

Effectiveness of the Balanced Scorecard in Enhancing Firm Performance

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Abstract: The Balanced Scorecard (BSC) and the Sustainability Balanced Scorecard (SBSC) are critical tools for evaluating and improving organizational performance through both financial and non-financial metrics. This research examines the application of these frameworks in British American Tobacco (BAT) and Shell Plc, focusing on their strengths, limitations, and the evolving need for adaptation in a dynamic business environment^[1-3]. The BSC framework is structured around four perspectives: finance, customers, internal processes, and learning and growth, while the SBSC expands on these by incorporating sustainability factors, addressing environmental, social, and economic concerns. Despite their usefulness in providing a comprehensive strategy map and guiding business decisions, the traditional BSC lacks flexibility and the ability to integrate dynamic, time-sensitive factors. The study highlights how BAT has adapted its BSC by incorporating non-financial indicators and establishing a detailed performance tracking system. Shell's shift to the SBSC reflects its commitment to social responsibility and sustainability, focusing on reducing carbon emissions and enhancing diversity within the workforce. The paper concludes that both frameworks remain valuable but require continuous updates and customization to reflect industry-specific challenges. Recommendations include redesigning the BSC to better align with individual company needs and integrating financial technologies for real-time performance tracking to improve accuracy and decision-making.

1. Introduction

This report is based on the Balanced Scorecard (BSC) created by Kaplan and Norton in 1992 to evaluate performance through financial and non-financial metrics^[4]. The newest Sustainable Balanced Scorecard (SBSC) has also been introduced. It examines the implementation of these in British American Tobacco (BAT) and Shell Plc, focusing on the strengths of the practice process and examining the deficiencies. It was concluded that BSC and SBSC are still valid today, but the company must change according to its situation. This study ultimately delivers recommendations for enhanced business sustainability and strategic management practices.

2. Literature review

2.1. Balanced Scorecard (BSC)

BSC comprises four parts: finance, customers, internal procedures, and learning and growth. Like an airplane cockpit, the BSC gives managers complex information at a glance. BSC boosted strategy implementation efficacy and gave a more valuable and detailed evaluation of firm performance. Introducing a strategy map helps evaluators focus less on lagging financial performance indicators and more on leading non-financial performance. The Balanced Scorecard increases cause-and-effect relationships and improves performance reviews by balancing lagging and leading indicators^[5-6].

BSC lacks flexibility because it focuses on causality at a certain point, which is incompatible with dynamic linkages that change with the environment and strategic objectives. The BSC's lack of a time dimension is a significant limitation in determining cause-and-effect relationships^[7]. Until another improved innovation tool appears, the balanced scorecard will continue to provide organisations with a valuable option as a strategy map, an enabler of policy implementation, and an organisational control and accountability tool^[8].

2.2. Sustainability Balanced Scorecard (SBSC)

The four objectives reviewed by the traditional BSC ignore the sustainability issues that needs to be modified because of the changing business environment^[9].

The Sustainability Balanced Scorecard (SBSC) evolved from BSC and combines all non-financial variables. That allows management to handle sustainability by integrating economic, environmental, and social factors with a triple bottom line theory^[10-11]. The SBSC can be utilised to help businesses become digitally transformed, carbon neutral, and reduce their ecological footprint. Figure 1 shows that SBSC-4 and SBSC-5 are the two basic structures^[12].

