, the paper concludes with a set of recommendations for practitioners and future research directions on this critical aspect of global analytics implementation.

Keywords: Regional Buy-in, Global Enterprises, Regional Resistance, ROI (Return on Investment), Business Goals Alignment, Implementation Frameworks, Data-driven Decision-Making, Global Analytics

#### I. INTRODUCTION

Global enterprises are aware of advanced analytics potential to engender competitive advantage and enhance decision-making processes. However, securing business cases for analytics initiatives across a diverse regional context comes with challenges, especially in regions spanning across the globe. This paper gives insights into strategies and techniques that help these organizations surmount the challenge of gaining buy-in from these regions by demonstrating value and providing robust financial justification. Some of the various reasons that create resistance to analytical initiatives at a regional level conflict between short-term financial goals versus long-term strategic investment; different cultures concerning decision-making and the use of data; different levels of maturity and understanding related to analytics within the regions; uncertainties on resource allocation and questions of return on investment; and organizational silos and friction to change. Only if the analytics initiatives are adjusted to these various challenges, with mechanisms that specifically prove value and financial viability, can such regional buy-in be expected of them in a global enterprise. The paper therefore aims to provide frameworks for the accomplishment of the same by drawing from best practices and emerging trends in the relevant field.

## II. DEMONSTRATING VALUE STRATEGIES

The goal of this section is to explore various means of communicating the value of analytics initiatives to regional stakeholders. We can, most effectively, convey their importance and impact by aligning these initiatives with the regional business goals, focusing on their Return on Investment (ROI).

# A. Alignment of analytics initiatives to regional business goals

This is critical to gain regional buy-in by lining up an analytics initiative with specific regional business objectives. It will demonstrate how directly the analytics will relate to and may impact regional performance [1].

First, regional needs assessments are foundational. This could be done by running surveys and interviews with regional stakeholders, analyzing regional performance data to identify critical challenges, and conducting region-specific SWOT analyses. It means developing customized use cases that help solve identified challenges, region-specific dashboards and reports, and adaptation of global models into regional contexts. For example, a dashboard highlighting local market trends and performance metrics can help immensely in stakeholder engagement.

Advanced technical frameworks should be in place to offer tailoring of Analytics solutions. For instance, applying machine learning models such as Random Forests or Gradient Boosting would help predict regional market trends. The implementation of data processing frameworks like Apache Hadoop or Apache Spark would efficiently deal with the large regional data chunks. The result of such technologies is a more robust, region-specific dashboard and report with actionable insights, custom-built to the interests of the locales.

Equally important is involving regional stakeholders in the design process of initiatives. This can be done through the formation of regional advisory boards on analytics initiatives, co-creation workshops with regional teams, and a system of feedback loops to keep upgrading analytics solutions. These methods ensure that acceptance and support of the initiatives will be built up locally.

#### B. Cultural and Organizational Resistance

While this clearly explains the requirement for change management, realize that it is a fact that most staff may be resistant to new BI initiatives for several reasons. These range from unfamiliar approaches to business operations or just the fear of redundancy. To mitigate this resistance, firms should develop robust leadership support supplemented by inclusive planning processes and leading communication mechanisms. Early involvement of all stakeholders and taking them along the process—eliciting their buy-in, working on their feedback for the change process, and detailed training on any new processes—can be quite useful in mitigating the risk and resistance to change [7].

## C. Show Potential ROI and Competitive Advantages

High quality, consistent data across all the functions is a must so it feeds good results in BI systems; otherwise, inaccurate insight often results, thus poor decision-making results as a consequence. That means that proper data governance, data stewardship roles with set metrics for data quality, and frequent audits should take place to assure data integrity.

## D. Technology Constraints and Scalability

Any consideration of regional support must hence be based on a specified potential ROI and competitive advantages. Region-specific ROI models can be built to help illustrate the financial benefits associated with the analytics initiatives. Such models should take into account regional cost structures and incorporate regional revenue potential together with growth projections and other factors specific to the region like the regulatory environment or market dynamics.

