

Name: Shafrin Akter Chowdhury

Id: 223012033

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**Criticism and Analysis of a Failed ICT4D Project in Bangladesh:
The Doyel Laptop Project**

1.Introduction

Information and Communication Technology for Development (ICT4D) refer to the strategic use of digital technologies to achieve socio-economic development, reduce inequality, and increase access to information and services, especially in developing countries. ICT4D has been considered an important pillar of the national development policy in Bangladesh, especially under the “Digital Bangladesh Vision 2021”, which aimed to transform the country into a knowledge-based economy by ensuring widespread use of information technology.

The project was a central part of the Digital Bangladesh Vision 2021, launched by Prime Minister Sheikh Hasina on October 11, 2011 (Rahman, 2011). Among the various ICT4D initiatives undertaken by the Bangladesh government, the Doyel Laptop Project was one of the most ambitious but also the most controversial. Launched in 2011, the project aimed to increase digital access among students, government officials, and low-income people by producing laptops domestically at low cost. Named after the national bird of Bangladesh, the Doyel Laptop was presented as a symbol of technological self-reliance and national pride.

It was designed as a specialty product to bridge the digital divide by providing \$130 laptops to the masses (Ethirajan/BBC, 2011). However, despite high expectations and strong political support, the project failed to achieve its stated goals. The laptops were of poor quality, had limited functionality, were not competitive in the market, and lacked a long-term sustainability plan. Production was eventually halted, and the project became known as a failed initiative in the history of ICT development in Bangladesh. The purpose of this report is to critically analyze the Doel Laptop Project as a failed ICT4D initiative. The analysis will discuss the project’s objectives, implementation process, reasons for failure, impact, and relevant lessons for future ICT4D projects.

2. Project Summary

The laptops were assembled by the state-owned Telephone Shilpa Sangstha (TSS) in Gazipur (TSS, 2024). While four models were planned, the Primary 2102 model was the most famous for its target price of Tk 10,000 (Dhaka Tribune, 2013). The Doel Laptop Project was formally launched in 2011 under the auspices of the Bangladesh Computer Council (BCC), an organization under the Ministry of Posts, Telecommunications and Information Technology. The laptops were assembled at the Bangladesh Computer Council’s facilities, where most of the components were imported from abroad. The project was primarily government-funded and the initial budget allocation was aimed at producing affordable laptops for the domestic market.

The main objective of the project was to reduce the digital divide by providing low-cost computing devices to students, teachers, and government employees. The laptops were priced at approximately Tk 10,000 to Tk 20,000, which was lower than many imported laptops at

the time. Another important goal was to increase domestic ICT production capacity and reduce dependence on foreign technology. The target population of the project included students of government universities and schools, various training institutions and government offices. The Doyel laptop runs the Linux operating system and was designed for basic educational and official use such as word processing, internet browsing and e-learning.

The project was in line with the Digital Bangladesh Vision 2021, which emphasizes expanding ICT access, human resource development and strengthening the local technology industry. In theory, the Doyel laptop project was an ideal ICT4D initiative, combining affordability, domestic production and national development goals.

However, the wide gap between policy ambition and the reality of implementation became the main reason for the project failure.

3. Implementation Process

The project relied on a Public-Private Partnership where TSS held a 25% stake, while foreign partners (TFT Display and 2M Corp) held 75% (Hossain/Dhaka Tribune, 2014). However, the partnership collapsed within a year due to financial disputes and allegations of over-invoicing (IEOM, 2024).

The implementation process of the Doel Laptop project was completely government-driven and top-down. The Bangladesh Computer Council was responsible for the procurement, assembly, quality control, and distribution of the project. At the beginning of the project, hardware components such as processors, motherboards, and displays were imported from abroad and assembled locally.

The implementation process was divided into several phases, which included pilot production, limited distribution to selected institutions, and later plans for mass production. However, it was at the pilot stage that serious problems with hardware quality, system performance, and user satisfaction were revealed. The management and coordination structure was highly centralized, and there was very limited participation by private ICT institutions, universities, or users. While resource allocation focused on hardware procurement, software development, user training, after-sales service, and maintenance were not adequately addressed.

The project also lacked an effective monitoring and evaluation system. Feedback from early users such as slow speeds, battery problems, overheating, and software limitations was not systematically incorporated into the design development. The distribution strategy was also unclear and there was no strong plan to create a competitive position in the market. The lack of effective coordination between policymakers, technologists, academics, and users weakened the project implementation process. As a result, the project failed to move beyond the initial production stage and failed to gain public trust.

4. Failure Analysis

Research indicates several core reasons for the collapse:

- **Hardware Issues:** Users reported blurry screens, frequent system hangs, and poor battery life (Scribd Case Study, 2021).
- **Market Incompatibility:** While the Tk 10,000 model was promised, only 98 units were sold in two years because the actual quality was so low that consumers preferred paying slightly more for established brands (IEOM, 2024).
- **Corruption and Mismanagement:** In early 2024, the State Minister for ICT, Zunaid Ahmed Palak, officially attributed the project collapse to irregularities, mismanagement, and corruption within TSS (Bangladesh Post, 2024).