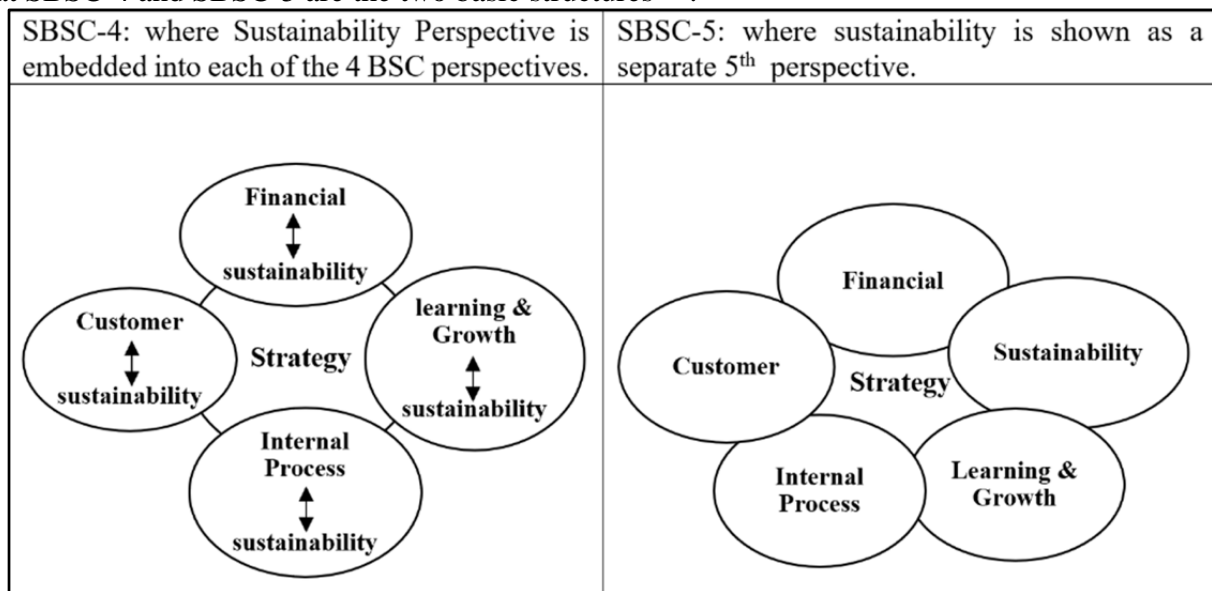


Figure 1 Architecture of SBSC-4 and SBSC-5.

The required environmental and social indicators, goals, and accompanying Global Reporting Initiatives (GRI) must be included in the SBSC framework. The GRI assist managers by providing various performance and department-specific metrics. The SBSC architecture allows managers to evaluate the performance of existing strategies in terms of their impact on the organization's overall risk exposure^[13-14]. A strategy map is developed by combining the triple bottom line and SBSC (Figure

2). It pursues inclusive growth by adding mission, value for stakeholders, and an updated business model to the tool^[15].