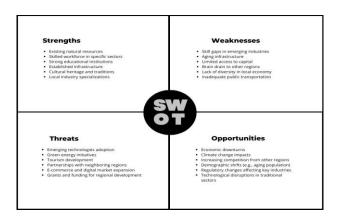
Another way is benchmarking against regional competitors. It can be followed by competitive intelligence concerning regional analytics capabilities and a determination of the potential competitive advantage through analytics adoption. Success stories in regional contexts can further be used to provide concrete examples of benefits realized in comparable regions. One of them is exemplifying potential ROI and competitive advantages through SWOT analysis. The SWOT analysis framework has been in continued use since the 1960s, making it a tool with over 60 years of application in strategic planning [2]. SWOT analysis is helpful, but other frameworks—SOAR, which involves strengths, opportunities, assets, and risks; or NOISE, which includes needs, opportunities, improvements, strengths, and exceptions—are more compatible with certain regions and stakeholders. The framework that is used needs to enable, or enhance, participation across a diverse array of community members. Moreover, resiliency economic factors need to be integrated into the analysis so that not only will the regional economy be viable, but also sustains its position over time. The method allows for an all-rounded assessment of the status of the region at present and its prospects in the future while considering the internal and external factors that affect the development of the area [3].

The elements of SWOT analysis are primarily explained as:

- 1) Strengths: a relative competitive advantage of a region, for example, industry supply chains and clusters, Extensive port, rail, and broadband assets, Specialized workforce skills, Higher education levels, and Stakeholders working collaboratively) and are normally internal.
- 2) Weaknesses: relative competitive disadvantages to a region; often internal, like a risk-averse regional culture or one that resists change.
- 3) Opportunities: events or circumstances creating a chance or occasion for the betterment or improvement of a region; often external, like the expansion of a biosciences research lab in a region.
- 4) Threats: events or circumstances creating the possibility of a negative impact on a region or leading to regional decline; often external, like several companies in a region considering a move to lower-cost areas of the state.

Hence, in carrying out a SWOT analysis, the full picture of ROI and competitive advantages that analytics initiatives can realize within this regional setting will be developed. It will do the following:

- 1) Customizing ROI projections that would appeal more to regional stakeholders
- 2) Clearly articulating how analytics will solve regional weaknesses and exploit opportunities
- 3) Position analytics initiatives strategically as a source of competitive necessity rather than an option



ISSN No: 2349-5677

Figure 1: SWOT analysis framework for a regional needs assessment.

# III. FINANCIAL JUSTIFICATION TECHNIQUES

Having identified the strategies to demonstrate values, these section details financial justification techniques that will enable the conduct of full cost-benefit analyses and risk assessments to ensure the financial viability of analytics initiatives.

# A. Cost-Benefit Analysis Methods

Strong cost-benefit analysis is important to convince the regional stakeholders of the financial viability of analytics initiatives. This comprises the complete and detailed identification of various costs involved, such as implementation cost—hardware, software, and consulting services—and operational expenditure for maintenance, upgrades, and training, apart from the indirect costs associated with productivity changes during implementation and organizational restructuring, etc. Benefit projections should be made with detailed estimates, which involve tangible benefits accruing as cost savings, increased revenue, and efficiency gains, intangible benefits like improved decision-making, customer satisfaction, and increased agility; and long-term strategic benefits, again, like market positioning and innovation potential [4].

Sensitivity analysis involves the development of multiple scenarios deducting regional cost and benefit differentials and possible risks with their implications on projections. This provides a world of knowledge regarding the possible range of financial outcomes, giving the confidence to prepare for uncertainties.

