CoGrammar

Welcome to this session:

Open Session: Challenges in

Upgrading the UK's Power Grid

The session will start shortly...

Any Questions?

Drop them in the questions section.







Safeguarding & Welfare

We are committed to all our students and staff feeling safe and happy; we want to make sure there is always someone you can turn to if you are worried about anything.

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Democracy

Every person's opinions matter.

Respect

We look after each other.

Tolerance

We accept each other's differences.





Rule of Law

We keep to the rules.

Liberty

We are free to make choices.







Leadership & Management Live Lectures – Housekeeping

- The use of disrespectful language is prohibited in the questions, this
 is a supportive, learning environment for all please engage
 accordingly.
 - (Fundamental British Values: Mutual Respect and Tolerance)
- No question is daft or silly ask them!
- Should you have a question during the lecture, please feel free to post in the Questions section and I will respond throughout.





Leadership & Management Live Lectures – Housekeeping

- Activating live captions in your browser's accessibility settings is a helpful option for better understanding, especially for those with hearing impairments or challenges with accents.
- For all **non-academic questions**, please submit a query: **www.hyperiondev.com/support**
- Report a safeguarding incident: www.hyperiondev.com/safeguardreporting
- Should you have any further questions or want to provide us with feedback, please feel free to post them <u>here</u>.
- GitHub Link to access L&M Presentation Slides.







Learning Objective



- Understand key challenges in upgrading the
 UK's power grid for green energy initiatives.
- Learn the fundamentals of project planning and how to create realistic timelines to mitigate delays.
 - Apply insights to improve project execution in their workplaces.









Setting The Scene

Imagine you're planning to revolutionise transportation by introducing an electric ferry to connect communities. You're told, 'Great idea, but you'll have to wait until 2037 for the grid capacity to support it.'

Absurd, right? Yet, this is the reality for many organisations navigating today's energy infrastructure challenges.

Today, we're delving into the critical role of project planning and timelines in overcoming obstacles like these; transforming them from roadblocks into stepping-stones for progress.



Why Are There Delays?

Regulatory Bottlenecks

Obtaining necessary approvals involves navigating a labyrinth of bureaucracy and outdated processes.

Local authorities and national grid operators often face misaligned priorities, slowing the approval and execution of upgrades.





Why Are There Delays?

Planning Challenges

Environmental assessments, public consultations, and land acquisition add layers of complexity to infrastructure projects.

Compounding this is a shortage of skilled labour in critical areas like engineering and renewable energy technology.



Wightlink's Electric Ferry

Wightlink, a ferry operator, envisioned an electric ferry as part of its commitment to reducing carbon emissions.

The project, however, has been stalled due to inadequate grid capacity in the proposed area, with solutions delayed until 2037.

This delay undermines not only Wightlink's sustainability goals but also broader regional efforts to combat climate change.



Turning Obstacles into Opportunities

Innovative Workarounds: Organisations are exploring temporary solutions, such as hybrid technology or localised renewable energy sources (e.g., microgrids), to bridge the gap.

Policy Advocacy: Businesses and industry groups are advocating for streamlined regulatory processes to accelerate grid modernisation.

Planning for Resilience: Long-term project planning is now incorporating contingencies for infrastructure delays, enabling more flexible and adaptive strategies.



RULE OF LAW

Regulatory frameworks, while sometimes cumbersome, are essential for maintaining fairness and accountability in infrastructure projects.









Imagine you're cooking a meal for a special dinner party. You wouldn't just wing it, would you?

You'd start by deciding what you're making; the end goal. Then, you'd consider who's coming and their preferences; your stakeholders.

Next, you'd plan out the steps: shop for ingredients, prep the food, cook, and finally plate everything beautifully.

Along the way, you'd keep an eye on potential risks, like burning the main course or running out of time.



Define Project Goals: What Problem Are You Solving?

Analogy: Imagine setting out to bake a cake but not knowing what kind of cake or why you're baking it. Without a clear vision, you could end up with a mess or a dessert no one wants to eat.

Explanation: Every project must start with a clear objective. Ask questions like: "What are we trying to achieve?" "Who benefits from this project?' "How will we measure success?"

Application: For example, if the goal is to launch an electric ferry, the objective might be to reduce emissions while maintaining reliability for commuters.



Identify Stakeholders: Who Is Impacted by Your Project?

Analogy: Surprise party? You'd need to consider not just the guest of honour but also the attendees, the venue staff, and even the neighbours (so they don't complain about noise).

Explanation: Stakeholders are anyone affected by the project.

Understanding their needs ensures the project aligns with
expectations and garners support.

Application: In the case of an electric ferry, stakeholders include passengers, the local community, environmental groups, and power grid operators.





Break Projects Into Phases: Planning, Execution, Testing, etc.

Analogy: Building a house doesn't happen all at once. You lay the foundation first, then frame the walls, install wiring, and so on. Each phase depends on the one before it.



Break Projects Into Phases: Planning, Execution, Testing, etc.

Explanation: Dividing a project into manageable phases helps maintain focus and allows for adjustments along the way:

Planning: Setting objectives and defining resources. **Execution:** Implementing the plan step by step. **Testing:** Ensuring everything works as intended before going live. **Delivery:** Handing off the completed project to stakeholders.

Application: For an electric ferry, planning might include designing the ferry and coordinating with power suppliers, while testing ensures it operates efficiently before being introduced to the public.



