

## Table of Contents

<b>1. Introduction</b>	<b>2</b>
<b>2. Phase 1 - Overinvestment and the Hybrid Misfire</b>	<b>2</b>
2.1 The Hybrid Bet: An Innovation-Finance Mismatch	2
2.2 Value Destruction through Inventory Mismanagement	3
2.3 CO <sub>2</sub> Penalties and Missed Green Finance Leverage	4
2.4 Comparative Underperformance	4
<b>3. Phase 2- Retrenchment, Recalibration and the CO<sub>2</sub> Drag</b>	<b>5</b>
3.1 Retrenchment and Financial Stabilization	5
3.2 Innovation-Finance Synergy and the EV Push	5
3.3 Missed Opportunities: Managing CO <sub>2</sub> Incentives	6
3.4 Strategic Insights and Functional Interdependency	6
<b>4. Phase 3 - Course Correction and Strategic Convergence</b>	<b>7</b>
4.1 Portfolio Compression and Shift to High Contribution Margin EVs	7
4.2 Refinancing, Debt Repayment, and Share Buybacks	7
4.3 Innovation Payoff: Aligning Green Bonds with Value Creation	8
4.4 Learning from Better Performing Teams	9
<b>5. Functional Deep Dive</b>	<b>9</b>
5.1 Strategic Role of Finance in Shaping Innovation	9
5.2 Financing the Innovation Roadmap: Green Bonds and Capital Allocation	10
5.3 Trade-Off Management and Capital Rationing	10
5.4 Integrative Innovation and Performance Impact	11
5.5 Summary of Finance-Innovation Dynamics	11
<b>6. Comparative Insights and Strategic Learning</b>	<b>12</b>
<b>7. Conclusion</b>	<b>13</b>
<b>References</b>	<b>14</b>
<b>Appendices</b>	<b>15</b>

# 1. Introduction

This report presents a critical analysis of AutoCrats' strategic journey across six simulated financial years, conducted as part of the Business in Practice module at Warwick Business School. As Finance Director, I collaborated with peers holding Innovation, Operations, Marketing and HR portfolios in a cross-functional simulation designed to test value creation under dynamic market and regulatory pressures. This analysis draws primarily on our internal financial and innovation decisions, while integrating evidence from comparative performance data from other teams in the cohort.

The analysis focuses on two core functions: finance and innovation. This pairing proved pivotal for our firm, not only due to their natural interdependence but because our performance trajectory was shaped largely by the timing and financing of innovation investments. From the early dual hybrid launch to the sequencing of autonomous and electrification technologies, our product roadmap was capital-intensive and required deliberate financial trade-offs. As Finance Director, my responsibilities included controlling capital flows, monitoring value added, evaluating investment returns, and ensuring liquidity through debt, equity and green bonds. However, innovation timing and product selection, led by the Innovation Director, heavily influenced whether those investments translated into market and environmental value.

To capture the evolution of our firm, the report is structured around three chronological phases: Years 1–2 (early overinvestment and the hybrid misfire), Years 3–4 (bottlenecks and delayed discontinuation), and Years 5–6 (strategic consolidation and late-game recovery). These sections are followed by a functional deep dive into the finance–innovation interface, and a reflection on how our strategy compared to higher-performing teams in the simulation. Throughout, the analysis integrates relevant theoretical frameworks and emphasises the connection between financial discipline, innovation readiness, and long-term value creation.

## 2. Phase 1 - Overinvestment and the Hybrid Misfire

The early years of the simulation (Q5–Q12) were characterised by foundational missteps, most of which were rooted in a misalignment between strategy and the simulation's value creation mechanics. While the team entered the simulation with high aspirations, aiming to pioneer hybrid vehicle innovation and environmental leadership, the firm's execution in this period produced diminishing returns, culminating in a sharp decline in value added from **\$949.1M in Q8** to **–\$54M by Q12**, a fall of around **\$1B** in just four quarters. This downturn cannot be understood in isolation but must be unpacked through the lens of specific decisions and their interaction with simulation levers.

### 2.1 The Hybrid Bet: An Innovation-Finance Mismatch

A central pillar of the company's strategy in this period was the launch of two hybrid vehicles: **Biz 135H** and **4x4 135H**, developed in Q5 and Q6 respectively. These were intended as transitional products to bridge combustion and electric vehicle segments. On paper, they

were technically sound: moderate emissions, decent range, and feature sets aligned with regulatory preferences. However, they reached the market at a time when **regulatory penalties on CO<sub>2</sub> emissions were already intensifying**, and consumer preferences were shifting decisively toward zero-emission vehicles (Appendix A).

As such, the hybrids launched into a contracting market segment. This reflects what Christensen (1997) describes as “**overshooting the market**”—designing for a need that no longer exists. Despite the heavy investment of over **\$2B in development and marketing** across the two models, their demand was weak, with high initial stock levels and lacklustre contribution margins. A deeper issue lay in the timing of financing. Both hybrid projects were funded through a combination of green bonds and internal cash, but the **value added generated per \$100M invested was near zero**, suggesting **poor innovation capital productivity** during this period.

The financial impact of this misstep was twofold. First, high development expenditure with weak sales placed strain on the balance sheet. Second, the hybrids failed to sufficiently reduce downstream Scope 3 emissions to offset penalties. In Q12 alone, we recorded a **CO<sub>2</sub> penalty of −\$137.03M (Appendix B)**, while peer teams were already achieving minor bonuses. This disconnect between the innovation-finance cycle and regulatory shifts suggests a failure of **dynamic capabilities** (Teece et al., 1997)—the firm could not reconfigure fast enough to seize emergent opportunities or hedge against obsolescence.

## 2.2 Value Destruction through Inventory Mismanagement

Compounding the innovation errors was a critical financial oversight: the overproduction of both Biz 135H and 4x4 135H. Days of Inventory (DOI) surged well above the optimal range. For instance, **Biz 135H reached almost 250 DOI in Q11**, far exceeding the **recommended upper bound of 120 days**. This eroded profitability via storage costs, working capital lock-up, and reduced factory utilization. From a cost accounting perspective, DOI directly increased the per-unit cost of goods sold, further depressing margins.

