

An Interdisciplinary Approach to Sports Analytics in a University Setting
(Technical Report)

Performance, Privacy, and the Professional: The Proliferation of Data
Analytics in Athletics
(STS Research Paper)

An Undergraduate Thesis Portfolio
Presented to the Faculty of the
School of Engineering and Applied Science
In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science in Systems Engineering

by

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May 7, 2020

Preface

The explosion of data has transformed athletics. The publication of the book *Moneyball* in 2003 sparked a new national appreciation for sports analytics, evident in “Fantasy” leagues, sports betting, and commercial sensors such as Fitbit. Data analytics has changed the ways in which we play, coach, watch, and enjoy both collegiate and professional sports.

Many universities have begun offering academic degrees in sports analytics and management. Data collection and modeling techniques offer universities valuable opportunities. A systems analysis was used to identify stakeholders, uncover values, and better understand the networks and culture of the University of Virginia. In combination with a modified trade study, the analysis was applied in the design of an interdisciplinary sports analytics hub. Our recommendation is a design that serves the university’s strategic goals by integrating pan-university educational programs, research activities, athletic programs and community outreach.

In athletics, data analytics is controversial, dividing athletes, coaches, and fans. To its defenders, data analytics improves performance, coaching, and gameplay. But critics of data analytics in sports contend that it is no substitute for good coaching, that it is inconsistent with the spirit of athletics, and that it compromises privacy.

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