Manage Risks: Highlight the Importance of Contingency Planning

Analogy: Imagine going on a road trip. You'd bring a spare tire, just in case, and check the weather forecast to avoid getting stuck in a storm.

Planning for the unexpected makes the journey smoother.





Manage Risks: Highlight the Importance of Contingency Planning

Explanation: Risks are inherent in any project. Identifying potential issues early; such as delays, budget overruns, or regulatory hurdles; and preparing contingencies can keep the project on track.

Application: For the electric ferry, risks could include delays in grid upgrades or unexpected costs. Contingency plans might involve exploring alternative energy sources like solar or hybrid technology.







Let's say you've been tasked with leading a groundbreaking project: launching an electric ferry by 2030.

To make that goal a reality, you need a well-structured timeline that accounts for milestones, dependencies, and risks.





Set a Clear Goal

Apply SMART Criteria

Specific: The goal specifies the launch of an electric ferry.

Measurable: Success is defined by the operational launch by 2030.

Achievable: Assess feasibility based on current resources and constraints.

Relevant: Aligns with sustainability and business objectives.

Time-bound: Clear deadline of 2030.



Identify Key Milestones

Examples for the Electric Ferry

2025: Secure regulatory approvals.

2026: Begin grid upgrades and ferry construction.

2028: Complete grid upgrades and finalise ferry construction.

2029: Conduct ferry testing and address issues.

2030: Launch and celebrate!



Map Dependencies

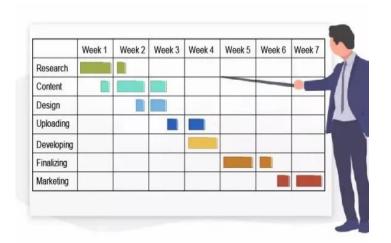
Examples for the Electric Ferry

Regulatory Approvals: Must be secured before grid upgrades or construction can begin.

Funding: Sufficient financial resources are required to keep the project on track.

Supplier Contracts: Delays in procuring materials could impact ferry construction timelines.





Apply the Timeline to a Gantt Chart

Use visual tools like Gantt charts or project management software

Visualise Relationships: Show how tasks overlap and depend on one another.

Track Progress: Identify potential delays early and reallocate resources if necessary.



Apply the Timeline to a Gantt Chart

Address Common Pitfalls

Underestimating Regulatory Delays: Build extra time into the timeline for approvals and conduct regular follow-ups with regulators.

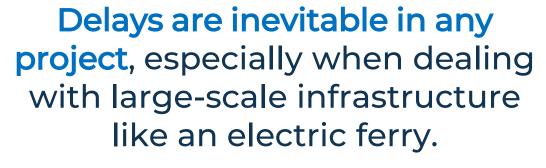
Overlooking Interdependencies: Use dependency mapping to identify and address critical path items.

Inadequate Contingency Planning: Allocate buffer periods for unexpected delays or challenges.









But delays don't have to mean failure.

Instead, they can be opportunities to rethink, innovate, and adapt.



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Build Flexibility Into Timelines

Explanation: Plan for the unexpected by adding buffer time to critical milestones and being realistic about deadlines.

Example: Instead of assuming the grid upgrade will be completed by 2028, allocate an additional 12–18 months for potential delays.

Key Tip: Use flexible milestones that allow progress on unrelated tasks while waiting for bottlenecks to clear.



Develop Parallel Paths to Progress

Explanation: Work on tasks that don't depend on delayed components or explore alternative solutions that align with the overall goal.

Example: If the grid upgrade is delayed until 2037, consider installing renewable microgrids, such as solar panels or wind turbines, to power the ferry temporarily.

Key Tip: Always have a "Plan B" that can bridge the gap while waiting for primary solutions.



Foster Collaboration With Regulatory Bodies Early

Explanation: Engage with regulators from the outset to align expectations, understand approval timelines, and address potential roadblocks proactively.

Example: Schedule regular check-ins with regulatory agencies and create joint task forces to accelerate approval processes.

Key Tip: Transparency and open communication can reduce misunderstandings and expedite decision-making.



What other creative solutions could we implement to overcome this delay?



- 1. Partnering with other transportation operators to share power resources.
 - 2. Exploring battery storage technology to minimise reliance on the grid.
- Engaging local communities in crowdfunding or advocacy to accelerate grid upgrades.



DEMOCRACY

Open communication with regulators and stakeholders embodies democratic principles of transparency and participation.







CONCLUSION

Key Points

Successful project execution starts with a strong foundation in planning.

Realistic timelines are the backbone of effective project management.

Flexibility and proactive problem-solving are crucial to overcoming challenges.

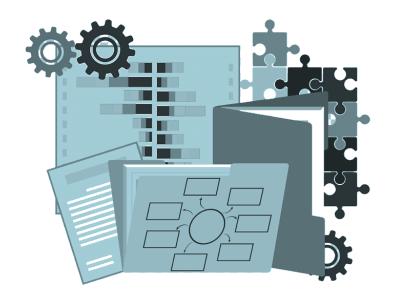
Delays aren't dead ends; they're opportunities for innovation.



CONCLUSION

Think of a project at your workplace.

"How can you apply today's planning and timeline strategies to improve it?"









RESOURCES

Articles

- ✓ Britain's creaking power grid leaves green energy revolution adrift.
- ✓ 'Lack of vision': UK green energy projects in limbo as grid struggles to keep pace.
 - ✓ Why the UK needs a major energy grid upgrade now.
 - √ Faster grid hook-ups planned for some green energy projects.



Thank you for attending