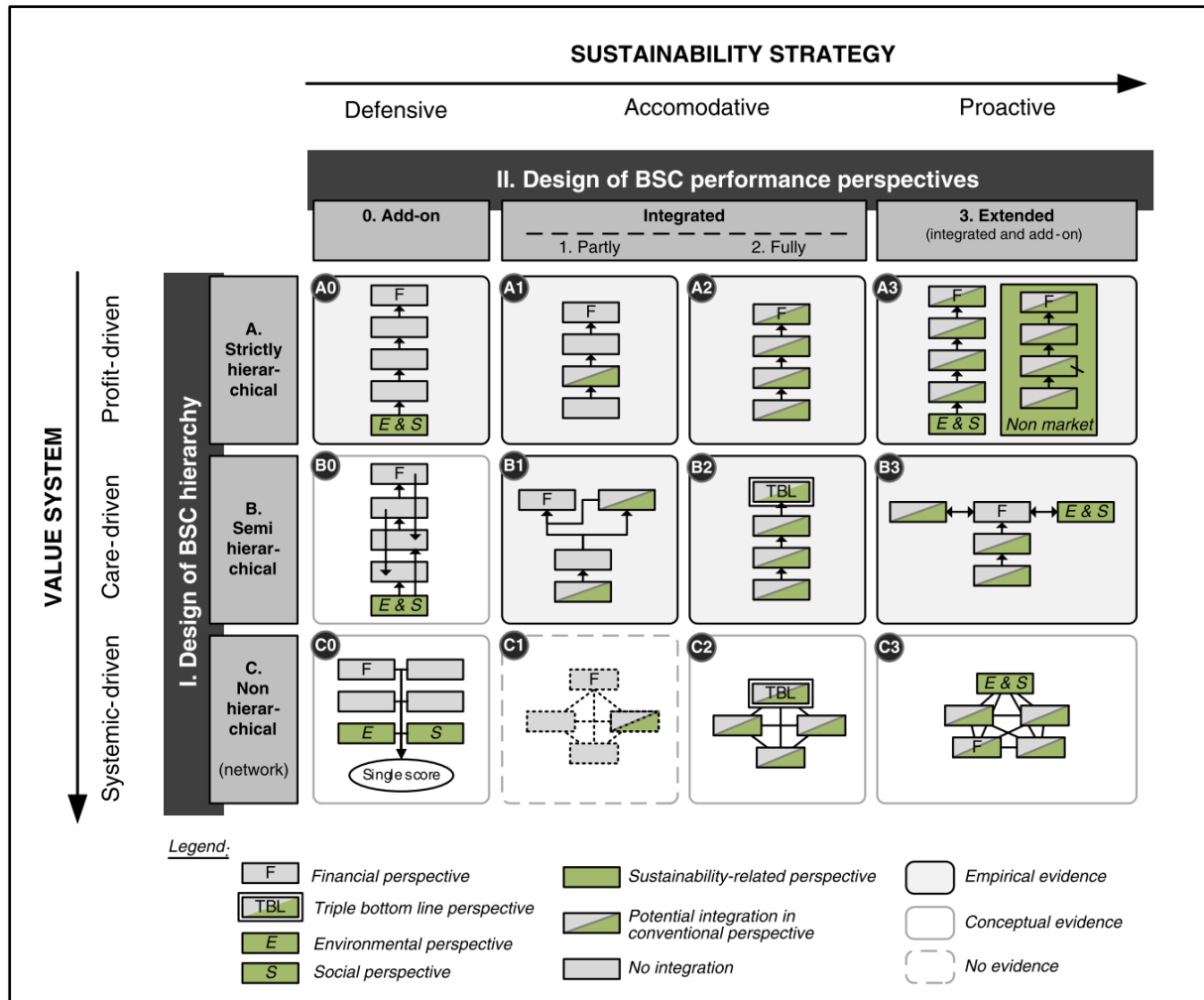


Figure 2 A typology of generic SBSCs architectures - strategy maps.

3. Finding & Analysis

3.1. British American Tobacco (BAT)

	Objectives	Measurements	Target		Initiatives
			FY-2023	Benchmark	
Financial	Optimize capital structure	Adjusted Net Debt to Adjusted EBITDA	2.57x	steady 2-3x	Dynamic Business pillar
	Increase cash efficiency	Cash conversion (%)	-68%	at least 90% annually	
	Optimize product mix	Revenue from Non-Combustibles	16.5%	50% by 2035	Predominantly smokeless business
		Revenue from New Categories at cc (%)	17.8%	+37.0 % in 2021	
Customer	Increase market share	Cigarette and HP volume share growth (bps)	-10 bps	+10 bps in 2021	Encourage adult consumers
	Grow consumer base	Number of Non-Combustible Product Consumers	23.9 million	50 million by 2030	Potential in new product categories
		Vapour consumer acquisition	11.5 million	10 million in 2021	Switch to Better

Figure 3 BSC of BAT (BAT, 2024c).

Figure 3 presents the Balanced Scorecard (BSC) of BAT, providing key performance indicators related to financial efficiency, product mix, market share, and consumer growth (BAT, 2024c). BAT is now the world's second-largest tobacco company. However, its financial position is not as good as expected. Although the adjusted net debt to adjusted EBITDA ratio was 2.5x within the scope of BAT's target, the cash conversion is negative. This indicates that there may be problems in the operating efficiency of the company. BAT intends to become a smokeless company, and new categories will boost non-combustible revenue. However, revenue from non-combustibles and revenue from new categories at cc are unsatisfactory in 2023, only 16.5% and 17.8% respectively. That's because BAT is shifting its focus from traditional combustible cigarettes to smokeless or low-risk alternatives. This commitment represents a significant shift in BAT's future product line and market strategy to drive tobacco harm reduction by providing smoke-free products. Therefore, the financial data for 2023 is unsatisfactory due to a volatile period for BAT to explore the market (BAT, 2024c).

