[The 99% - Making the SPC work]

INTRODUCTION

- [We are a multidisciplinary student team from Industrial Engineering Management, Automotive Manufacturing, and Structural Design, working together in Semester 6 to optimise the **Smart Production Center (SPC)** at the HAN. The SPC is a unique testing ground for smart, circular, and lightweight manufacturing using fiber-reinforced thermoplastic composites (FRTPC), located at IPKW in Arnhem.]
- [Our goal was to identify how the SPC can operate more effectively, both technically and strategically. We wanted to explore how internal processes, external positioning, and partner collaboration could be improved – not only to benefit current users, but to help SPC grow into a future-proof innovation platform. This challenge mattered to us because it allowed us to work on the real-world intersection of engineering, education, and sustainability.]

JOURNEY & LEARNINGS

- [Our journey started with a full internal and external analysis of SPC. We spoke with partners, mapped out the value proposition, and studied existing workflows and communication strategies. Along the way, we discovered that SPC offers strong technical value but suffers from a lack of visibility and structure. One of the biggest surprises was how much of SPC's success depends on informal networks and student initiative. There's huge potential, but also a need for clearer systems and external communication. We also encountered some technical challenges – like understanding the setup of the extruder and how machine maintenance could be improved.]

- [A turning point came when we started visiting partners. These conversations helped us realize that the SPC is seen as valuable but also underutilized. That insight helped shape our direction: the SPC doesn't need to reinvent itself – it needs to communicate better, operate more consistently, and showcase what it already does well.]

OUTCOME & IMPACT

- [Our final result is a development plan and set of proposals for the SPC that include:
    - An improved mechanism for the extruder that makes it easier to replace the turning screw.
    - Optimized process flows and layout suggestions to improve efficiency and clarity in the lab.
    - A stakeholder map, strategic communication advice, and a clear overview of SPC's value.
    - A long-term roadmap for growth, collaboration, and visibility.

  This work is valuable because it strengthens the foundation of an already promising initiative. The SPC has the right tools and mindset — our work helps bring it all together in a way that's clear, structured, and scalable.]

- [Our work can have impact at several levels. For partners, it makes collaboration easier and more meaningful. For students, it creates a better learning experience. And for HAN, it contributes to a stronger bridge between education and innovation in sustainable manufacturing.]

- [We're most proud of how we combined technical, strategic, and stakeholder perspectives into one integrated project. At the symposium, we're excited to show the development roadmap and our vision for a smarter, more connected SPC – ready for the future.]

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Choose a photo, render or visual that really captures the essence of your project. This could be your final prototype, a moment from the process, or something that tells the story in one glance. Make sure it sparks curiosity – this is the first thing viewers will see!

Note: Please write your text between the [brackets] and remove the *cursive* instruction once your story is complete.