# Applied Business Statistics: Techniques and Interpretations



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# Techniques and Interpretations

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First Impression: May 2024

Applied Business Statistics: Techniques and Interpretations

ISBN: 978-81-19585-78-6

Rs. 1000/- (\$80)

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Published by: Parab Publications

### Preface

Thank you for viewing "Applied Business Statistics: Techniques and Interpretations." The goal of this book is to make business statistics more approachable and helpful for both professionals and students by demythologizing the field. Making wise business decisions in today's data-driven environment requires the ability to evaluate and apply statistical methodologies. Our aim is to present concise explanations, useful examples, and real-world applications that demonstrate the use of statistics to corporate problem-solving.

Although we acknowledge that statistics can sometimes appear overwhelming, we think that anyone can learn the fundamentals and make effective use of these useful tools with the correct guidance. This book covers a lot of ground, explaining everything from basic ideas to sophisticated methods in an approachable and clear way. This book is for anyone starting a business studies programme, hoping to improve your professional abilities, or wanting to make data-driven decisions as an entrepreneur.

We believe that "Applied Business Statistics: Techniques and Interpretations" will be a useful and powerful resource for you as you pursue your business goals by enabling you to fully utilise statistical analysis.

## Acknowledgment

We sincerely thank all of the people who helped make this book possible. To our families: we are grateful for your patience and constant support over the many hours we spent writing and editing. To our students and coworkers, many of the subjects and illustrations in these pages were sparked by their inquiries and comments. We would especially want to thank our editorial team, whose knowledge and commitment made sure that our content was accurate and clear.

We express our sincere gratitude to the business experts who contributed their experiences and practical insights, which enhanced our comprehension of the several industries that employ statistics. Their assistance has been crucial in making this book applicable and useful.

Finally, we thank statisticians and educators for their pioneering work in laying the foundations for contemporary business statistics. Their innovative work continues to motivate and direct us in our endeavour to increase everyone's access to statistical information.

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Dr. Parvez Khan
Dr. Gangadhar G Hugar
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### About the Authors



**Dr. Muhammed Basheer** have been working since 2007 in the University as Mathematics lecturer. After his completion of Msc, immediately started working in different firms in the field of education. He has proven the ability in the field of research also, as he published more than 17 papers in the field of education/ Mathematics/IT/OR/Stats and technology-science in national and international journals. He has been received 5 patents from Government of India. He has been fascinated by the concept of 'Lecturer' as object—research oriented educator, like tangible teaching whose purpose is to relate intangible ideas to become a part of the individual lecturing significance worth of study as he experienced that the teaching is one of the most significant sources of information and knowledge-acculturation process

Furthermore, if someone could club the teaching with research innovation it would be the maximum significance optimization level in the field of education. He has been recognized this implementation in the University as because of that only he is too much fascinated in the field of teaching and self-learning especially in the field of higher education.

He was deeply interested in the preservation and adoption of the different methodology in teaching using technology to reduce the effort of Lecture as well as student to obtain excellent optimal gain.



Dr. Parvez Khan With over a decade of experience, Dr Parvez is a distinguished researcher and educator. Holding an MBA, M.com, MA, and Ph.D. in Management, Dr Parvez brings multifaceted expertise across finance, economics, operations, strategy, and marketing research. He is currently employed as the Faculty of Business at ATRIA University in Bangalore, India, as an Assistant Professor. As an Assistant Professor, he demonstrates an unwavering commitment to higher education and passion for cultivating the next generation of leaders. He is also a bank trainer for Bank CAIIB and JAIIB Exams. His illustrious career reflects his dedication to academic excellence and rigorous research. Published various research papers in Scopus, UGC Care, and ABDC indexed Journals and authored several books.



**Dr. Gangadhar G Hugar**, PhD in Management from Dravidian University, Kuppam, Andhra Pradesh, M.Phil in Management from Alagappa University, Karaikudi, Tamil Nadu, MBA – Newport University, California – South Asia Chapter, Bangalore, MBA - Alagappa University, Karaikudi, Tamil Nadu, M.Com in Personnel Management & Industrial Relations, PG Diploma in Marketing Management from KSOU, Mysore.

Dr Gangadhar G Hugar is Presently working as a Director of Department of Management Studies at Laxmi Institute of Management, LVS Campus, Sarigam, Valsad, Gujarat.

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**Dr. Parbin Sultana,** She has expertise in the field of Quantitative Techniques, Operations and Production Management, Research Methodology, Mathematical Statistics, Bio-Statistics, Demography and Data Analytics (ML & AI). She has more than 16 years of experience in the field of teaching and served as Controller of Examination & Admission at University of Science & Technology Meghalaya for 3 years. She has published articles & Research Papers both in national as well as international journals which include in UGC CARE, Peer Review, web of Science and SCOPUS Indexed journals. She has been presenting research papers at various national & international seminars & conferences and also remained as chairperson of technical sessions. Also, she has conducted national workshops on Data Analysis and on Research Methodology. Three books have been edited by her. She was awarded Shuvom Saikia Memorial award for securing first class first position in M.Sc Previous Examination ( in Statistics) of Guwahati University and also pursued Advanced Programme in Data sciences from Indian Institute of Management Calcutta. She has produced four Ph.D. Scholars and presently she is guiding eight numbers of research scholars. She is delivering lectures on various socioeconomic problems faced by women on different platforms.



**Dr. Akshaya Kumar Mohanty** working as Associate Professor of Economics in Mizoram University has more than 20 years of Research and Academic Experiences in P.G. and Ph.D.programmes across the globe. He has published more than 51 research papers of international repute.

## Table of Contents

Preface	IV
Acknowledgment	$\mathbf{V}$
About the Authors	VI - IX
<b>Table of Contents</b>	X - XI
Title of Chapters	Page No.
Chapter - 1	1 - 17
Introduction to Business Statistics	
Chapter - 2	18 - 34
Descriptive Statistics	
Chapter - 3	35 - 48
Probability Theory	
Chapter - 4	49 - 60
Sampling and Sampling Distributions	
Chapter - 5	61 -67
Estimation	
Chapter - 6	68 - 76
Hypothesis Testing	
Chapter - 7	77 - 83
Analysis of Variance (ANOVA)	

Cnapter - 8	84 - 91
Regression Analysis	
Chapter - 9	92 - 100
Time Series Analysis	
Chapter - 10	101 - 112
Nonparametric Methods	
Chapter - 11	113 - 124
Quality Control and Statistical Process Control	
REFERENCES	125 - 131

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#### **ABOUT THE BOOK**

Your go-to resource for comprehending and applying statistics in the corporate sector is "Applied Business Statistics: Techniques and Interpretations". This book, which is written in an understandable, straightforward language, covers everything from fundamental ideas to sophisticated methods. Learning how to gather, examine, and decipher data will help you make wise business decisions.

Every chapter demonstrates the application of statistical techniques in actual business contexts through case studies and real-world examples. This book will provide you the tools you need to use statistics to make smarter decisions and run a successful business, whether you're a professional, a student, or a business owner.







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