



Republic of the Philippines
Technological University of the Philippines
College of Industrial Technology
Electronics Department



Name: Joseph C. Arenas
Course: BET-CPET 3A
Subject: ESS 6- Engineering Management
Professor: Elvin T. Balais
Topics: Control
Date of Submission: 10/13/2025



Reflection No. 6: Controlling the Flood

On October 9, 2025, the 6th group of class BET-CPET 3A and 3B presented their report on Control through Microsoft Teams under our course Engineering Management (ESS6). As I listened attentively to their presentation, I realized that “control” is not just an academic term confined to management frameworks but an essential mechanism that governs the stability and integrity of any organization, be it a private company or the government itself. The group emphasized that control is a systematic process of checking actual performance against set standards, ensuring that plans are effectively implemented and objectives are met. What got my attention during the discussion was how control actually extends beyond the company offices and in corporate settings in general, it actually applies to how systems in society operate. With this, I could not help but relate these to the current shortcomings in our government, specifically on flood control projects that have long been an issue in the Philippines.

Control, as defined in the report, is both forward and backward looking, meaning it does not only assess past performance but also anticipates future challenges. The absence of such a concept seems to be a fundamental flaw in many government projects of our country, especially those dealing with infrastructure and disaster prevention. In a yearly basis, billions of pesos are poured into flood projects in the country. However, cities such as in Bulacan, Pampanga, and even Metro Manila, where all of these projects should be prioritized, continue to be flooded during the monsoon seasons. This repeated nonsense of planning then failure mirrors a weak control scheme, one that lacks proper measurement of performance, timely corrective actions, and clear accountability. The group’s discussion moved on to the six steps of the control process which are determining what to control, setting standards, measuring performance, comparing results, analyzing deviations, and taking corrective action. These standards made me realize that our government often stops at the first two steps. Plans are created, budgets are set, but the remaining stages, those that involve actual oversight and response, are often neglected. I have realized that in the context of governance, the failure to execute control is the failure to learn, and this is precisely why our flood control systems crumble under pressure year after year.

As the group continued their report, they discussed the Strategic Control System, which ensures that strategies are properly implemented and continuously evaluated. This framework includes Premise Control, Implementation Control, Strategic Surveillance, and Special Alert Control. These all aim to align and center all goals and aspirations. Upon hearing this during the report, I could not help but think of how government agencies, particularly those from public works, could benefit from these principles. Example, Premise Control would require validating theories and presuppositions about the effectiveness of flood projects before they were launched. Implementation Control would demand strict monitoring during the building phase to ensure their

actual effectiveness. Lastly, Special Alert Control would involve the actual assessment and examination needed after floods to see their effectiveness afterwards. Sadly, these mechanisms are either poorly implemented or entirely absent in practice. With that, I realized that what Group 6 presented was not merely an academic framework but a reflection of what good governance could and should look like. The absence of these controls is what transforms promising flood prevention projects into billion-peso failures.

Another part of the presentation that I have deeply connected with was their explanation on Managing Technical Services and Operations. It reminded me that in engineering management, control is not only about decision-making but the actual process and logistics that go with it. These steps mirror the POLC framework (Planning, Organizing, Leading, Controlling) my group has reported on the inception of this class. However, the emphasis was on how control ties everything together. The group mentioned that managers must monitor performance, assess quality, and implement continuous improvement based on feedback. Translating this into our current societal issues, I see how our flood control projects fail precisely because this loop of continuous improvement is broken. Instead of using post-flood data to improve future infrastructure, the same flawed designs and approaches are replicated, often by the same contractors. This vicious cycle is a result of poor feedback control—a lack of initiative to learn from mistakes and refine processes. I have realized that the true essence of control lies not only in managing what already exists but in ensuring that the next iteration is always better than the last.

Listening to the report, I was also drawn to the section discussing Identifying Control Problems, which include schedule delays, budget overruns, and resource mismanagement. These issues, although managerial in nature, perfectly describe the condition of government flood control projects today. Year after year, project deadlines are extended, costs balloon without clear justification, and transparency is clouded by political interests. It is ironic that in engineering, control exists to eliminate waste of resources and ensure deadlines are met, yet in public administration, these very goals are often ignored. As an aspiring engineer manager, I see this not as a distant political problem but as a technical and ethical one. If engineers are placed in positions of control and management, perhaps we could create systems that are not only efficient but accountable. This gives me hope that our generation of engineers can lead a paradigm shift, where public infrastructure is not a showcase of corruption but of competence.

In conclusion, Group 6's report on Control was not just an exploration of management theories but a reflection of what our society desperately needs: accountability, adaptability, and foresight. I have come to realize that the frameworks they presented—such as the strategic control system, performance measurement, and corrective feedback, are not abstract concepts, they are solutions waiting to be applied. If only our government could treat flood control the same way an engineer treats a system, with precise measurement, constant monitoring, and immediate corrective action, then perhaps we would no longer see the same suffering repeated every year. With that, I have understood the importance of control not only in engineering management but in nation-building. As a future engineer manager, I aspire to apply such principles to ensure that every project I handle does not only achieve what is required, but to also pave the way to a future where control actually has a greater purpose. Which is to genuinely serve the people around me.