6th Day National Workshop on Research Methodology on Management and Statistical Analysis Using IBM SPSS Statistics 22.0
8th-14th December 2014


Prof. Yogesh Upadhyay, Vice Chancellor, ITM University delivering inaugural speech in 5th 7 Day National Workshop on Research Methodology on Management and Statistical Analysis Using IBM SPSS Statistics 22.0 held from May 26 - June 2, 2014.

Organised by: ITM School of Business
Ranked at 26th position amongst the top 50 B-Schools in India in terms of “Quality of Permanent Faculty” and “Performance of College/Faculty”
(By Career Connect, Dec. 2013)
“Knowing is not enough; we must apply. Willing is not enough; we must do.”

Johnson Von Goethe,

Introduction

Search for knowledge or any systematic investigation to establish facts is research. It is about searching systematically for solutions to problems. For this statistical device is required. Statistical device not only provides a way of summarizing the data into quicker and manageable information but also helps the researcher to make decisions about whether relationships between two or more variables are actually real ones. Statistics today have become indispensable in all field of human endeavor including not only natural physical and social science but also in the field of management science.

To address challenges and opportunities in the field of research a new software product SPSS now known as IBM SPSS Statistics 22.0 has enabled academicians and researchers to obtain valuable information from the data. Basic knowledge on SPSS is vital for all users before they proceeded to survey and data analysis. But very often people have adequate knowledge about the basic operation of SPSS programme. This seven days workshop is for the beginners with little or no experiences in SPSS software who want to acquire the skills and knowledge of getting started in to this software. The programme simply aims at developing the pedagogical and research skills in the participants.

Objectives of the workshop

- To enable the participants to define research problems and develop a suitable methodology for addressing the key issues.
- To enable the participants to understand the need for statistical tools in research.
- The objective of seven day workshop is to impart the data analytical capabilities to the project leaders, business analysts, faculty, research scholars and post graduate students who want to enhance their ability of data analysis capabilities to facilitate decision making.
- The participants also learn about use of various data analysis techniques in research, designing the study, collecting data, issues involved in coding, editing, analyzing and interpreting the data collected.
- The primary focus will be on survey research with special seasons on Finance, Human Resources, Organization Behavior, and Marketing areas.
- To equip the participant with analytical knowledge and skills to enhance the quality of work, enhance managerial ability to apply different types of statistical tools, interpret and use the result for decision making.

For whom

The participants of the program could be the faculty members, project leaders, business analysts research scholars who have an inherent inclination towards research. The participants may be the starters or on the
middle of research or at the analysis stage. You can attend this programme if you want to develop a holistic view on the statistical tools to do an excellent research. SPSS software training is intended to instill confidence in data analysis and its interpretation. Corporate and educational Institutes can sponsor their employees.

Participants Fee
Participants from Industry : Rs. 5,000/-
Academicians : Rs. 4,000/-
Researchers : Rs. 3,000/-

Fee can be deposited either by Bank Draft drawn in favour of “ITM University”, payable at Gwalior, or via. On-line payment at IDBI Bank Account Name : ITM University - Gwalior, A/C Number : 0056104000295482, MICR Code : 474259002, IFSC : IBKL0000056, Branch Code : 056 or through cash deposited at the cash counter of ITM University. The participation fee includes course materials, SPSS (latest) software training, lunch, high tea, dinner and 14 days evaluation version of SPSS software. Accommodation on twin sharing basis will be provided at nominal rates (subject to availability).

Its Rs. 350 per day on twin sharing basis (Non AC rooms)
Rs. 700 per day on twin sharing basis (AC Room)

Why you should attend?
- This seven day workshop offers you hands-on experience to use state-of-art SPSS 22.0 software.
- Sessions are also taken by statisticians from IBM-SPSS.
- Since it is a seven day workshop, you can earn 10 points as provided in Point Based Assessment System (PBAS) of UGC.
- Scholars who are taking this workshop have wide experience of international level research.

Resource Persons
Prof. Yogesh Upadhyay
Vice Chancellor, ITM University Gwalior.

Prof. Nimit Choudhury
Professor, Indian Institute of Tourism & Travel Management, Gwalior.

Prof. Manoj Patwardhan
Professor, Atal Bihari Vajpai Indian Institute of Information Tech. & Mgmt. (ABV IIITM) Gwalior

Prof. Keshav Singh Kansana
Asst. Prof. ITM School of Business, ITM University Gwalior.