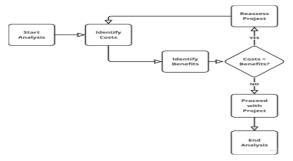


Figure 2: Cost Benefit Analysis Flowchart

## B. Risk Assessment and Mitigation Strategies

The potential risks that may impede the development of confidence in the initiative need attention. This calls for the identification of the region-specific risks in terms of data privacy and security regulations, the availability and skill gaps of talent, cultural resistance to data-driven decision-making, and technical infrastructure limitations. The mitigation strategies include compliance frameworks for data governance, training and development programs, change management initiatives, and phased approaches to implementation. Integrating risk factors into the financial justification: This would entail quantifying the potential impact of identified risks and including risk mitigation costs in overall financial projections. Further strengthening of the financial case for the initiatives can be gained by showing how the analytics will aid in managing and reducing some of the risks.

# C. Long-Term Value Projection Models

While short-term gains are important, developing an argument based on long-term value can help overcome initial resistance. This approach would necessarily include such elements as multiyear projection models of costs and benefits, depictions of future innovation and competitive positioning, and a link to long-term strategic goals. Progression of 3–5-year projections, accounting for scaling effects and increased adoption over time—with a place for the potential of expanded use cases and applications—can roundly illustrate the long-term benefits of analytics initiatives [4].

#### IV. OVERCOMING REGIONAL RESISTANCE

With a strong financial justification in place, one must overcome cultural and organizational barriers to regional buy-in. This section will call attention to ways in which to overcome resistance and engender regional collaboration.

# A. Understanding Cultural and Organizational Differences

The key to implementation success is therefore the identification and addressing of cultural and organizational subtleties. Cultural assessments can be conducted with frameworks like Hofstede's cultural dimensions, which delineate regional attitudes toward data-driven decision-making and will point out potential conflicts between analytics practice and local business cultures [5]. Means of implementation will need to be tailored by regional cultural context and engage local champions able to advocate for the initiatives to gain acceptance and support [5]. Among the most cited and tested models for diagnosing the cultural effectiveness of an organization and its fit with the environment is the Competing Values Framework. The framework's effectiveness criteria offered, tested for over 30 years with the CVF, were discovered to have made a difference in identifying organizational cultures that would fit the characteristics of the external environments

## B. Adapting the Communication Plan for the Different Regions

Effective communication is a means to achieve buy-in. Several tactics were utilized to customize the messaging; making the communication more relevant and persuasive by developing region-specific

value propositions that address local concerns and priorities, and using local case studies and examples. Access to preferred communication channels together with localized materials may further raise the level of effectiveness of the communication strategy [7].

ISSN No: 2349-5677

# C. Advanced Data-driven Decision-making

This brings forth a centralized data repository and much more advanced analytics, making crossfunctional BI solutions that help decision-makers. It is through such data-backed approaches that the reliance on intuition and subjective evidence is curtailed, thereby rendering the approach of making any decision more informed and effective.

**Competing Values Framework** 



Figure 3: The Competing Values Framework [6].

#### D. Building Cross-Regional Collaboration and Knowledge Sharing

It can foster collaboration that can work through issues of resistance and build on joint successes. These cross-regional working groups can systematically provide a venue for building trust, and knowledge exchange through inter-regional analytics summits or conferences, and mentorship programs. All these efforts will go a long way in forming a sense of community and a shared vision across the regional stakeholders involved.

#### V. IMPLEMENTATION FRAMEWORK

Finally, we present an implementation framework to guide the rollout of analytics initiatives. This section outlines a step-by-step approach, key performance indicators, and resource allocation considerations to ensure successful execution.

# A. Systemic Approach to the Implementation of Analytics

The implementation of a global analytics strategy requires a systematic but flexible approach. In this section, we will outline all those steps which at minimum form the core of a framework necessary for successful adoption across regional contexts. Isolation of key phases will separate the process that is considered critical for laying foundations and maintaining momentum throughout the implementation process.

