

Project Context and Purpose – Delivering within Constraints

This presentation outlines the strategic pivot, showing how the revised system will be delivered within the £500,000 budget and fixed 13-month timeline.

- Original approach was unfeasible due to portability and high-risk technical choices.

One shared technical platform, delivered as two commercial variants (Synful and EDC) through badging and bundled software.

"In this presentation, we'll focus on the revised approach for delivering the Synputer project. Originally, we aimed for a portable, proprietary system, but several feasibility and commercial concerns led us to re-evaluate this direction. Given the strict constraints of a £500,000 budget and a fixed 13-month timeline, the original vision was not achievable."

"As a result, we pivoted to a desktop, business-grade solution. This change directly addresses the key concerns raised by our primary sponsor, EDC, and ensures the system is deliverable within both budget and schedule constraints."

"The purpose of this presentation is to show how we've revised the system to meet the core business requirements of EDC while remaining within the financial and timeline constraints. We'll walk through the updated requirements, the key decisions made to mitigate risk, and the next steps that will ensure we remain on track for delivery."

Accommodating Stakeholder Requirements

Concern	Description
Portability targets unachievable	The initial portable system was found to be unfeasible with weight and battery life exceeding specifications.
High technical risk (proprietary OS & storage)	Proprietary OS and storage solutions posed high technical risks, leading to potential delays and integration issues.
Business compatibility concerns	Concerns about the system's ability to integrate with existing business applications and meet stability standards.
Delivery risk within 13 months	Concern about the feasibility of delivering the system within the 13-month project timeline.
Cost overrun risk	The original design required complex custom developments, risking significant cost overruns.

These concerns represent significant risks to both timeline and budget.

“This slide outlines the **critical concerns** raised by EDC early in the project. These issues were not just about technical difficulties, but rather about the feasibility and commercial viability of the system.”

“First, EDC’s main concern was the portability targets. The original design required a battery-powered system weighing under 2 kilograms with a 2-hour battery life. However, testing showed that the minimum viable hardware exceeded 3 kilograms and only provided 15–20 minutes of battery life, which made portability unfeasible.”

“Next, the project had significant technical risks due to reliance on proprietary OS and storage solutions. This introduced high technical risk, as the development of a custom OS and storage technology was highly speculative, concentrating multiple high-risk R&D efforts within a very tight timeline.”

“EDC was also concerned about business compatibility. The system had to work with existing business software, be stable, and offer predictable operational stability for enterprise environments. Ensuring seamless integration with legacy systems was critical.”

“Finally, there were concerns about whether the system could be delivered on time within the 13-month window, as well as the risk of cost overruns due to the complexity of the original design.”

Table 3 - Requirements document

Strategic Project Pivot

Realigning the project to meet financial, technical, and timeline constraints

Original Direction

- Portable, battery-powered system
- Proprietary OS and storage
- High innovation density

Strategic Pivot

- Desktop, business-grade system
- Industry-standard OS and storage
- Reduced technical and commercial risk

Risk reduction and delivery confidence were prioritised over speculative innovation to ensure commercial success and timely delivery.

"To address the concerns raised by EDC, we had to make a significant strategic decision — to pivot the project from the original direction to a more feasible, risk-reduced approach."

"The original vision was to create a portable, battery-powered system with a proprietary operating system and custom storage solutions. However, as we saw earlier, the portability targets were unachievable, and relying on proprietary technologies would have introduced significant technical and schedule risks."

"In response, we made the decision to pivot to a desktop, business-grade system. This new direction focuses on using industry-standard OS and storage solutions, which reduces both technical complexity and development time. Importantly, this pivot addresses the critical concerns raised by EDC, ensuring the system aligns with their needs for compatibility, stability, and reliability."

"By shifting to a desktop form factor, we eliminate the risks associated with portability, such as excessive weight and limited battery life. This change also makes the system more compatible with existing business software, which is a key requirement for EDC's market."

"This pivot was a strategic decision, driven by the need to meet EDC's business requirements while ensuring the system could be delivered on time and within budget. The shift to industry-standard components and a

desktop form factor allows us to reduce development risk and focus on delivering a stable, reliable system."

"Ultimately, the decision prioritised risk reduction and delivery confidence over speculative innovation. The new approach ensures that we can deliver the system within the 13-month timeline and the £500,000 budget."

Revised Requirements – Feasible and Risk-Reduced Solution

Must Have	Won't Have
• Industry-standard operating system	• Portable form factor
• ≥ 512 KB RAM	• Proprietary OS or storage technologies
• TeleBasic compatibility	
• Standard removable storage	Requirements prioritised based on technical feasibility, stakeholder value, and risk mitigation.
• External keyboard support	
• Bundled office productivity suite	

"In this slide, we have used the MoSCoW method to prioritise the system requirements. The 'Must Have' requirements are non-negotiable for project success and form the foundation of the revised design."