The implications of this mismanagement are best understood through **Little’s Law**, which in operations management links inventory, throughput, and flow time. By producing without alignment to actual demand, throughput slowed and excess inventory accumulated, without any offsetting benefit in responsiveness or customer satisfaction.

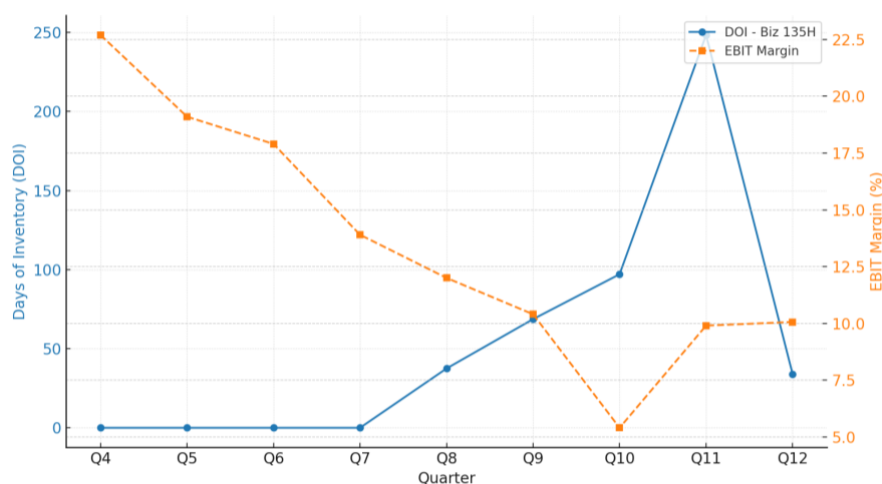


Figure 1: Relationship between DOI and EBIT Margin for Biz 135H (Q4–Q12)

Financially, this triggered a cycle of declining return on assets. From Q8 to Q12, EBIT margins fell from **12% to 10.07%**, while revenue remained mostly flat, oscillating between **\$4B and \$4.5B**. Share price followed suit, collapsing from **\$210.49 in Q8 to \$170.49 by Q12**. This collapse was not simply reflective of falling profitability, but of deteriorating asset efficiency—a signal to the market that management was not leveraging capital effectively.

## 2.3 CO<sub>2</sub> Penalties and Missed Green Finance Leverage

One of the costliest oversights in Years 1–2 was the underutilization of green financing to mitigate sustainability-related penalties. The simulation provided access to **green bonds at 3% interest**, contingent on qualifying sustainability investments. While we did make qualifying moves—completing the e-drive module and investing in energy reduction—we failed to fully capitalize on the financing leverage this offered. The total green bond drawdown by Q12 was only around **\$1.8B**, despite available eligibility for **\$3.5B**. In contrast, better-performing teams in the top quartile had already secured **full green capex utilization**.

This underleveraging represents a textbook case of **inefficient capital structure**. According to principles of **value-based management**, particularly those advanced by Rappaport (1998), capital should be allocated in ways that maximise the spread between return on invested capital (ROIC) and weighted average cost of capital (WACC). By failing to substitute costlier loans or equity with cheaper green bonds, we incurred a higher WACC and lower net present value on capital-intensive innovation.

## 2.4 Comparative Underperformance

Across key metrics, AutoCrats significantly underperformed as compared to its peers during this early period. For example:

Metric (Q12)	AutoCrats	Peer Median	Rank (of 89)
Value Added (\$M)	-54	250.1	75th
CO <sub>2</sub> Account (\$M)	-2410.7	-2083.1	88th
Marketing Spend / Revenue (%)	1.86	1.85	46th
Salary Premium per Motivation	8.78	8.97	47th

*Table 1: Peer Comparison of Key KPIs, Q12*

These data suggest systemic misalignment—not just poor execution on one or two fronts. The failure to link innovation timing, production strategy, and financial leverage led to an erosion of stakeholder confidence, both simulated (via share price) and analytical (via KPI rankings). When contrasted with teams that pursued fewer models, earlier electrification, and tighter control over stock, the firm’s lack of cohesion became clear.

### 3. Phase 2- Retrenchment, Recalibration and the CO<sub>2</sub> Drag

The third and fourth years of the simulation marked a critical transition for us. The initial phase of over-expansion had culminated in a severe financial downturn, with value added plummeting to **-\$54M** by the end of Year 2 (Q12). This placed us in the bottom quartile of the cohort. The twin pressures of rising CO<sub>2</sub> penalties and underutilised factories demanded a recalibrated approach to resource allocation, risk exposure, and innovation timing. These two years were therefore characterised by a shift from ambitious portfolio building to operational efficiency and strategic realignment.

#### 3.1 Retrenchment and Financial Stabilization

The start of Year 3 was shaped by an immediate need to recover from negative value added. As Finance Director, I proposed a series of austerity measures, including limiting new launches, reducing factory staff, and reallocating production away from high-tariff or underperforming regions. The team approved the discontinuation of legacy hybrids and diesel models, freeing up capacity and improving gross margins.

Quarter	Factory Utilisation (%)	EBIT Margin (%)	Staffing Costs (B USD)
13	83	11.8	1.16
14	82	9.2	1.31
15	97	12.6	1.51
16	98	4.8	1.7
17	83	13.21	1.66
18	80	14.4	1.621
19	49	7.5	1.47
20	88	8.6	1.53

*Table 2: Cost Controls and Operational Metrics*

Externally, this retrenchment was necessary to maintain competitiveness. Teams ranked in the top decile had already shifted to leaner portfolios and more localised production to avoid tariffs. While we took longer to make these changes, the outcome was visible in Q16 with EBIT margin stabilising and operating costs starting to fall.