ISSN No: 2349-5677

# 1) Regional Needs Assessment (4-6 weeks)

A cross-functional BI solution is supposed to easily incorporate the information from a variety of sources and systems that are there in the operation. These should include practices such as data governance, which gives assurance of the quality of data and its metadata through management, CDM/common data model practices, and security protocols over data, all of which will maintain the integrity and reliability of that data. The first step in our approach is the detailed regional needs assessment process. It is important to understand the exact challenges and opportunities characterizing each market. It provides an opportunity to gather insight from different stakeholders, thereby effectively tailoring the analytics strategy per regional requirements.

- (i) Conduct 20-30 structured stakeholder interviews per region
- (ii) Use the PESTEL framework to drive comprehensive analysis [8]
- (iii) Deploy surveys to more than 100 end-users per region

# 2) Stakeholder Mapping and Engagement (3-4 weeks)

Following the needs assessment, we go into detail with the stakeholder analysis. It is a significant process step in recognizing certain key personnel who will influence and be vital in decision-making and will play a major role in the success of the analytics implementation. The stakeholder dynamics bring out engagement strategies that will attract supportive stakeholders while bringing down potential resistance.

- (i) Apply Mitchell's 1997 stakeholder salience model [9]
- (ii) Custom communication plans for all stakeholder groups

## 3) Value Proposition Development (2-3 weeks)

With a clear understanding of regional needs and the landscapes of various stakeholders in place, we then turn our attention to the formulation of compelling value propositions. This phase concerns the translation of analytics potential into real value-based benefits that will resonate with each region's distinct goals and challenges.

- (i) Use Osterwalder's Value Proposition Canvas [10]
- (ii) ROI modeling workshops with finance teams

#### 4) Proposal and Roadmap Creation (4-5 weeks)

The insights and value propositions developed in earlier phases inform the detailed implementation proposal and roadmap. This important planning phase serves as the set-up for execution, providing a clear vision of the path forward and what milestones will be achieved.

(i) Develop an 18-month Gantt chart implementation roadmap

(ii) Build a business case using the framework of Balanced Scorecard, based on Kaplan and Norton, 1996. The Balanced Scorecard is one of the most comprehensive frameworks concerning performance measurement, where financial and non-financial metrics are integrated to focus business activities within the firm toward its strategic objectives [11].

ISSN No: 2349-5677

# 5) Iterative Feedback and Adjustment (Ongoing)

Knowing that implementation is a continuous process, continuous feedback mechanisms would be built in. This phase would make sure that the strategy keeps itself flexible and responsive to changing needs and emerging challenges all along the journey of implementation.

- (i) Implementation of bi-weekly steering committee meetings
- (ii) Adoption of Agile methodology with 2-week sprints

# 6) Setting Up the Governance Structure (2-3 Weeks)

Consistency and accountability can only be brought about across regions with strong governance. During this stage, the structures and policies that broaden the analytics uses are designed to keep it aligned with the organizational goals.

- (i) Form a cross-functional Analytics Governance Board
- (ii) Data governance policies development along the lines of the DAMA-DMBOK framework [12]

# 7) Phased implementation (12-18 months)

The final mile of our approach is the strategically crafted rollout of the analytics strategy. We will start with a pilot and then ramp up to take the fine-tuning approach based on the feedback from the real world before it gets fully deployed.

- (i) 3-month pilot in one receptive region
- (ii) Scale to 3-5 additional regions in subsequent quarters
- (iii) Full rollout across all regions by month 18

## B. Key Performance Indicators for Measuring Success

These are some KPIs that organizations must focus on while developing and implementing global analytics solutions.

