Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education)

From SUNY Press

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press

We've reached a tipping point in the path of human evolution; billions of data points are being generated every minute of every day by humans, computers, and technological devices all around us, creating a real-time, digital footprint of our lives with every credit card swipe and smart phone use. With this ocean of information accessible to us, the question becomes how to use the data to better engineer our world to serve our needs. This big data movement is transforming everything from healthcare delivery systems to the way cities deliver services to citizens. Now is the time to examine how the big data movement could help build smarter universities - institutions that can use the huge amounts of data they generate to improve the student learning experience, enhance the research enterprise, support effective community outreach and advance the campus's infrastructure. While much of the cutting edge work being done with big data is happening at colleges and universities, higher education has yet to turn the digital mirror on itself to innovate the academic enterprise. This volume will focus on three primary themes related to building a smarter university: 1) enhancing the operations and management of higher education institutions; 2) improving the education pipeline; and 3) educating the next generation of data scientists. 1)Enhancing Operations & Management: For decades, institutional research offices have been collecting student data to analyze things such as retention and graduation rates. As technology rapidly continues to evolve, the breadth and depth of data available to campuses is growing. Student ID cards allow institutions to track library usage, dining habits on and off campus, health center usage, medical treatments, attendance at co-curricular activities, and what residence halls or classrooms they access. Course management software can monitor student grades, which students access course material and for how long, and provide real-time learning assessments. Colleges and universities also generate the same infrastructure information that many cities are now using to improve their own effectiveness. This includes data created by parking enforcement, pedestrian patterns, traffic flows, energy usage, and recycling efforts. The data is massive and the possibilities for ingenuity are endless. 2)Improving the Education Pipeline: Over the last several years, there has been an growing interest both inside and outside of the academy to better insulate the

education pipeline, seeking to promote access, completion, and success of our students. There have been a growing number of efforts to capture and use data to better understand where students are coming from, how they experience college, and where they go after graduating. 3)Educating the Next Generation of Data Scientists: In grappling with the big data title wave, one of the most important roles of colleges and universities will be to prepare the next generation of data scientists, which the Harvard Business Review has called "the sexy new job of the 21st century." As the need for data scientists grows, colleges and universities should be at the forefront of training the workforce for these next generation careers. This third volume in the SUNY Critical Issues in Higher Education Series - Building A Smarter University: Big Data, Innovation and Ingenuity will take up this topic focusing on the opportunities and challenges of using big data to improve the academic enterprise, The book is intended to be thought provoking, analyzing some of the most pressing and complex issues about harnessing big data to build a smarter university, fostering innovation and ingenuity in the academy, and educating the next generation of data scientists. The authors, though their scholarly and practical insights, frame these issues for an international discussion.

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education)

From SUNY Press

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press

We've reached a tipping point in the path of human evolution; billions of data points are being generated every minute of every day by humans, computers, and technological devices all around us, creating a real-time, digital footprint of our lives with every credit card swipe and smart phone use. With this ocean of information accessible to us, the question becomes how to use the data to better engineer our world to serve our needs. This big data movement is transforming everything from healthcare delivery systems to the way cities deliver services to citizens. Now is the time to examine how the big data movement could help build smarter universities - institutions that can use the huge amounts of data they generate to improve the student learning experience, enhance the research enterprise, support effective community outreach and advance the campus's infrastructure. While much of the cutting edge work being done with big data is happening at colleges and universities, higher education has yet to turn the digital mirror on itself to innovate the academic enterprise. This volume will focus on three primary themes related to building a smarter university: 1) enhancing the operations and management of higher education institutions; 2) improving the education pipeline; and 3) educating the next generation of data scientists. 1)Enhancing Operations & Management: For decades, institutional research offices have been collecting student data to analyze things such as retention and graduation rates. As technology rapidly continues to evolve, the breadth and depth of data available to campuses is growing. Student ID cards allow institutions to track library usage, dining habits on and off campus, health center usage, medical treatments, attendance at co-curricular activities, and what residence halls or classrooms they access. Course management software can monitor student grades, which students access course material and for how long, and provide real-time learning assessments. Colleges and universities also generate the same infrastructure information that many cities are now using to improve their own effectiveness. This includes data created by parking enforcement, pedestrian patterns, traffic flows, energy usage, and recycling efforts. The data is massive and the possibilities for ingenuity are endless. 2)Improving the Education Pipeline: Over the last several years, there has been an growing interest both inside and outside of the academy to better insulate the education pipeline, seeking to promote access, completion, and success of our students. There have been a growing number of efforts to capture and use data to better understand where students are coming from, how they experience college, and where they go after graduating. 3)Educating the Next Generation of Data Scientists: In grappling with the big data title wave, one of the most important roles of colleges and universities will be to prepare the next generation of data scientists, which the Harvard Business Review has called "the sexy new job of the 21st century." As the need for data scientists grows, colleges and universities should be at the forefront of training the workforce for these next generation careers. This third volume in the SUNY Critical Issues in Higher Education Series - Building A Smarter University: Big Data, Innovation and Ingenuity will take up this topic focusing on the opportunities and challenges of using big data to improve the academic enterprise, The book is intended to be thought provoking, analyzing some of the most pressing and complex issues about harnessing big data to build a smarter university, fostering innovation and ingenuity in the academy, and educating the next generation of data scientists. The authors, though their scholarly and practical insights, frame these issues for an international discussion.