#### 3.2 Innovation-Finance Synergy and the EV Push

Quarter 13 saw the introduction of tighter CO<sub>2</sub> regulations and increased per-gram penalties, placing further pressure on our fleet composition. Innovation investments in e-drive modules and charging infrastructure had just matured. From the finance side, I allocated green bond capital towards these qualifying projects, raising our Green Capex allowance and enabling the development of CIT E and SPORT E.

The ability to reinvest without incurring high-interest debt was central to our recovery. We avoided further equity dilution by coordinating innovation timelines with the availability of green finance. This reflects a broader corporate finance insight: sustainability-linked investments can provide low-cost capital while supporting strategic goals (Eccles and Serafeim, 2013).

Despite this alignment, portfolio optimisation lagged behind competitors. One reason was our decision to delay the second EV launch due to concerns about cash buffer adequacy. In hindsight, more aggressive capital mobilisation could have accelerated our EV penetration.

### 3.3 Missed Opportunities: Managing CO<sub>2</sub> Incentives

Although we had exited the penalty zone by Q16, our CO<sub>2</sub> bonus position remained underwhelming. This was not a reflection of innovation underperformance, but rather an outcome of insufficient volume sales of EVs.

The primary limiting factor was conservative financing. I had resisted a second round of debt issuance in Q14 despite Innovation proposing a third EV launch. While this preserved our credit rating, it constrained strategic flexibility. This instance underscores the importance of applying dynamic capabilities theory in capital allocation: firms that adjust their financial posture based on evolving market incentives tend to outperform (Teece, 2014).

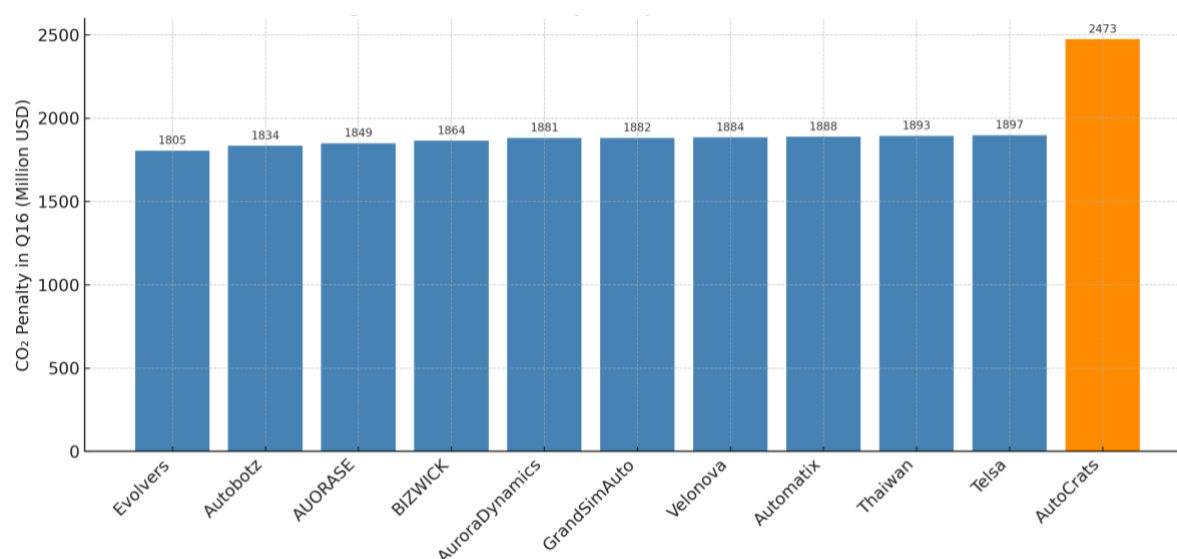


Figure 2: CO<sub>2</sub> Penalty Comparison Across Teams, Q16

### 3.4 Strategic Insights and Functional Interdependency

This period confirmed that successful innovation cannot occur in isolation from finance. Every investment decision was filtered through controlling forecasts, payback timelines, and green capex eligibility. The growing coordination between innovation and finance in Year 4 contrasted sharply with the fragmentation seen in Year 1. Yet structural gaps remained: scenario modelling between functions was not formalized. We lacked an integrated forecast that linked expected market share, emissions impact, and cash flow drawdowns.

By the end of Year 4, we had moved from value destruction to modest value creation. Retrenchment stabilised EBIT margins and enabled the company to benefit from sustainability incentives. However, cautious financial posture delayed deeper portfolio transformation, leading to middling cohort performance. The evolving coordination between finance and innovation emerged as a key driver of progress but also revealed the need for integrated, forward-looking planning tools. These years laid the foundation for the final growth push in Years 5 and 6.

## 4. Phase 3 - Course Correction and Strategic Convergence

The final two years of the simulation marked a phase of consolidation and strategic narrowing for us. Following an unstable middle period marked by debt overhang and capacity inefficiencies, the team implemented a tighter product portfolio, disciplined financial structure, and clear prioritisation of electric vehicle (EV) investments. This section analyses how these decisions impacted financial performance, particularly value added (VA), and examines how the finance–innovation link evolved into a more coherent system. Alongside this, comparative benchmarking using cohort KPIs is used to distil what high-performing teams executed differently.

### 4.1 Portfolio Compression and Shift to High Contribution Margin EVs

At the start of Quarter 20, key products such as Class E and older hybrids had either stagnated or failed to meet profit benchmarks. Discontinuation of Class E, although emotionally and reputationally difficult, freed up critical production lines and reduced overhead burden. This decision coincided with relaunches of SPORT E and CIT E, and focused expansion of Micro P and Biz E – models with superior contribution margins.