#### 1) Financial metrics

- (i) Return on Investment (ROI)
- (ii) Cost savings achieved
- (iii) Revenue growth attributed to analytics initiatives

#### 2) Operational metrics

- (i) Efficiency gains (e.g., reduced processing time, improved resource utilization)
- (ii) Decision-making speed and quality
- (iii) Error reduction rates

## 3) Adoption metrics

- (i) Item User engagement rates
- (ii) Data utilization levels
- (iii) Number of active analytics projects

# 4) Strategic metrics

- (i) Market share changes
- (ii) Customer satisfaction improvements
- (iii) Innovation rate (new products/services launched)

#### C. Timeline and Resource Allocation Considerations

We have discussed the timelines and resources above that need the following considerations:

# 1) Phased implementation approach

- (i) Start with pilot projects in receptive regions
- (ii) Establish clear milestones and decision points for expansion
- (iii) Allow for regional variations in implementation pace

## 2) Resource planning

- (i) Allocate budget for both global and regional resources
- (ii) Plan for talent acquisition and development needs
- (iii) Consider partnerships with local analytics providers

# 3) Flexibility in execution

- (i) Build in contingency time and resources
- (ii) Establish processes for reprioritization based on regional feedback
- (iii) Create mechanisms for reallocating resources across regions as needed

#### VI. CHALLENGES AND CONSIDERATIONS

While the above strategies provide a solid framework to ensure regional buy-in, there exist many challenges and considerations. This may range from huge potential for analytics initiatives by different maturity levels of data and its accessibility across various regions. The key issue related to data quality and availability is the most important one must consider to ensure the success of any analytics project. Moreover, with varying data protection and privacy regulations in the complex landscape across regions, the implementation process becomes more complicated while the legal requirements are navigated. Another huge challenge would be the global shortage of analytics talents, which may be especially acute in certain regions. This scarcity will make organizations think creatively about capability-building solutions that can drive their analytics initiatives with the required skills. Furthermore, inherited IT

infrastructure in various geographies may pose integration challenges to new analytics tools and platforms, hence slowing down implementation or requiring additional resources to overcome.

ISSN No: 2349-5677

Of all the tasks, however, it is especially cumbersome to quantify the long-term strategic value of analytics, particularly in regions driven by short-term results. The intangible benefits are not easy to quantify in such a situation, and such a situation will pose a challenge when justifying further investments in analytics initiatives. In addition, to maintain interest and investment in analytics initiatives over time, there must be an ongoing effort that requires the continuous demonstration of value, which can be very challenging in light of other competitive priorities and resource constraints.

Other proactive steps taken at the organizational end would counter these challenges. It is important to invest in data governance and quality improvement initiatives along with analytics projects to ensure a strong base for data-driven decision-making. A clear data privacy and compliance framework developed at the center can then be adapted to regional requirements, helping to better navigate the complex regulatory landscape. It is recommended to have comprehensive training and development programs for building local analytics capabilities to offset the acute talent scarcity challenge.

Organizations should also consider flexible, cloud-based analytics solutions that can integrate with diverse regional systems, reducing the challenges posed by legacy infrastructures. Quantifying and communicating tangible and intangible benefits through robust methodologies will become crucial to justify these ongoing investments and secure stakeholder support. Finally, ad hoc communication and engagement strategies, periodic in nature, will be important in retaining support for analytics initiatives and ultimately ensuring long-term success in leveraging data for strategic advantage across all regions.

#### VII. FUTURE TRENDS

Several emerging trends are likely to impact this process of securing regional buy-in for analytics initiatives as the field continues to evolve:

#### A. Artificial Intelligence and Machine Learning

With ever-increasing sophistication, AI and ML technologies have the potential to make even more powerful and easily accessed analytics capabilities—and hence faster diffusion—but raise new challenges in terms of ethics and governance. According to a recent study, Artificial Intelligence (AI) techniques such as machine learning and evolutionary algorithms can provide more precise, faster, and scalable outcomes in big data analytics [13].

# B. Edge computing

The edge computing that is increasingly developed will, in turn, realize the ability to process more data locally. This would reduce some of the data privacy concerns by allowing real-time analytics across different regions where connectivity might be low. Global spending on edge computing in 2022 is expected to increase 14.8 percent over 2021 spending to reach \$176 billion (£129.5bn)

# C. Democratization of Analytics

With a new class of self-service analytics tools and low-code/no-code platforms facilitating ease of use, further democratization, and proliferation to non-technical business users, the availability of analytics has become more widespread. This could be seen as easing adoption while requiring careful governance. By 2025, 80 percent of all data analytics initiatives will have augmentation through automation—Gartner [15].