This view can also be corroborated from the perspective of customers. Cigarette and HP volume share growth (bps) has declined 10 bps; this indicates BAT's continuous efforts to prevent underage access to cigarettes and occupy the market share by encouraging adult consumers to increase their consumption of smoke-free products. The number of non-combustible product consumers is 23.9m, steadily rising toward the target in 2030. The number of vapour consumers increased by 1.5 million, making a substantial contribution to the consumption of non-combustible products while expanding the consumer base; it provides smokers with the opportunity to "Switch to Bette" (BAT, 2024a).

BSC has some inherent limitations. Kaplan and Norton's original formulation of the BSC did not include a time dimension. Explaining both quantitative and qualitative indicators on the BSC may require the user to exert cognitive effort because environmental information is qualitative, and financial measures are quantitative^[16]. For all these reasons, the BSC looks less effective.

BAT's measures to address the above problems appear to be effective, turning backwards into advantages. Its strategy map (Appendix 1) guides the entire company top-down to truly understand its mission and value. BAT transforms non-financial indicators that are difficult to visualize into a series of quantitative indicators. Trying to defer the achievement of the goal by several years and designing a specific tracking system for each single goal (Figure 4). It divides the state of the target into four levels: achieved, on track, ongoing focus and not on track. They pay attention to the progress status of each metric so that the plan can be adjusted in time. Translating the qualitative aspect into the quantitative metrics makes BAT's special tracking system easier and more efficient. BAT can strengthen or stop the implementation and supervision of a certain measure in a timely manner. That helps to fully leash the previously hidden or frozen assets and capabilities, which can help the long-term value-creation process.

Key ✓ Achieved – Met target/ambition on or ahead of time ■ On track – Likely to meet target/ambition on time ■ Ongoing focus – Continued progress towards target/ambition required ■ Not on track – Significant progress required to meet target/ambition on time						
Topic	Ambitions and targets	Metrics	Performance tracking			
			2023	2022	2021	Status
(H) Harm reduction	£5bn by 2025 in revenue from New Categories	New Category revenues (£bn)	3.3	2.9	2.1	■
	50m by 2030 consumers of our Non-Combustible products	No. of consumers (millions), ^{®♦®} excluding Russia and Belarus	23.9	20.7	17.1	■

Figure 4 An example of BAT's performance tracking key (BAT, 2024b).

3.2. Shell Plc

Shell's BSC has begun to transform into SBSC, taking the initiative to assume social responsibility instead of being subject only to the external requirements of mandatory disclosure of ESG information.

First, it analyzes Shell's BSC from the learning and growth perspective. Shell aims to enhance diversity and inclusion of the whole company and support equity in the community. It accomplishes this by recruiting and promoting female employees and giving more opportunities to ethnic minorities. Both of these indicators achieved targets, as shown in Figure 5, and 3 ethnic minority members of the BOD exceeded the levels needed by the Parker Review. The people survey response rate reached 88%, and the training days for employees also increased significantly by nearly 30,000 days. 'NXplorers' training, with various projects including science, technology, engineering and mathematics (STEM), helps young people develop creative thinking to bridge the skills gap. Through continuous progress in learning and growth, Shell has a more diversified and skilled staff, which makes its work procedures safer and supports its low-carbon progress.