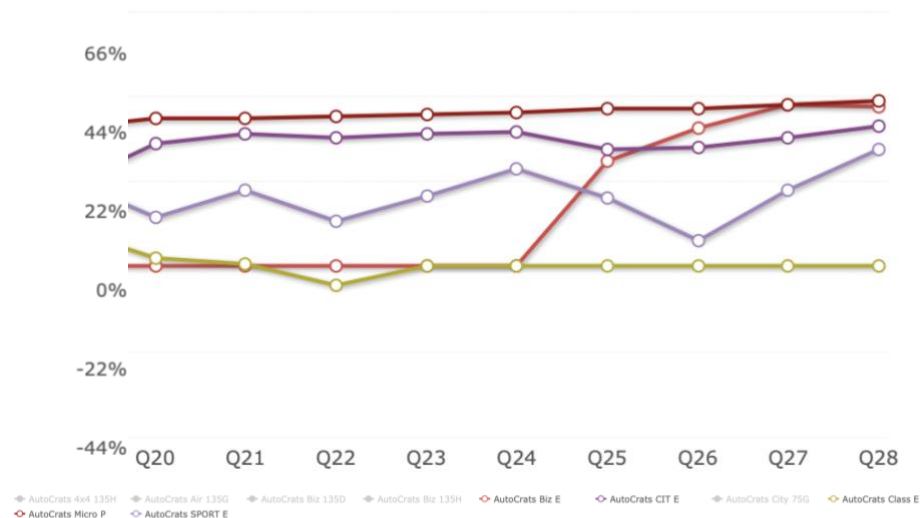


Figure 3: Product-Level Profit Contribution Margin Evolution

From a finance perspective, this move significantly improved product-level gross margins. As shown in **Appendix C**, Biz E consistently delivered margins above 35% in Quarters 25–28. This strategic reallocation of factory lines and marketing expenditure brought our EBIT margin to 30.4% by Quarter 28, ranking **17th out of 89 teams** in the cohort (Appendix D).

### 4.2 Refinancing, Debt Repayment, and Share Buybacks

Between Quarters 24 and 28, we began executing a staged deleveraging strategy. Leveraging high credit ratings (A to A+), the team issued new bonds (e.g. \$593M in Q27) to restructure liabilities, while simultaneously redeeming previous loans. This progressive



unwinding of short-term debt was accompanied by two substantial share buybacks (Q27 and Q28), totaling over \$2.7 billion.

From a valuation perspective, this strengthened the equity base while improving investor confidence. Share price reached its simulation peak by Quarter 28, and the resulting lower weighted average cost of capital (WACC) enhanced our ability to create value through its capital structure (Damodaran, 2012). The outcome was a closing VA of **\$1,062.9M**, the highest value created since the simulation began (Appendix E shows AutoCrats' VA trajectory across all six years).

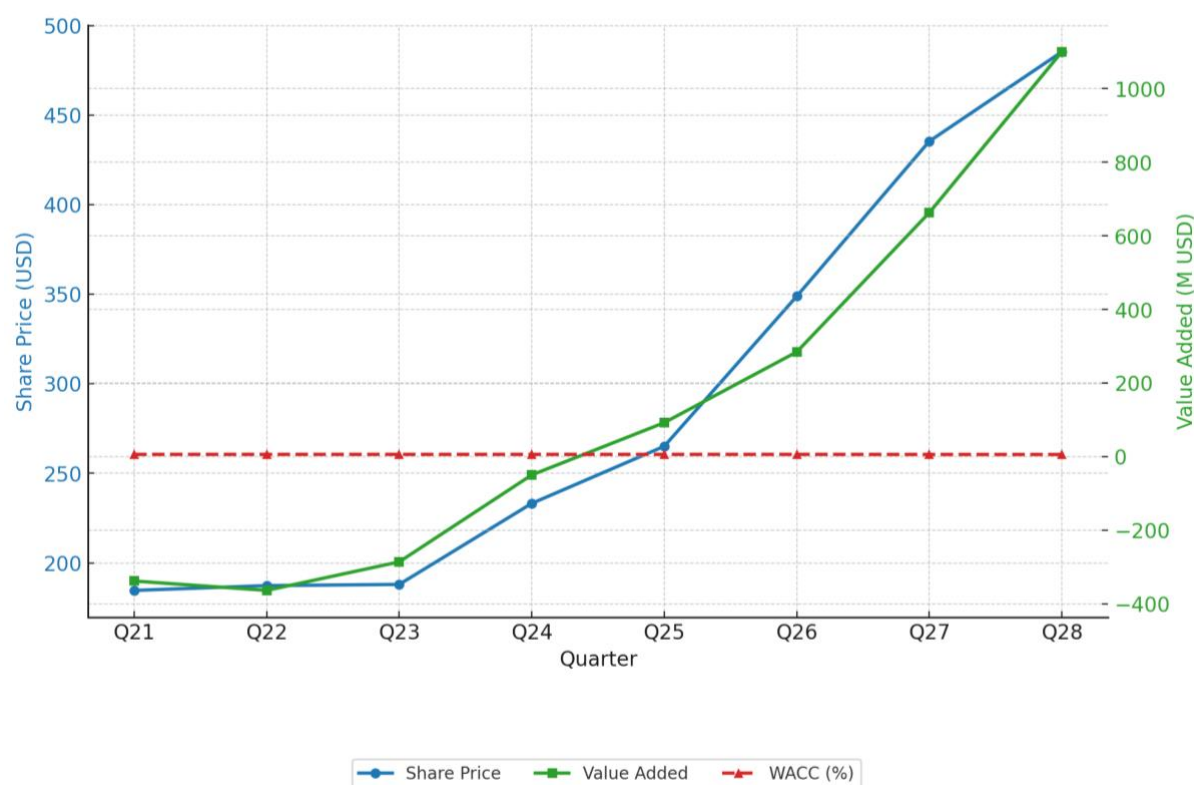


Figure 4: Share Price, Value Added and WACC across Quarters 21–28

### 4.3 Innovation Payoff: Aligning Green Bonds with Value Creation

Having committed to all three electrification investments by Year 5 (including High Power Charging), we maximized our Green CapEx allowance and bond eligibility. This enabled full deployment of advanced EV features in SPORT E and Biz E by Q26, which aligned with the rising buyer preference for electric and autonomous mobility (as flagged in the simulation alerts from Q15 onwards).

