FRAMEWORK FOR TECHNOLOGY DECISIONS

Based on the April 15, 2020 webinar presentations of Kevin Chambers and Andrew Carpenter

QUESTIONS TO ASK

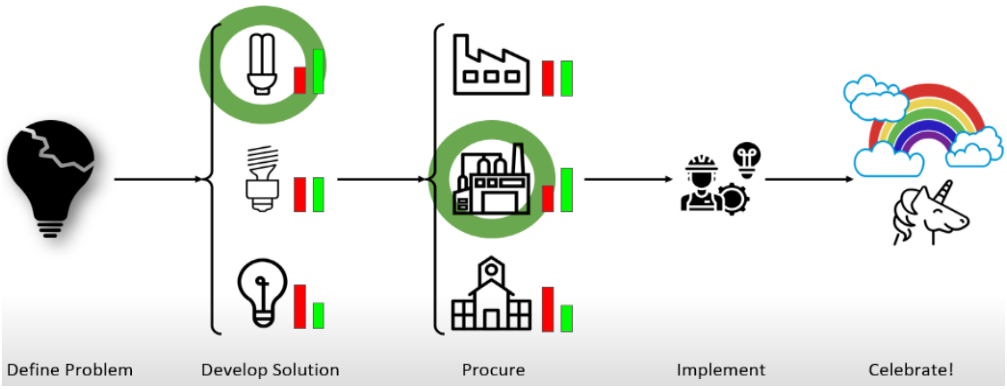
What are your needs?
How did you come to these needs?
How will you prioritize with the resources you have?
How will you accomplish your goals?
Whom can you collaborate with?

THINGS TO KEEP IN MIND

1. Be deliberate and stay focused: Boil down what you want to do and how you want to go about it.
2. Learn vendor speak: Transportation technology is evolving rapidly. Research and keep up to date with advancements and technical language to stay informed about what is best for your problem.
3. Test your solutions: Don't start out going all in on one idea. Try out many different possibilities to discern which solution is best
4. Determine Return on Investment: Make sure the ROI for any solution is worth it. Work out the costs and benefits of any and all tested solutions.

HOW TO APPROACH TRANSIT PROBLEMS

1. Define the Problem
   Recognize what needs improvement. View the problem objectively and do not get attached to pre-conceived solutions. Identifying what the underlying need is helps in finding a more holistic solution.
2. Develop a Solution
   Technology itself is not a solution, but a tool to solve a problem. The goal or challenge should lead, and technology will follow from that goal. Simple solutions are often the best solutions.
3. Procure and Implement
   Start small and simply, with a Minimum Viable Product. Rank the importance of other aspects. Technology can be helpful, but should not be so complex that it cannot be managed. Working backwards and recognizing what technology you can manage before implementing is important for ensuring technology implementation success.
4. Celebrate!



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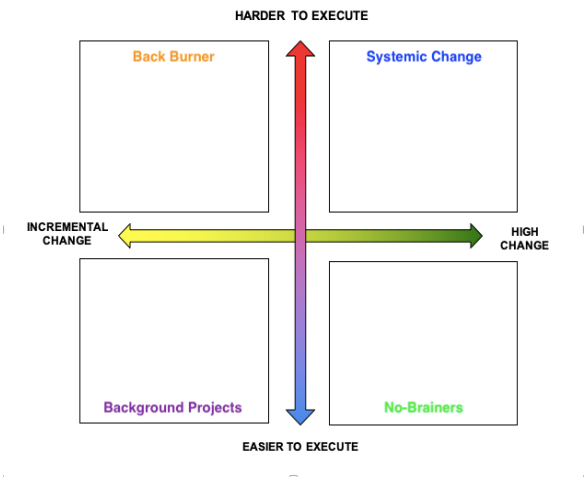

KEY RISK MANAGEMENT STRATEGIES

Dig down to the core problem
Carefully analyze costs and benefits
Apply systems thinking-transportation
Engineer only when needed
Cultivate Leadership and trade-off-based thinking
Use standards and support the development of more

BARRIERS TO APPLYING TECHNOLOGY IN TRANSIT

Misidentifying the Problem

Don't let available technology define the problem, but think about it in terms of a goal or challenge.

Underestimating Costs, Overestimating Benefits

Objectively look at the cost of a technology before implementation and estimate the lifespan costs of a technology in terms of employee time, upgrading, and maintenance

Address the issues that will have a significant impact.

Lack of Systems and Thinking and Risk Management Tools

Prioritize which problems are most pressing and which solutions will have the biggest impact to determine which issues need to be addressed

Abundance of Complexity

Keep it simple! Focus on the problems that can be solved

Absence of Standards

Whenever possible, look to industry standards that are available.

Kevin Chambers has been dedicated to assisting public agencies and non-profits in adopting the right technology since 2000. For the past 10 years he has worked in transit and mobility, and currently consults through Full Path Transit Technology.
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