Prof. Aditya Tripathi
Asst. Professor, ITM School of Business, ITM University Gwalior.

Prof. Abhinandan Chakraborty
Asst. Professor, ITM School of Business, ITM University Gwalior.

Statisticians from SPSS South Asia Pvt. Ltd., Bangalore

List of Participating Institutions
So far more than 300 participants from across the country have participated and attended the workshop. We have participants coming from Narsee Monjee Institute of Management Studies, Mumbai SVM’S Narsee Monjee Mumbai, IIFM Mumbai, Sirna College of Engineering and Technology, Badnera Road, Amravati, Maharashtra; Prof. Ram Meghe Institute of Technology and Research, Amravati, Maharashtra; G.H. Raisoni Institute of Management Studies, Amravati, Maharashtra; Shri Shivaji College, Akola Maharashtra; Dr. Panjabrao Deshmukh Institute of Management and Technology and Research, Nagpur; University School of Business Studies, Punjabi University, Guru Kashi Campus, Talwandi Sabo, Bathinda; The Maharaja Sayajirao University of Baroda, Vadodara; U.P Rajarshi Tandon open University, Allahabad, U.P.; Punjabi University, Patiyala; DAV College for Girls Yamanunagar, Haryana; Dr. HS Gour University, Sagar; Manipal University, Jaipur; J.Z. Shah Arts & H.P Desai Commerce College, Amnoli, Surat; C.J. Patel College of Commerce. Varav, Surat; BHEL, Bhapal; LNUPE, Gwalior; Amrapal Institute of Management & CA, Haldwani, Saurashtra University, Gujarat, SRIT, Baranpur, SivaSivani Inst of Mgmt, Hyderabad, BHU, Varanasi, MNNIT, Allahabad, ITM Dept of Humanities, BHilwara, Raj. St Thomas College, Bhilai, Institute of Business Management, Kolkata, University of Lucknow, Lucknow, Sahara Arts & Mgmt Academy, Lucknow, Aditya College, Gwalior, North Maharashtra University, Jalgaon, KLE Society’s IMS & R. Hubli, Vinayaka Mission Open University, Gwalior, APS University ; Rewa, KCES’s IM & R, Jalgaon, TIMS, Gujarat, UPRTU University, Allahabad, Mang layat university, Aligarh, West Bengal State University, Kolkata, BBS Ins. Of Mgmt, Studies, Gr Noida, T John College, Bangalore, Gwalior, SMS, SGSB University, Rajouri, J&K, BVM Inst of Mgmt, Gwalior, Jiwaji University, Gwalior, IM Udaipur, IIT-Roorkee, Banaras Hindu University, University of Lucknow, Andhra University, Central University of Rajasthan, Bharathidasan University, Aligarh Muslim University, Dayalbagh Educational Institute Agra, SSP, Jain Arts and Commerce College, Gujarat, ICSC, Srinagar, Annamalai University, IFIM Business School, Bhuwaneswara, Indian Institute of Teacher Education, Gujarat, Babasaheb Bhimrao Ambedkar University, Lucknow, Central University of Haryana, FD Arts and Commerce College for Women, Ahmedabad.
ITM University – A Silhouette

ITM University is a multidisciplinary University with an international reputation for the quality of its research and teaching across the academic spectrum, with subjects spanning Sciences, Engineering, Management, Education, Pharmacy, Library Science, Commerce, Agriculture, Medical, Nursing etc. It is at the forefront of learning, teaching and research and leader in many different fields. It seeks to sustain and enhance its excellence as an institution of higher learning through outstanding teaching and world-class societies they serve.

• Awarded as Best Private University Serving Social Cause by Enhancing Employment Opportunities on 9th April, 2013 by Dr. M.M. Pallam Raju, Minister-HRD, Govt. of India, Planning Commission & ASSOCHAM.
• “Best Innovative University for Industry Interface in India” Awarded on 14th April, 2013 by Brands Academy.
• Awarded in Feb., 2013, “Most Promising University of North and Central India” – (One Planet Research).
• One of the Five Most Promising Universities of India (India Today Aug. 2012).
• Awarded in December 2012 “Best University of Central Northern India.”

