

Abstract

# Innovation through Digitalization in Coffee Roasting <sup>†</sup>

Christian Müller

inno.space Design Factory Mannheim, University of Applied Sciences Mannheim, Paul-Wittsack-Straße 10, 68163 Mannheim, Germany; c.mueller@hs-mannheim.de

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**Abstract:** In today's dynamic landscape, products have transcended their traditional role as isolated devices. Instead, they find synergy within digital ecosystems, facilitating immersive user experiences that extend beyond mere functionality. These ecosystems provide not only the necessary hardware but also grant access to essential resources and knowledge, fostering a comprehensive user journey. Leveraging the power of technological platforms, these ecosystems successfully manage the seamless collaboration of diverse stakeholders, creating a room for innovation and value creation. This presentation employed Design Thinking methodologies to explore new territories, investigating untapped potentials for enhancing user experiences in the context of coffee roasting. Through this exploration, the feasibility of translating these enhancements into tangible software solutions was also assessed. Finally, this paper highlights the identified potential and introduces an innovative concept—a digital ecosystem designed to enhance the user experience in the craft of coffee roasting. Regarding the potential, optimization possibilities around the hardware and software of coffee roasters are presented. However, the greatest potential for innovation in coffee roasters through digitalization lies in a digital platform and, thus, the associated ecosystem. In this ecosystem, roasters can, for example, exchange knowledge and roasting profiles with each other or obtain the right green coffee for their device.

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