"The **industry-standard operating system**, **512KB of RAM**, and **TeleBasic compatibility** are all essential for ensuring the system is both functional and meets EDC's business needs."

"In addition, the **standard removable storage** and **external keyboard support** are critical to ensuring that the system is compatible with existing business environments and user expectations."

"The **bundled office productivity suite** is included as part of the essential package, as it is a key feature that makes the Synputer a complete business solution out-of-the-box."

"The '**Should Have**' category, such as the **Graphical User Interface (GUI)**, is not essential to the operation of the system but will improve usability. This feature will be prioritised if resources and time allow, but it is not mandatory for initial deployment."

"Finally, the '**Won't Have**' section lists the features we have explicitly removed, such as the **portable form factor** and the **proprietary OS**. These decisions were made based on feasibility and risk mitigation, ensuring we stay within budget and meet the project timeline."

“These prioritisation decisions are based on several key assumptions: that an industry-standard operating system and office suite can be licensed within budget, that TeleBasic compatibility can be maintained through available tooling or interpreters, and that EDC accepts a desktop-only solution as a trade-off for reduced technical risk and improved delivery certainty.”

Table 1 - Requirements document

Key Assumptions and Project Constraints

- Third-party operating system can be licensed within budget
- Desktop form factor accepted by EDC
- Cost savings from portability removal offset higher RAM and licensing costs
- TeleBasic interpreter or licence available without major rework

- Fixed budget: £500,000
- Fixed delivery timeline: 13 months
- Advertised retail price: £399.99
- Small, fixed engineering team

Assumptions validated continuously through stage-gates and sprint reviews.

This slide outlines the key assumptions and constraints that underpin the revised system design.”

“The assumptions are critical because they set the foundation for the design and delivery of the project. We assume that a third-party operating system can be licensed within budget, and that the desktop form factor will be accepted by EDC, given the technical data supporting this decision.”

“We also assume that removing portability will free up budget for higher RAM and licensing costs, and that TeleBasic compatibility can be achieved with an existing interpreter or licensing agreement, avoiding major rework.”

“The project operates under fixed constraints: a £500,000 budget, a 13-month timeline, and a retail price of £399.99. These constraints shape every decision made in the project, ensuring we remain on track and within scope.”

“It’s important to note that these assumptions are validated continuously through stage-gates and sprint reviews, which ensure that we’re on course and able to adapt if any assumptions prove false.”

Hybrid Agile Approach for Feasible and Controlled Delivery

Stage-Gated Structure

- Requirements & Feasibility Gate
- Design & Architecture Gate
- Integration & Test Gate
- User Acceptance & Handover Gate

Scrum-Based Iterations

- 2-week development sprints
- Sprint reviews with stakeholders
- Bi-weekly retrospectives

Combines Agile flexibility with structured governance and cost control, ensuring reliable delivery within project constraints.

The project follows a Hybrid Agile development approach, combining the flexibility of Agile with the governance and cost control of traditional project management.”

“We’ve adopted a stage-gated structure for the project, with four key gates: Requirements & Feasibility, Design & Architecture, Integration & Test, and User Acceptance & Handover. These gates provide structured checkpoints where we review progress, ensure alignment with the project goals, and make any necessary adjustments.”

“In parallel with these gates, we are using Scrum-based iterations to drive development. Each sprint lasts two weeks and is followed by a sprint review with stakeholders. This allows us to demonstrate progress early and address any issues as they arise. Bi-weekly retrospectives also ensure continuous improvement in our processes.”

“This Hybrid Agile approach combines the best of both worlds: the flexibility to adapt to change during development and the governance to ensure we stay on track and meet the fixed budget and timeline.

“This delivery approach is consistent with established Hybrid Agile models described in the project management literature, which recommend combining stage-gate governance with iterative development to manage risk in complex, fixed-constraint projects (PMI, 2021; Boehm, 1988).”

13-Month Project Plan & Key Milestones

Month 1-2	Month 3-4	Month 5-8	Month 9-11	Month 12-13
Requirements & Feasibility	Design & Architecture	Development & Procurement	Integration & System Testing	UAT & Release
Milestones	Milestones	Milestones	Milestones	Milestones
Requirements baselined	Architecture approved	Prototype hardware available	Integrated system ready	UAT sign-off

Milestones aligned with stage-gates and sprint reviews.

This slide shows the high-level 13-month project plan, broken down into phases with corresponding milestones. We've structured the plan around our stage-gates and sprint reviews, ensuring that the project stays on track and within scope.”