	Cause-and-effect	Objectives	Measurements	Target		Initiatives
				FY-2023	Benchmark	
Internal Processes		Reduce environmental impact	Net carbon intensity (NCI)	74 gCO ₂ e/MJ	76 gCO ₂ e/MJ in 2022	Generate low-carbon energy
			Investing in low-carbon energy solutions	\$5.6 billion	\$4.3 billion in 2022	
		Enhanced process safety	Lost time injury frequency (LTIF)	0.4 cases per million hours	0.5 cases per million hours in 2022	Enhance safety planning
			Operational process safety events	63 times	66 times in 2022	
Learning and Growth		Improve employee skills and engagement	Formal training days for employees	295,000 days	266,000 days	NXplorers (STEM)
			Shell People Survey response rate	88%	87%	Employee forums
		Enhance diversity and inclusion	Number of ethnic minority in BOD	3	1 in 2022	Equity in the communities
			Women in senior leadership positions	35%	40% by 2030	Recruit and promote female

Figure 5 BSC of Shell plc.

The internal procedures have improved due to the preceding initiatives. The frequent employee training reduced lost time injury frequency (LTIF) to 0.4 cases per million hours and operational process safety events to 63 times in 2023. That demonstrates Shell's effective employee training and improves safety planning. To enhance the life-cycle emissions intensity of the portfolio of energy products and generate low-carbon energy, Shell spends \$5.6 billion on low-carbon energy solutions, and Net Carbon Intensity (NCI) dropped to 74 gCO₂e/MJ, indicating Shell's energy transition strategy transformation start to pay off.

However, innovation and change are necessary to maintain and improve competitiveness in future markets, which will be characterized by disruptive changes and transitions from fossil to low-carbon energy. This strategic refresh (rather than operational optimization) requires a long-term investment but does not ultimately guarantee success.

The SBSC has been concerned about child labour since the beginning of its use (Appendix 2), but even though Shell has switched to the SBSC when creating the indicators, they may choose to ignore the hardest-to-change aspects as tough metrics. The issue of child labour in the energy and tobacco industries is a problem that the entire industry finds challenging to solve, but neither BAT nor Shell has paid attention to this indicator. Shell needs to make more efforts to solve the problems, and this is a long-term investment process. This reflects the SBSC is unlikely to contain all imaginable detailed mappings of the tensions and trade-offs associated with how businesses can potentially address the complexity of ecosystems and social systems. Shell should incorporate sustainability knowledge into the company's employee training so that the company's mission can be integrated into all actions. Shell should eventually make long-term and sustained efforts to achieve the transition to low-carbon energy and assume more social responsibility.

4. Conclusion & Recommendation

For BAT and Shell plc, BSC still effectively promotes the improvement of corporate performance,

but it is not comprehensive enough and needs to be further improved. BSC needs to be redesigned to adapt to the characteristics of each industry and make it more personalized. With the help of financial technologies to promote automated real-time updates and improve the accuracy of BSC indicators. Overall, implementing the BSC is not a one-time practice but a continuous learning experience, and the reformulation and improvement of BSC are frequently required.