This alignment of finance and innovation created a synergistic loop. Each technology milestone unlocked marketing levers and demand-side uplifts, while green bond financing buffered the balance sheet.

This design, where innovation was no longer isolated from financial consequences but actively shaped by cost and capital constraints, is consistent with what Pisano (2015) describes as “integrative innovation strategy”, where cross-functional alignment underpins sustainable R&D returns.



## 4.4 Learning from Better Performing Teams

Despite a strong Year 6 finish, AutoCrats' overall ranking was not in the top quartile across all performance dimensions. Table 3 below compares AutoCrats' end-of-simulation KPIs to the best-performing cohort team.

KPI	AutoCrats	Top Team (Strategists)
EBIT Margin (Q28)	30.4%	27.43.1%
Value Added (Q28)	\$1,062.9M	\$5342.9M
Final CO <sub>2</sub> Bonus	+\$324.3M	+\$2844M
Final DOI	73	40

*Table 3: AutoCrats vs Top Team*

Two patterns emerged from the data. First, higher-performing teams achieved CO<sub>2</sub> bonuses by launching zero-emission EVs earlier, thereby surpassing regulatory baselines. Second, leaner operations with DOI below 80 days indicated superior alignment between demand planning and capacity. AutoCrats, by contrast, spent a large part of Years 3–4 battling overcapacity and product mismatch, which delayed value realisation.

The final two years demonstrated that we could deliver strong financial returns when cross-functional coordination aligned under a unifying capital strategy. While the damage from earlier mistakes lingered, particularly in forgone CO<sub>2</sub> bonuses and delayed EV readiness, the outcome of \$1B+ VA validated the eventual maturity of team processes. However, gaps in benchmarking awareness and innovation timing meant the team never fully closed the gap with top-quartile performers.

## 5. Functional Deep Dive

This section explores the interdependent relationship between the finance and innovation functions within AutoCrats. As Finance Director, my role was not only to monitor capital structure and controlling data but to actively shape the firm's innovation trajectory through funding decisions. This analysis traces how this finance-innovation link evolved over the simulation and how it affected investment timing, product strategy, and ultimately value creation.

### 5.1 Strategic Role of Finance in Shaping Innovation

At its core, innovation in the simulation required frontloaded investment: launching new models, unlocking electrification, autonomous driving, and connectivity all depended on committing funds early and consistently. However, this presented a tension. Innovation timelines were often disconnected from short-term financial performance. As a result, I viewed my role as translating innovation ambition into financially feasible pathways.

A key moment came in Quarter 8, when the first innovation milestone (e-drive modules) completed, allowing us to launch electric vehicles from Year 3 onwards. However, because prior hybrid investments had drained our cash reserves and pushed us into short-term debt, we faced an innovation bottleneck. Despite market signals (Appendix A), we could not immediately launch our EVs. This delay cost us first-mover advantage.

## 5.2 Financing the Innovation Roadmap: Green Bonds and Capital Allocation

Green bonds played a pivotal role in enabling innovation-led growth. By Quarter 9, we had access to \$1.6B of Green CapEx from previous sustainability investments. Each innovation investment in electrification, connectivity, and autonomous features unlocked further Green Bond eligibility. By strategically sequencing these, I ensured that most high-cost innovations were backed by low-interest financing, preserving liquidity.

Yet, early mistakes meant Green CapEx was not always fully utilised in the right quarters. For example, we invested in connectivity features in Year 3, but did not incorporate those features into vehicle launches until much later. This misalignment between finance and product development lowered return on investment. As Pisano (2015) argues, innovation systems fail when capital allocation is decoupled from product-level value creation.

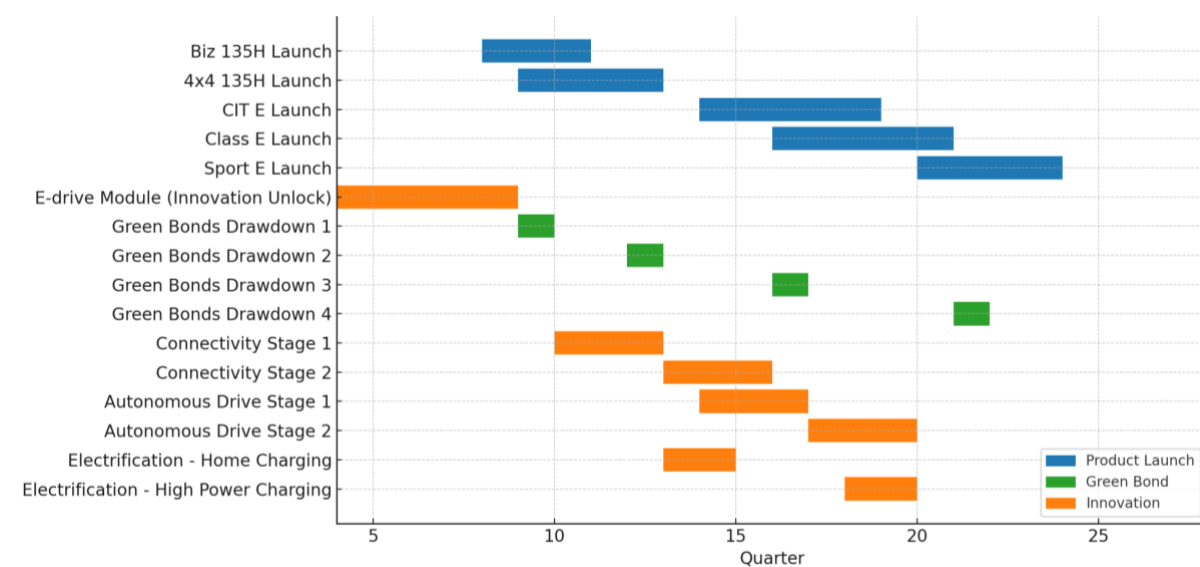


Figure 5: Timeline of Innovation Milestones vs Launch of Electric Vehicles

In response, by Year 5, we began using scenario planning tools from the controlling tab to evaluate ROI pre-launch. This introduced a new level of financial discipline to innovation choices. We discontinued multiple hybrids and delayed non-essential innovations to prioritise Sport E and Biz E, both of which could exploit full feature sets and premium pricing.