ITM School of Business

ITM University, Gwalior, was conferred with the Best Private University Serving Social Cause, Award by ASSOCHAM (Associate Chamber of Commerce and Industry of India) in the National Education Excellence Awards 2013, an initiative by ASSOCHAM, held on April 9, 2013, in New Delhi. The award was handed over by the Hon’ble Union Minister of HRD, Dr. M.M. Pallam Raju to Prof. (Dr.) Yogesh Upadhyay, Vice Chancellor, ITM University, Gwalior.

ITM School of Business (ITM-SOB) is one of the flagship brand of ITM University Gwalior and ranked as one of the leading B-Schools in Central and North India. It has received highest ratings for its learning-outcomes based academic programmes, state-of-art infrastructure, rich academic resources, continuous evaluation system, credit based system and global outlook. Recently ITM-SOB has been ranked at 26th position amongst the Top 50 B-Schools in India in terms of “Quality of Permanent Faculty” and “Performance of College/Faculty” (Career Connect, Dec.2013). It has been ranked as 9th best B-School in North India (Excluding IIMs) by Silicon India (2013).

Our programmes are a showcase of flexibility, predictability, and transparency. All our academic programmes are based on a system of credits—generally guided by ECTS (European Credit Transfer and Accumulation System) as a proper means of promoting the most widespread student mobility. The basic intent of the school is to impart quality management education at Undergraduate, Postgraduate and Doctoral research levels. It is India’s 1st B-School that offers customized programme designed in association with prominent industries aimed to offer industry ready product in form of well-groomed students. Here, industry and ITM School of Business jointly decide on curriculum, teaching-learning process, internship, workshops and other academic inputs that help in securing maximizing learning outcomes in terms of knowledge, skills, attitude and behaviour.

About Gwalior

Gwalior is a historical city in the heart of India, situated in the State of Madhya Pradesh, 120 Km from Agra (The city of Taj Mahal) and 317 Km from Delhi. It is well connected with Delhi, Bhopal, Mumbai, Bangalore and Hyderabad by train and road, and by air from Delhi and Mumbai. Gwalior, known as city of music, has perhaps the richest musical tradition among all the cities in this great country starting from Tansen, Baijubabra, Hassukhan, Haddukhan, Krishnarao Pandit, Bala Saheb Puchhwale, Chote Bahyya Puchhwale, Bande Ali Khan, Shankar Rao Pandit and to come to the living legends Malini Rajurkar, Ustad Amjad Ali Khan, the list is endless. The legendary musician Tansen who belonged to Gwalior was recognized as one the nine jewels of Emperor Akbar’s court.

Most famous and memorable landmarks include Gwalior Fort, the living palace of Scindia’s, Jai Vilas Palace, the Tomb of the famous musician Tansen and museums. Agra, the city of Taj, is 110 Kms from Gwalior and 1.5 hours journey by express trains. The world famous Khajuraho group of temples, depicting all facets of life, are 4 hours journey by road. Mitawali & Padavali has a group of 108 ruins of temples and is 20 Kms from Gwalior. Orchha is 100 Kms from Gwalior and is a treat for weekend trips as the village still carries old time feel with palaces, temples, cenotaphs and ruins along the banks of Betwa River.
## Programme Schedule

### 8 December, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 AM – 11:00 AM</td>
<td>Inauguration Function and key note speech on relevance and mileage offered by Research</td>
</tr>
</tbody>
</table>
| 11:30 AM – 12:00 NOON | SESSIONS BY EXPERTS FROM SPSS  
Data Editing and Data Preparation  
Data Transformation and File Handling and Transformations  
Working with Output and Pivot Tables  
Working with Models and Chart Facility |
| 12:00 NOON – 1:30 PM | SESSIONS BY EXPERTS FROM SPSS  
Data Analysis via SPSS 22.0  
Using Functions: Frequencies  
Descriptive Statistics  
Explore  
Cross Tabs  
P-P Plots  
Q-Q Plots |
| 02:15 PM – 4:00 PM | SESSIONS BY EXPERTS FROM SPSS  
Statistical Analysis  
Z-Test, T-test – Independent samples and paired sample.  
ANOVA – Contrasts, post-hocs and options. |
| 04:15 PM – 5:45 PM | SESSIONS BY EXPERTS FROM SPSS  
GLM Univariate Analysis  
Model, contrasts and post-hoc |

