

International Summit on Industrial Engineering

December 08-10, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA

Data analysis to support healthcare decisions

Sampson Gholston*, Sherri Messimer, Sheila Dyas, Eric Greenfield, Swati Thotakura, Tracy Doughty and Richard Ivey
The University of Alabama in Huntsville, USA

Turning data into information that can be used to make timely decisions is a challenge that organizations have been facing for many years. In today's technology age, there is no shortage of data. Organizations have databases that store all varieties of data. The term big data is used because the amount of data systems can generate in this technology era. Decision makers must use various analytical concepts to synthesize and visualize the data. The purpose of this presentation is to propose a clinical and operational data infrastructure to support hospital administrators in making decisions. The final conclusion will suggest methods to identify inherent patterns, correlations, and anomalies which provide valuable insight for healthcare data analysts and executives.

Biography

Sampson Gholston is an Associate Professor of Industrial and Systems Engineering and Engineering Management at The University of Alabama in Huntsville. He has a PhD in Industrial and Systems Engineering from The University of Alabama in Huntsville, a Masters in Industrial Engineering for The University of Alabama, and Bachelors from Austin Peay State University in Engineering Technology. He teaches classes in Quality Engineering, including Introduction to Statistical Quality Control, Quality Management, Advanced Quality Control and Engineering Statistics. His research area is applied statistics, quality engineering, quality management, and engineering education. He worked for the GM Saturn Corporation as lead supplier quality engineer. He holds a Six Sigma Black Certification and has a great deal of industry experience. He is the President of the North Alabama Chapter of the Society of Manufacturing Engineers and works on several committees for the Society at the National level. He has served as an examiner for the Sterling Award for three years. He has also served three years as an examiner on the National Baldrige Quality Award.

gholston@ise.uah.edu