#### **Thesis Project Portfolio**

# Automating Software Tools in Consulting: Enhancing the SitScape Platform with OpenSearch Advanced Text Search

(Technical Report)

## **Establishing A Culture of Open Development: The Open Source Movement**

(STS Research Paper)

#### An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science
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In Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

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#### **Sociotechnical Synthesis**

MongoDB and Elastic NV recently provoked controversy in the open source community by shifting the licenses of their software products from open source licenses to a new "Server-Side Public License" in response to what they saw as an encroachment by cloud providers like Amazon. This new license was rejected by the Open Source Initiative, the governing body for open source, in a press release that described it as "fauxpen source" and both companies lost support from participants in the open source community. This sociotechnical thesis examines the philosophical tensions present within the open source community by studying the ideology and motives of each type of participant in the open source community including software foundations, for profit companies with open source products, and cloud providers. Non-profit organizations like the Free Software Foundation's focus are to promote a political and philosophic vision for computing, while other participants are motivated more by the practical benefits of software sharing. This thesis also explores how technological change and the increased prominence of cloud computing has affected the viability of some open source business models. Through this analysis, I conclude that the current philosophical position of the open-source community is more aligned with the business model of cloud providers than that of companies like MongoDB and Elastic NV. Actions like the license changes performed by these companies reflect a dissatisfaction with the open source model's ability to benefit their investors.

Keywords: Open Source, Free Software, Platform-as-a-Service (PaaS), Software Licenses