“In the first two months, we will focus on finalising requirements and feasibility. This phase will involve confirming the revised project scope and ensuring alignment with EDC’s expectations.”

“Months 3 to 4 will be dedicated to the design and architecture phase, where the system architecture will be approved and finalised. This will also include procurement of key components.”

“Months 5 to 8 will see the bulk of the development and procurement activities. During this time, the hardware and software will be integrated, and the system will begin to take shape.” “By the end of month eight, we expect to have functional prototype systems available. These prototypes will be used for early integration testing and validation before entering the formal system testing phase.”

“From months 9 to 11, we’ll focus on system integration and testing. This will ensure that the system functions as expected and that all components are fully integrated.”

“Finally, in months 12 to 13, we will conduct User Acceptance Testing

validate the system with stakeholders and prepare for commercial launch.”

“This schedule ensures that the system is ready for user acceptance and commercial deployment within the agreed 13-month window, providing EDC with a clear and predictable availability timeline.”

Cost Control and Commercial Viability – Ensuring Feasible Delivery

Unit Cost & Margin Position:

- Estimated unit cost: **£250**
- Advertised retail price: **£399.99**
- Gross margin preserved

Project Budget & Risk Control:

- Total development budget: **£500,000**
- No parallel development streams
- High-risk R&D eliminated

Scope reduction ensures financial predictability and market competitiveness.

This slide outlines how we are managing both the cost and commercial viability of the project.”

“The estimated unit cost of the revised system is around £250. This is well within the advertised retail price of £399.99, allowing us to maintain a healthy margin while ensuring the system remains commercially competitive.”

“The total development budget is £500,000, which includes the costs of hardware, software, licensing, and engineering. By eliminating parallel development streams and high-risk R&D, we’re able to focus on delivering the core functionality of the system within the budget and timeline.”

“This cost control strategy ensures that the project remains financially viable while still delivering a high-quality product. The scope reduction has been key to ensuring both cost predictability and market competitiveness.”

“This pricing model represents a deliberate deviation from the original feature ambition, prioritising predictable delivery and commercial sustainability over maximum functionality, which aligns with EDC’s stated preference for stability and cost certainty.”

EDC Concerns and Mitigation Strategy — Addressing Risks

EDC Concern:	Mitigation Implemented:
Portability targets unachievable	Desktop form factor adopted
High technical risk (proprietary OS & storage)	Industry-standard OS and storage
Business compatibility concerns	TeleBasic support and office suite
Delivery risk within 13 months	Hybrid Agile with stage-gates
Cost overrun risk	Scope reduction and single platform

Mitigations aligned with feasibility, governance, and commercial constraints ensure project success.

This slide directly addresses the concerns raised by EDC and the strategies we've implemented to mitigate these risks.”

“The first concern was the unachievability of portability targets. By shifting to a desktop form factor, we've eliminated the weight and battery life challenges, ensuring the system is both functional and commercially viable.”

“Next, the high technical risk of a proprietary OS and storage solution was mitigated by switching to industry-standard solutions. This decision reduces both technical and commercial risk and ensures compatibility with existing business systems.”

“The business compatibility concerns were addressed by including TeleBasic support and a bundled office suite, ensuring seamless migration for existing users and providing a complete solution for new customers.”

“To manage delivery risk within 13 months, we adopted a Hybrid Agile approach, with stage-gates to track progress and mitigate any delays. Finally, cost overrun risk was addressed by reducing scope and focusing on a single platform, which streamlines development and procurement.

Conclusion: Feasible and Controlled Delivery

What this plan achieves

- Technically feasible system
- Commercially viable within £399.99
- Fully aligned with EDC's critical business requirements
- Deliverable within 13 months

Immediate next steps

- Confirm revised requirements baseline (Immediate stakeholder sign-off required)
- Approve and finalize architecture, OS, and software licensing decisions
- Initiate procurement and sprint planning

The project transitions from speculative innovation to controlled delivery.

In conclusion, this revised plan delivers a technically feasible system that is commercially viable within the £399.99 price point and aligned with EDC's key requirements. We've eliminated the high-risk elements from the original plan, focusing on a reliable, business-grade system that can be delivered within the 13-month timeline."

"The immediate next steps are to confirm the revised requirements baseline, approve the architecture and licensing decisions, and initiate procurement and sprint planning. Once these steps are completed, the project can move forward with confidence, knowing that the risks have been mitigated and the system is aligned with stakeholder needs."

"This is a shift from speculative innovation to controlled delivery, and we are now positioned to execute with a clear, achievable plan."

"Based on the revised plan, prototype systems will be available by month eight, with full user acceptance testing completed and the system ready for deployment by the end of the 13-month delivery window."

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