## D.Data Ethics and Responsible AI

Growing awareness of the ethical dimension in the use of data and AI will drive requirements for a robust framework underpinning the practice of responsible analytics across geographies. In the future, according to an Accenture study, 76 percent of the surveyed executives ranked scaling AI responsibly as their top strategic priority [16].

## E. Blockchain for Data Trust

Blockchain technology may contribute to the enhancement of data trust and traceability, hence reducing some of the regional concerns related to data integrity and security. The World Economic Forum projects that by 2027, 10 percent of global GDP will be stored on blockchain [17].

# F. Augmented Analytics

Receipt of AI-driven insights within any analytic platform will democratize advanced analytics capabilities to regional teams, thus increasing the potential for accelerated adoption. The global Augmented Analytics market size is projected to reach \$ 14620 million by 2028, from \$ 4623.5 million in 2021, at a CAGR of 17.4 percent during 2022-2028 [18].

## G. Collaborative Analytics

The more advanced collaborative analytics platforms will foster cooperation and knowledge sharing across regions. According to the MIT Sloan Management Review, organizations enabled by strong collaborative analytics capabilities were 5 times more likely to make faster decisions as opposed to their peers [19]. These trends no doubt impress the importance of agility and adaptability in a course of action an organization charts toward securing regional buy-in for analytics initiatives. As technology evolves, so must strategies for showing value, mitigating concerns, and cultivating adoption in diverse global settings.

#### VIII. CONCLUSION

Deployment of leading-edge technical frameworks, in-depth cost-benefit analyses, and solutions at a regional level are some guaranteed ways to demonstrate real output from analytics initiatives. Getting regional buy-in on analytics initiatives within a global enterprise is an intricate task but very important. It is through attention to demonstrating value creating robust financial justification, and bridging cultural

and organizational gaps that the company can maximize its chance of winning big. Strategies and frameworks of this nature will ensure regional buy-in within a predominantly local or global setup and stimulate innovation impetus and competitive advantage.

ISSN No: 2349-5677

The top recommendations that key practitioners highlight include the following: analytic initiatives targeted toward regional needs and objectives; comprehensive financial justification models that cover regional variations; change management and communications strategies attuned to regional contexts; and the importance of cross-region collaboration and knowledge transfer. In addition, staging flexible analytics models and communicating the value over time of analytic initiatives are key ingredients for sustained success.

This will prevail in future work on several key questions, such as the development of more sophisticated models for understanding the long-term strategic value of analytics initiatives, how to understand the impact of different technologies within the emerging space on the effects of the adoption of regional analytics capabilities, best practices for building analytic capabilities across diverse regional contexts, and finally, the role organizational culture can play in the success of analytics implementations. In this respect, both practitioners and researchers can participate in global analytics initiatives by taking up these areas, thus helping organizations

unlock their full potential for making data-driven decisions across varied regional contexts.

#### **REFERENCES**

- 1. P. Sainam, S. Auh, R. Ettenson, and Y. S. Jung, "How Well Does Your Company Use Analytics?," Harvard Business Review, Jul. 27, 2022. Available: https://hbr.org/2022/07/how-well-does-your-companyuse-analytics.
- 2. Phadermrod, Boonyarat& Crowder, Richard M. & Wills, Gary B., 2019."Importance-Performance Analysis based SWOT analysis," International Journal of Information Management, Elsevier, vol. 44(C), pages 194203.
- 3. "SWOTAnalysis. U.S.EconomicDevelopment Administration, Available:https://www.eda.gov/resources/comprehensive-economicdevelopment-strategy/content/swot-analysis.
- 4. V. Grover, R. H. L. Chiang, T.-P. Liang, and D. Zhang, "Creating Strategic Business Value from Big Data Analytics: A Research Framework," Journal of Management Information Systems, vol. 35, no. 2, pp. 388–423, 2018.
- 5. B. Szkudlarek, J. S. Osland, L. Nardon, and L. Zander, "Communication and culture in international business Moving the field forward," Journal of World Business, vol. 55, no. 6, Jul. 2020, doi: https://doi.org/10.1016/j.jwb.2020.101126.
- 6. The Competing Values Framework. Source: Adapted from K. Cameron and R. Quinn, 1999. Diagnosing and Changing Organizational Culture, Addison-Wesley, p. 32. Image: University of Minnesota, Principles of Management, CC BY 4.0.
- 7. Reboulet, Amanda & Jackson, Ross. (2021). Effective Communication Approaches for Decision Analytics: An Exploration of Strategies. 10.4018/978-1-7998-3964-4.ch002.