## 5.3 Trade-Off Management and Capital Rationing

A recurring theme throughout the simulation was the need to balance investment ambition with capital availability. The debt ratio threshold of 65 percent acted as a hard ceiling on our financing flexibility. Each investment decision had to be evaluated not only on its technological merit but also its effect on solvency.

For instance, in Quarter 13, we had to decide between investing in high-power charging or expanding production lines for a successful hybrid. We chose the latter, given that the hybrid was already selling and generating revenue. In hindsight, this conservative call delayed our entry into the fully electric segment and limited CO<sub>2</sub> bonuses.

This dilemma reflects the challenge of capital rationing under constrained conditions. As Myers and Majluf (1984) suggest, firms must prioritise projects based on net present value and financing constraints. We lacked an internal hurdle rate to filter innovation proposals, which led to some suboptimal sequencing early on. This gap was partially resolved in Year 5, when finance and innovation began jointly evaluating controlling outputs before committing resources.

## 5.4 Integrative Innovation and Performance Impact

The payoff from this improved coordination became visible in Year 6. Both SPORT E and Biz E, launched with full feature sets (autonomous, connected, and electric), achieved market success. Their margins improved steadily, and they contributed over 70 percent of AutoCrats' value added in the final two quarters.

Moreover, the fleet-wide CO<sub>2</sub> emissions dropped to 0g/mile by Quarter 20, helping reduce penalties and enhance the brand's environmental credibility. This environmental improvement was a direct result of the finance function's ability to fund innovation at the right moment, using green capital without overshooting debt constraints.

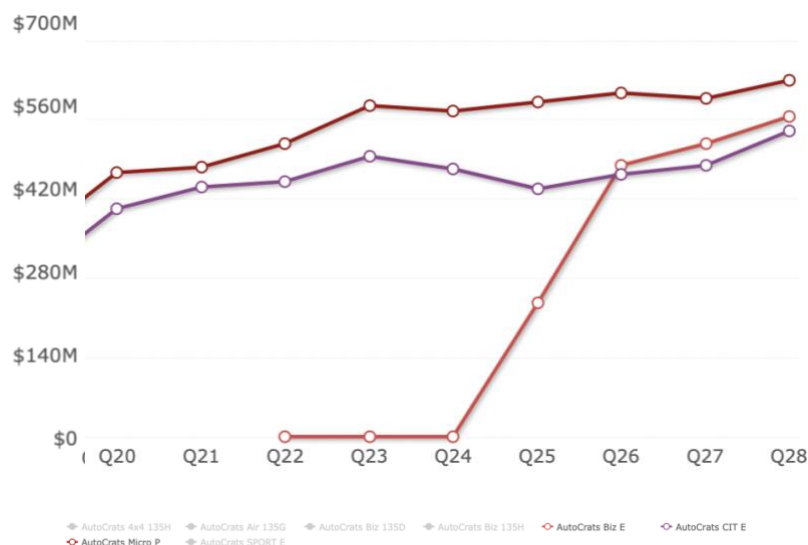


Figure 6: Gross Profit of Key EVs (Q20-Q28)

The theoretical framing of dynamic capabilities (Teece, 2007) helps explain this shift. Initially, we lacked the integration between sensing opportunities (via innovation) and seizing them through timely investment. Over time, our team developed the coordination mechanisms needed to transform innovation into competitive advantage.

## 5.5 Summary of Finance-Innovation Dynamics

This section has shown that our innovation performance cannot be isolated from financial design. In early years, innovation ambition ran ahead of financial capacity, resulting in delayed EV launches and poor ROI. In later years, capital discipline and controlling tools

helped synchronize product timing with available funding. Green bonds, though beneficial, required active alignment with product strategy to yield returns.

Ultimately, value creation was not a function of innovation quantity but of cross-functional coherence. The lessons from these six years reaffirm that finance is not merely an enabler of innovation, but a gatekeeper that must translate vision into viable, sequenced, and value-generating action.

## 6. Comparative Insights and Strategic Learning

By the end of the six-year simulation, AutoCrats had transitioned from a firm struggling with underperforming hybrids to one delivering an **EBIT margin of 30.4%** and **positive value added of \$1,062.9M** in Q28. However, when benchmarked against cohort teams in the final KPI dataset, it becomes evident that our recovery, while substantial, did not place us among the top quartile performers in value added or strategic agility. This section critically examines what distinguished the most effective teams and reflects on what we could have done differently, particularly from the standpoint of financial discipline and innovation pacing.

Across the cohort, teams with higher cumulative value added demonstrated **early and aggressive investment in electrification**, closely aligned with demand shifts and regulatory signals. For example, Team Visionaries, which ranked top five in cumulative value added, had **fully discontinued ICE and hybrid models by Year 3 as can be seen through their CO2 fleet emissions in Quarter 16**, compared to us who discontinued their BIZ 135H, a hybrid car as late as Quarter 20. This delay limited our ability to allocate factory space to more profitable and regulation-friendly EVs.