### 9 December, 2014

<table>
<thead>
<tr>
<th>Time</th>
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| 09:00 AM – 11:00 AM | SESSIONS BY EXPERTS FROM SPSS  
Correlations  
Bivariate and Partial |
| 11:30 AM – 1:30 NOON | SESSIONS BY EXPERTS FROM SPSS  
Linear Models and Regression Analysis |
| 2:15 PM – 4:00 PM | SESSIONS BY EXPERTS FROM SPSS  
Factor Analysis |
| 4:05 PM – 4:45 PM | SESSIONS BY EXPERTS FROM SPSS  
Cluster Analysis |

### 10 December, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</table>
| 09:00 AM – 11:00 AM | PREPARING FOR RESEARCH AND REVIEW OF LITERATURE  
• What is Research..?  
• Alternatives to Research.  
• How to conduct a Systematic Literature Review?  
• Use of EBSCO and other data bases in literature review.  
Use of software in Review |
| 11:30 AM – 1:30 NOON | INTRODUCTION TO STATISTICS  
• Statistics in real life  
• Central Tendency  
• Variability  
• Shape  
>Skew >Kurtosis  
• Relationship between Statistics  
>Skew and Central Tendency  
>Skew and Variability |
| 2:15 PM – 4:00 PM | HYPOTHESIS SETTING AND PROCEDURES  
• From Research Questions to Hypotheses  
• Language of Hypotheses  
• Type of Hypotheses.  
• Level of Significance, Brief Introduction of Sampling distribution Visiting International research papers to examine the practice. |
| 4:05 PM – 4:45 PM | PROJECT BASED HANDS-ON EXERCISES  
Measurement Scales and Questionnaire Design  
The value of a Good Survey Instrument Online Survey Methods: Available Options  
Measurement Scales-Single and Multiple Item Scales, Scales and Index |

### 11 December, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Z-Test, T-test, Paired T-test, Anova and Correlation</td>
</tr>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Factorial Anova, Interaction effect</td>
</tr>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Regression Analysis, Multiple Regression</td>
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<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Partial and Semi-Partial Correlation</td>
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</tbody>
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### 12 December, 2014

<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Factor Analysis – Case Studies</td>
</tr>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Cluster Analysis-Case Studies</td>
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<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Multi Dimensional Scaling (MDS)</td>
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<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Confirmatory Factor Analysis</td>
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### 13 December, 2014

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<tbody>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Application of non-parametric tests : Contexts and types.</td>
</tr>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Writing Research Article and Proposals: Structure of a Research paper. References? Plagiarism</td>
</tr>
<tr>
<td>PROJECT BASED HANDS-ON EXERCISES</td>
<td>Project Report Presentations</td>
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### 14 December, 2014

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>VALEDICTORY SESSION</td>
<td>Visit to Agra/Khajuraho</td>
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Pedagogy : The workshop will use a holistic model order to groom participant in the area of research methodology. The sessions will be a mix of pen/pencil exercises, concurrently implementing the same exercises via software in the same session and finally an overview of use of illustrated techniques in published research papers.

Based on lecture method  
Hands-on computer exercises or demonstration of the use of software via projector  
A mix of lecture and hands-on computer exercises or demonstration of the use software via projector.
Patrons
Shri Ramashankar Singh
Chancellor, ITM University Gwalior
Smt. Kanupriya Singh Rathore
Chairperson, ITM Universe Vadodara, Gujarat
Smt. Ruchi Singh Chauhan
Vice President, ITM University Gwalior
Shri Ravindra Singh Rathore
Managing Director, ITM Universe Vadodara, Gujarat
Shri Daulat Singh Chauhan
Managing Director, ITM University Gwalior
Dr. R.D. Gupta
Advisor to Chancellor, ITM University Gwalior

Programme Chairman
Prof. Yogesh Upadhyay
Vice Chancellor, ITM University Gwalior

Programme Facilitator
Prof. S.B. Geeta Narhari
Dean, ITM School of Business, ITM University Gwalior

Programme Coordinators
Prof. Sarika Keswani-09826221797
Prof. Shilpy Singh-09926244005
Prof. Saumya Dixit-07746866407
Prof. Abhinandan Chakarborty-08085136965

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Disclaimer: ITM University Gwalior has no connection with any other University with the similar name anywhere else in India.