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press Bibliography

- Sales Rank: #777985 in Books
- Published on: 2014-10-01
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x .86" w x 6.00" l, 1.29 pounds
- Binding: Paperback
- 342 pages

⬇ **Download** Building a Smarter University: Big Data, Innovatio ...pdf

📄 **Read Online** Building a Smarter University: Big Data, Innovat ...pdf

Download and Read Free Online Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press

Editorial Review

About the Author

Jason E. Lane is Vice Provost for Academic Affairs and Senior Associate Vice Chancellor at the State University of New York, Deputy Director of the Rockefeller Institute of Government, and Associate Professor of Educational Policy at the University at Albany, State University of New York.

Users Review

From reader reviews:

Paul Otoole:

Throughout other case, little persons like to read book Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education). You can choose the best book if you like reading a book. As long as we know about how is important the book Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education). You can add know-how and of course you can around the world by way of a book. Absolutely right, because from book you can know everything! From your country right up until foreign or abroad you will find yourself known. About simple thing until wonderful thing you are able to know that. In this era, we are able to open a book as well as searching by internet system. It is called e-book. You should use it when you feel uninterested to go to the library. Let's read.

Alysa Appel:

Reading can called head hangout, why? Because when you are reading a book mainly book entitled Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) the mind will drift away trough every dimension, wandering in most aspect that maybe unidentified for but surely will become your mind friends. Imaging every word written in a book then become one form conclusion and explanation which maybe you never get prior to. The Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) giving you an additional experience more than blown away the mind but also giving you useful facts for your better life on this era. So now let us present to you the relaxing pattern this is your body and mind will be pleased when you are finished reading through it, like winning a. Do you want to try this extraordinary spending spare time activity?

Stacia Cobb:

Beside this particular Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) in your phone, it could give you a way to get more close to the new knowledge or info. The information and the knowledge you are going to got here is fresh from the oven so

don't be worry if you feel like an aged people live in narrow town. It is good thing to have Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) because this book offers to your account readable information. Do you sometimes have book but you seldom get what it's all about. Oh come on, that will not end up to happen if you have this within your hand. The Enjoyable option here cannot be questionable, such as treasuring beautiful island. Use you still want to miss that? Find this book as well as read it from at this point!

Steven Craig:

This Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) is brand new way for you who has intense curiosity to look for some information given it relief your hunger associated with. Getting deeper you into it getting knowledge more you know or you who still having small amount of digest in reading this Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) can be the light food to suit your needs because the information inside this specific book is easy to get by anyone. These books build itself in the form that is certainly reachable by anyone, yeah I mean in the e-book type. People who think that in e-book form make them feel drowsy even dizzy this book is the answer. So there is absolutely no in reading a publication especially this one. You can find what you are looking for. It should be here for a person. So , don't miss the item! Just read this e-book kind for your better life and knowledge.

Download and Read Online Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press #9KFYQ20MUWT

Read Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press for online ebook

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press books to read online.

Online Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press ebook PDF download

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press Doc

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press Mobipocket

Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press EPub

9KFYQ20MUWT: Building a Smarter University: Big Data, Innovation, and Analytics (SUNY series, Critical Issues in Higher Education) From SUNY Press