References

- [1] British American Tobacco (2024a) *Combined Performance and Sustainability Summary 2023*. Available at: https://www.bat.com/content/dam/batcom/global/main-nav/investors-and-reporting/reporting/combined-annual-and-esg-report/BAT_Combined_Performance_and_Sustainability_Summary_2023.pdf (Accessed: 1 November 2024).
- [2] British American Tobacco (2024b) *Combined Annual and Sustainability Report 2023*. Available at: https://www.bat.com/content/dam/batcom/global/main-nav/investors-and-reporting/reporting/combined-annual-and-esg-report/BAT_Annual_Report_Form_20-F_2023.pdf (Accessed: 1 November 2024).
- [3] British American Tobacco (2024b) *Annual Report on Form 20-F 2023*. Available at: https://www.bat.com/content/dam/batcom/global/main-nav/investors-and-reporting/reporting/combined-annual-and-esg-report/BAT_Annual_Report_on_Form_20-F_2023.pdf (Accessed: 1 November 2024).
- [4] Kaplan, R.S. and Norton, D.P. (1992) 'The Balanced Scorecard-Measures that Drive Performance', *Harvard Business Review*, 70(1), pp. 71–79. Available at: https://www.steinbeis-bi.de/images/artikel/hbr_1992.pdf (Accessed: 2 November 2024).
- [5] Bartlett, G., Johnson, E. and Reckers, P. (2014) 'Accountability and Role Effects in Balanced Scorecard Performance Evaluations When Strategy Timeline Is Specified', *European Accounting Review*, 23(1), pp. 143–165. Available at: <https://doi.org/10.1080/09638180.2013.809977> (Accessed: 1 November 2024).
- [6] Figge, F. et al. (2002) 'The sustainability balanced scorecard - Linking sustainability management to business strategy', *Business Strategy and the Environment*, 11(5), pp. 269–284. Available at: <https://doi.org/10.1002/bse.339> (Accessed: 1 November 2024).
- [7] Elbanna, S. et al. (2022) 'An investigation of the causality links in the balanced scorecard: The case of the Gulf Cooperation Council hospitality industry', *Tourism Management Perspectives*, 41(1), pp. 1–12. Available at: <https://doi.org/10.1016/j.tmp.2021.100934> (Accessed: 3 November 2024).
- [8] Hoque, Z. (2014) '20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research', *British Accounting Review*, 46(1), pp. 33–59. Available at: <https://doi.org/10.1016/j.bar.2013.10.003> (Accessed: 1 November 2024).
- [9] Hansen, E.G. and Schaltegger, S. (2016) 'The Sustainability Balanced Scorecard: A Systematic Review of Architectures', *Journal of Business Ethics*, 133(2), pp. 193–221. Available at: <https://doi.org/10.1007/s10551-014-2340-3> (Accessed: 1 November 2024).
- [10] Hansen, E.G. and Schaltegger, S. (2018) 'Sustainability Balanced Scorecards and their Architectures: Irrelevant or Misunderstood?', *Journal of Business Ethics*, 150(4), pp. 937–952. Available at: <https://doi.org/10.1007/s10551-017-3531-5> (Accessed: 1 November 2024).
- [11] Jassem, S., Zakaria, Z. and Che Azmi, A. (2020) 'Sustainability Balanced Scorecard Architecture and Environmental Investment Decision-Making', *Foundations of Management*, 12(1), pp. 193–210. Available at: <https://doi.org/10.2478/fman-2020-0015> (Accessed: 1 November 2024).
- [12] Kaplan, R.S. and Norton, D.P. (2001) 'Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part I', *Accounting Horizons*, 15(1), pp. 87–104. Available at: <http://www55.homepage.villanova.edu/wayne.bremser/bsc&perf%20meas/Kaplan%20&%20norton-AH-3-01.pdf> (Accessed: 1 November 2024).
- [13] Kaplan, R.S. (2009) 'Risk Management and the Strategy Execution System', *Balanced Scorecard Report*, 11(1), pp. 1–6. Available at: <https://nzbef.org.nz/wp-content/uploads/2019/05/BSC-Report-Risk-Management-and-the-Strategy-Execution-System.pdf> (Accessed: 2 November 2024).
- [14] Kaplan, R.S. and Mikes, A. (2012) *Managing Risks: A New Framework*. Available at: https://www.nsf.gov/oirm/bocomm/meetings/spring_2018/Managing_Risks_A_New_Framework.pdf (Accessed: 2 November 2024).
- [15] Kaplan, R.S. and Mcmillan, D. (2020) *Updating the Balanced Scorecard for Triple Bottom Line Strategies*. Available at: <https://doi.org/10.1016/j.jenvman.2024.122000> (Accessed: 2 November 2024).
- [16] Jassem, S., Zakaria, Z. and Che Azmi, A. (2022) 'Sustainability balanced scorecard architecture and environmental performance outcomes: a systematic review', *International Journal of Productivity and Performance Management*, 71(5), pp. 1728–1760. Available at: <https://doi.org/10.1108/IJPPM-12-2019-0582> (Accessed: 1 November 2024).

Appendix

Appendix 1 BAT's simplified strategy map (BAT, 2024c)



Appendix 2 SBSC as a strategy map for a sample company (Jassem, Zakaria and Che Azmi, 2020)