8. J. MAKOS, "The PESTEL Framework Explained: 6 Important Factors," PESTLE Analysis, Feb. 06, 2022. Available: https://pestleanalysis.com/pestel-framework/.

ISSN No: 2349-5677

- 9. Mitchell, Ronald K., Bradley R. Agle, and Donna J. Wood. "Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Counts." The Academy of Management Review 22, no. 4 (1997): 853–86. Available: https://doi.org/10.2307/259247.
- 10. Yves Pigneur, Alexandre Osterwalder, Greg Bernarda, and Alan Smith, Value Proposition Design: How to Create Products and Services Customers Want, John Wiley & Sons, 2014.
- 11. Kaplan, R. S., & Norton, D. P. (1996). The balanced scorecard: translating strategy into action. Harvard Business School Press.
- 12. Ishak Firdauzi Ruslan, Muhammad Fahmi Alby, and Muharman Lubis. 2023. Applying Data Governance using DAMA-DMBOK 2 Framework: The Case for Human Capital Management Operations. In Proceedings of the 8th International Conference on Industrial and Business Engineering (ICIBE '22). Association for Computing Machinery, New York, NY, USA, 336–342. https://doi.org/10.1145/3568834.3568866
- 13. Rahmani AM, Azhir E, Ali S, Mohammadi M, Ahmed OH, Yassin Ghafour M, Hasan Ahmed S, Hosseinzadeh M. 2021. Artificial intelligence approaches and mechanisms for big data analytics: a systematic study. PeerJ Computer Science 7:e488. Available: https://doi.org/10.7717/peerj-cs.488
- 14. Strathern, Fin. "Global Spending on Edge Computing to Grow Nearly 15% in 2022." Edge Computing News, 18 Jan. 2022. Available: https://www.edgecomputing-news.com/2022/01/18/global-spending-onedge-computing-to-grow-nearly-15-in-2022/.
- 15. M. Rimol, "Gartner Survey Reveals 80% of Executives Think Automation Can Be Applied to Any Business Decision," Gartner, Aug. 22, 2022. Available: https://www.gartner.com/en/newsroom/pressreleases/2022-08-22-gartner-survey-reveals-80-percent-of-executivesthink-automation-can-be-applied-to-any-business-decision
- 16. "From AI compliance to competitive advantage," www.accenture.com. Available: https://www.accenture.com/us-en/insights/artificialintelligence/ai-compliance-competitive-advantage
- 17. "Deep Shift: Technology Tipping Points and Societal Impact," World Economic Forum, Sep. 09, 2015. Available: https://www.weforum.org/publications/deep-shift-technology-tippingpoints-and-societal-impact/
- 18. "Global Augmented Analytics Market Research Report 2022 Orbis Research," www.orbisresearch.com. Available: https://www.orbisresearch.com/reports/index/global-augmentedanalytics-market-research-report-2022.
- 19. S. LaValle, E. Lesser, R. Shockley, M. S. Hopkins, and N. Kruschwitz, "Big Data, Analytics and the Path From Insights to Value," MIT Sloan Management Review, Dec. 21, 2010. Available: https://sloanreview.mit.edu/article/big-data-analytics-and-the-path-from-insights-to-value/