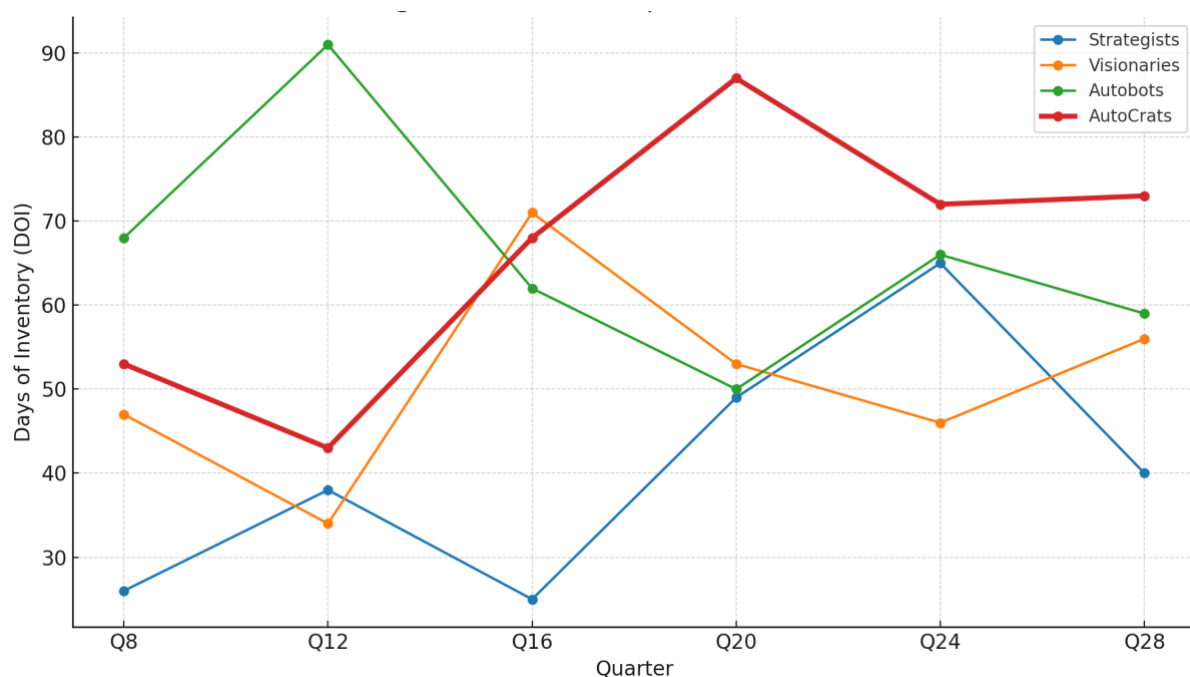


Figure 7: DOI Comparison over Time

Moreover, high-performing teams maintained **leaner production systems**, keeping their **Days of Inventory (DOI) between 40–70** consistently, which in turn helped preserve cash and maximise factory utilisation. Our DOI fluctuated between **43–87**, peaking in Q20 (Appendix F). This underlines our earlier operational inefficiencies in factory utilisation.

In terms of financial structure, teams with **greater loan utilisation early on** secured the capital needed to front-load technology investments. By contrast, our conservative financing in Years 1–2 delayed innovation unlocks such as autonomous driving and connectivity. This was reflected in the **Green Capex gap**, where top teams invested more consistently, enabling larger drawdowns of green bonds and avoiding CO<sub>2</sub> penalties earlier.

Overall, the data reveals that **strategic pacing and timing**, not just decisions themselves, separated high performers from the rest. Our team's learning curve improved significantly after Year 3, but an earlier pivot may have amplified value capture. The lesson is not just to adapt, but to **pre-empt**—a critical takeaway for any future strategy role.

## 7. Conclusion

The simulation journey offered a rigorous platform to navigate complex, interdependent decisions across strategy, finance, and innovation. As Finance Director, my role demanded both risk sensitivity and the ability to fund bold strategic moves under pressure. While our team succeeded in ending with a high EBIT margin and strong profitability, these figures mask a slower start and avoidable opportunity costs stemming from delayed product discontinuations, staggered electrification, and suboptimal capital deployment.

Our analysis shows that the critical turning point came when financial logic and innovation timelines were synchronised in Years 3–6. The hybrid crisis and Class E episode highlighted the need for discipline in exit strategies, while our late but concentrated EV push ultimately corrected the course. Benchmarking against top-performing teams confirmed that timing, proactivity, and lean execution were key differentiators we could have emulated earlier.

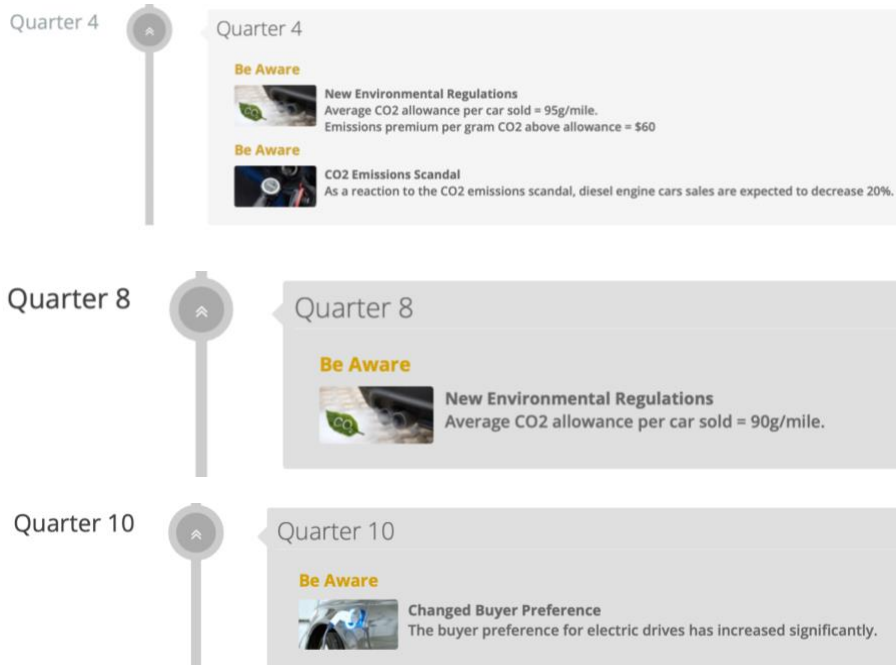
More than a simulation, this experience sharpened my understanding of financial stewardship within cross-functional strategy. It also reinforced the importance of scenario planning, transparent metrics, and pre-agreed thresholds to guard against sunk-cost traps and identity biases. These reflections will serve as foundational principles in any future leadership role I take on in fast-evolving industries.