There were multiple reasons behind the failure of the Doel Laptop project, including design flaws, technical limitations, institutional weaknesses, and lack of sustainability planning.

Firstly, poor planning and design were among the main reasons for the project's failure. The project prioritized national symbolic success over the actual needs of the users. The laptop was designed without adequate consultation with students, teachers, and ICT experts, resulting in important issues such as processing power, battery life, and software compatibility being neglected. As a result, the final product failed to meet user expectations.

Secondly, technical and infrastructural limitations severely hampered the functionality of the laptop. Modern applications could not run properly due to the use of substandard hardware. Many users reported problems with slow speeds, system crashes, and overheating. Although the Linux operating system was used to reduce licensing costs, it was difficult for many users to use due to lack of adequate training.

Thirdly, the lack of skilled manpower and capacity hampered the quality of production. The local assembly process did not ensure real technology transfer or skill development. Engineers and technicians had limited experience in large-scale hardware production, which led to weak quality control and increased component defects.

Fourth, institutional and administrative constraints weakened project implementation. Decision-making was highly centralized and politically influenced, limiting the scope for technical corrections. Delays in the procurement process, lack of accountability, and the complexity of mechanical defects further slowed the project.

Finally, sustainability and market competitiveness were completely ignored. No long-term business model or after-sales service system was developed for the project. At the same time, as laptop prices in the international market fell and the quality of private sector products rapidly improved, Doyel could not compete in the laptop market. After government interest and funding waned, the project had no capacity to survive independently.

5. Impacts and Consequences

By 2013, production had completely halted. Of the 37,059 laptops assembled, nearly two-thirds were forced upon the Ministry of Education because there was no public demand

(Dhaka Tribune, 2013). This resulted in significant financial losses for the government, with TSS reporting zero income and a need for private-sector handover to survive (Bangladesh Post, 2024).

The failure of the Doel Laptop Project had several negative impacts at the individual, institutional, and policy levels. Due to the poor performance of the laptops for students and educational institutions, they could not function as effective learning aids. In many cases, the devices were used to a limited extent or were abandoned altogether.

At the institutional level, the project undermined trust in government-led technology production initiatives. The failure to deliver a reliable product raised questions about the government capacity, transparency, and proper use of public funds. As a result, stakeholders became more cautious and critical of subsequent ICT projects.

Financially, the government resources invested in the project failed to yield long-term benefits. In many cases, facilities and equipment remained unused, creating a large opportunity cost. This money could have been used for alternative ICT initiatives such as digital training, expanding internet connectivity, or developing educational software.

Another unintended effect was the reproduction of the idea that hardware delivery alone is sufficient for ICT4D success. This narrow perspective risks repeating the same mistakes in future digital initiatives. Despite these failures, however, the project has provided important learning opportunities for policymakers and ICT experts.

6. Lessons Learned and Proposed Recommendations

The Doel Laptop Project provides several important lessons for future ICT4D initiatives. The first and foremost lesson is the importance of user-centered design. ICT4D projects must begin with an understanding of the needs, realities, and capabilities of the users. Technology should be used to serve people, not to become political symbols. The design could have been much more effective if students, teachers, and technology experts had been involved in the initial stages of the project.

Another important lesson is that hardware alone cannot ensure development. Mere distribution of devices without training, digital content, support services, and institutional capacity building fails to ensure digital inclusion. The project also shows that an effective monitoring and evaluation framework is essential. By receiving continuous feedback, it would have been possible to identify and resolve problems at an early stage. Transparency and accountability are crucial in publicly funded projects.

As a recommendation, future ICT initiatives should adopt the Public Private Partnership model, so that the private sector's experience in production efficiency, quality control, and market competition can be utilized. The government should play a policymaking, support and monitoring role rather than direct production. It is essential to increase investment in technical training, research institutions and human resource development to develop local

skills. In addition, a comprehensive sustainability plan, including maintenance, upgrades and financing, should be included from the beginning.

7. Conclusion

The Doel Laptop Project was an ambitious ICT4D initiative in Bangladesh, which aimed to increase digital inclusion and achieve technological self-reliance. Although the project objectives were aligned with the Digital Bangladesh Vision 2021, it failed due to poor planning, technical constraints, lack of capacity and lack of a sustainable strategy.

This case study shows how complex it is to implement ICT4D projects in developing countries. It demonstrates that affordable hardware is not enough; rather, inclusive design, institutional readiness, active participation of stakeholders and long-term strategies are essential. The failure of the Doel Laptop Project should not be seen as a negative example, but as an important learning experience. By analyzing this failure, it is possible to adopt more effective, inclusive and sustainable ICT initiatives in the future.

Finally, technology itself is not development; development depends on how technology is integrated with social, educational and institutional systems.

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