# References

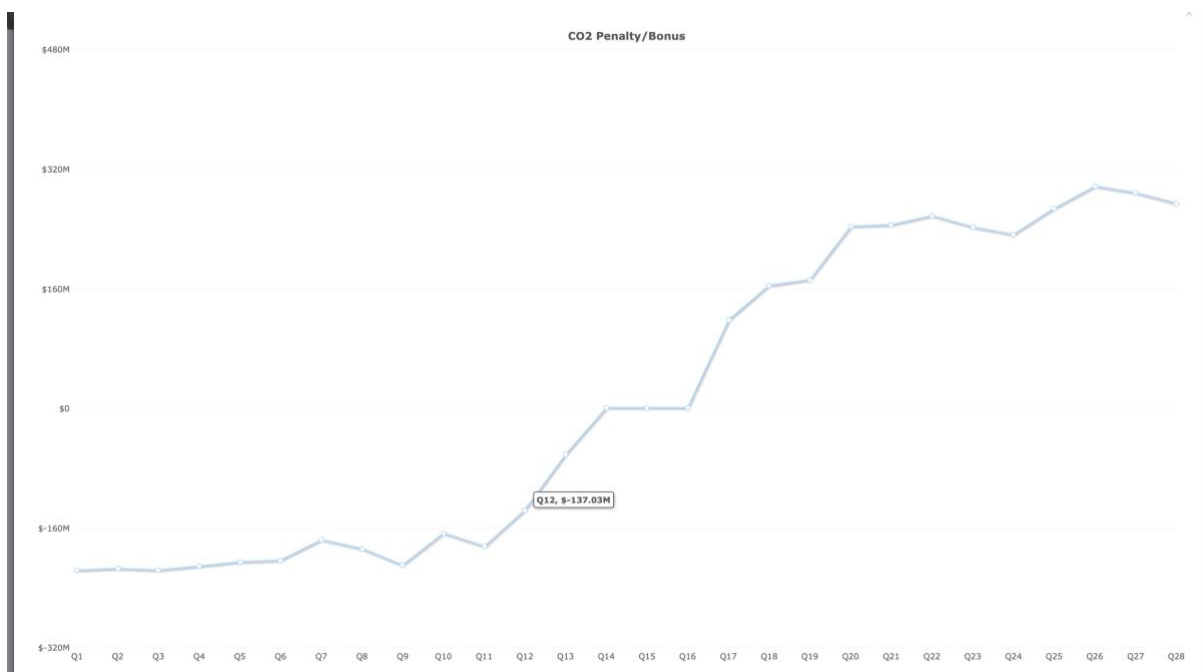
1. Christensen, C.M., 1997. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, MA: Harvard Business Review Press.
2. Damodaran, A., 2012. *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*. 3rd ed. Hoboken, NJ: John Wiley & Sons.
3. Eccles, R.G. and Serafeim, G., 2013. *The Performance Frontier: Innovating for a Sustainable Strategy*. Harvard Business Review, 91(5), pp.50–60.
4. Myers, S.C. and Majluf, N.S., 1984. *Corporate financing and investment decisions when firms have information that investors do not have*. Journal of Financial Economics, 13(2), pp.187–221.
5. Pisano, G.P., 2015. *You need an innovation strategy*. Harvard Business Review, 93(6), pp.44–54.
6. Rappaport, A., 1998. *Creating Shareholder Value: A Guide for Managers and Investors*. Revised ed. New York: Free Press.
7. Teece, D.J., 1997. *Dynamic capabilities and strategic management: organizing for innovation and growth*. Strategic Management Journal, 18(7), pp.509–533.
8. Teece, D.J., 2007. *Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance*. Strategic Management Journal, 28(13), pp.1319–1350.
9. Teece, D.J., 2014. *The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms*. Academy of Management Perspectives, 28(4), pp.328–352.

# Appendices

## Appendix A – Shift in Regulations and Consumer Preferences



## Appendix B – CO2 Penalty in Quarter 12





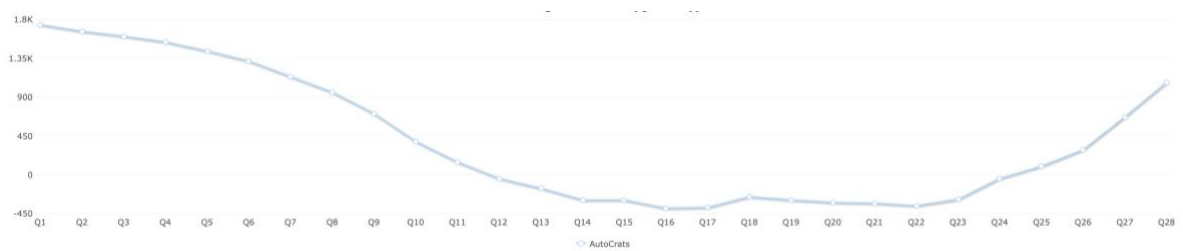
## Appendix C – Biz E Margins



## Appendix D – EBIT Ranking at Quarter 28

1	Group	Q28	Units
2	Visionaries	37.93 %	
3	BIPossible	35.73 %	
4	Hungrypanda	33.93 %	
5	AuroraDynamics	33.10 %	
6	Expelliarmus	32.60 %	
7	Bizzii	32.57 %	
8	VroominSeven	32.13 %	
9	MarioKart	32.03 %	
10	WattsUp	31.53 %	
11	Drivonix	31.20 %	
12	Feragon	31.00 %	
13	StratFix	30.73 %	
14	Gritgrid	30.70 %	
15	WillowWorks	30.60 %	
16	Autobots	30.53 %	
17	WarWired	30.50 %	
18	AutoCrats	30.40 %	

## Appendix E – AutoCrats' VA Trajectory



## Appendix F – DOI- AutoCrats

Group	Q8	Q12	Q16	Q20	Q24	Q28	Units
AutoCrats	53.00	43.00	68.00	87.00	72.00	73.00	x