

EBINS

**International Conference On
Economics And Business At
The Interface Of Natural Sciences**

**ATHENS, GREECE
July 3-4, 2017**

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International Conference on "ECONOMICS AND BUSINESS AT THE INTERFACE OF NATURAL SCIENCES" (EBINS-2017)

1st International Conference on “Economics and Business at the Interface of Natural Sciences”(EBINS- July 3-4, 2017)

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EBINS 2017

Conference Proceeding

Book of Abstracts

**1st International Conference on
“Economics and Business at the Interface of Natural
Sciences” (EBINS- 2017)”**

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Conference Chair Message

Farooq Ahmed Jam (Ph.D.)



1st International Conference on “Economics and Business at the Interface of Natural Sciences” (EBINS - 2017) serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the regional and global challenges faced by our societies. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe, these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences. The scholars attending this conference will certainly find it helpful in refining their own research ideas, finding solutions to basic/applied problems they face and interacting with other renowned scholars for possible future collaborations.

I am really thankful to our honorable scientific and review committee for spending much of their time in reviewing the papers for this event, selecting the best paper awards and helping the participants in publishing their research in affiliated journals. Also special thanks to all the session chairs from industry, academia and policy-making institutions who volunteered their time and support to make this event a success

A very special thanks to the great scholars for being here with us as key note speakers. Their valuable thoughts will surely open the horizon of new research and practice for the conference participants coming from across the globe. I am also thankful to all the participants for being here with us to create an environment of knowledge sharing and learning. We the scholars of this world belong to the elite educated class of this society and we owe a lot to return back to this society.

Let's break all the discriminating barriers and get free from all minor affiliations. Let's contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed.

Type of EBINS Papers

For this year, EBINS has two types of papers: *Empirical Studies* and *Insight*. Research papers meet the needs of researchers and are reviewed on the basis of highest academic standards. The objective of the academic paper is to contribute to the scientific body of knowledge. On the contrary, Insight papers meet the needs of policy makers and professionals and are reviewed on the basis of high practical standards. The objective of the Insight is to identify the real world problems and how they can be solved with the help of information systems.

Reviewing Criteria

In EBINS, all papers are judged on the same criteria (relevance, significance, originality, validity and clarity). However some criteria differ between the Research papers and Insight papers.

Relevance: Relevance has a great impact on the theme of the conference. The material is relevant and according to the theme of the conference.

Significance: Knowledge in different researches in the conference is related to research papers and insight papers.

Originality: Ideas that are new for the researchers are used in the conference.

Validity: Research papers in the conference are based on theory while the insight papers in the research are based on experimental researches. References are according to content.

Clarity: Papers are according to the format, language is easy and understandable by the audience in the conference.

Acceptance Rates

Full Research Papers				
Submitted Papers	Accepted Papers	Withdrawn	Unqualified papers	Acceptance Rate
55	20	20	15	36.5%

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Acknowledgment

A huge number of people helped in conducting the conference. First of all thanks to all the members of the Conference and Program Committee and representatives of the EBINS board and their helpers. We also want to thank all the Track Chairs, and reviewers, as well as all the members of the Scientific Committee for their help in the review process and organizing the tracks and special sessions. A special thanks to Universitas Sembilanbelas November Indonesia for collaboration.

We thank everyone for their hard work and dedication to this conference and we look forward to the latest episode of the EBINS tradition.

Farooq Ahmed Jam (Ph.D.), Tariq Iqbal Khan (Ph.D.)
Program Chair & Co-Chair

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Tehran University of Medical Sciences, Iran

Zhou Rui-Hua

School of Public Health, North China University Of Science And Technology

Best Paper Nominee List

The Relationships among Lean Production, Operational Performance, and Financial Performance

Piyachat Burawat,

Rajamangala University of Technology Thanyaburi,
Thailand

Floor Radiant Heating System with PCM

Jin Chul Park

Chung-Ang University, Korea, South

The Impact of Environmental Regulation and Threats of Regulation on Environmental Performance for Canadian Firms: Expectations Versus Reality

Camélia Radu¹, Claude Francoeur²

¹Université du Québec à Montréal, Canada

²HEC Montréal, Canada

An Interactive Real-Time Shadow Play System Using Kinect

Der-Lor Way

Taipei National University of Arts, Taiwan

EBINS 2017 Best Paper Award Winner

The Relationships among Lean Production, Operational Performance, and Financial Performance

Piyachat Burawat,

Rajamangala University of Technology Thanyaburi,
Thailand

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CONFERENCE PROGRAM

DAY 01 Monday (July 03, 2017)

Welcome Reception & Registration

8:15 am – 9:00 am

Opening Ceremony (09:00am – 10:00 am)

Venue: Room 1

09:00 am – 9:15 am	Welcome Remarks – Mr. On Chee Hoong (Wilson)	Manager Operations Global Illuminators
09:15 am – 9:25 am	Opening Speech – Dr. Tariq Iqbal Khan (Ph.D.)	Director Global Operations, Global Illuminators Conference Co-Chair
09:25 am - 10:00 am	Group Photo	

Tea Break (10:00 am – 10:30 am)

DAY 01 Monday (July 3, 2017)
Session 1 (10:30 am – 12:00 pm)
Venue: Room 1

Session Chairs: Mahwish Waheed & Tariq Iqbal Khan

Track A: Multidisciplinary and Interdisciplinary Studies

EBINS-17-107	The Relationships among Lean Production, Operational Performance, and Financial Performance	Piyachat Burawat,
EBINS-17-108	Floor Radiant Heating System with PCM	Jin Chul Park
EBINS-17-111	The impact of environmental regulation and threats of regulation on environmental performance for Canadian firms: expectations versus reality	Camélia Radu
EBINS-17-112	An Interactive Real-Time Shadow Play System Using Kinect	Der-Lor Way
EBINS-17-122	Energy Consumption and Economic Growth in Botswana	Nicholas Odhiambo
EBINS-17-114	Reconstruction of Social Science and Humanities through Narrative	Shin, Hye-Won
EBINS-17-115	Bruner's Educational Theory and its Implication: Focusing on New Humanities	Lee, Ji-Eun

Lunch Break & Closing Ceremony(12:00 pm – 1:30 pm)

LIST OF CONFERENCE ATTEDEES

The following scholars/practitioners/educationists don't have any paper presentations; however they will be attending the conference as delegates and observers.

ID	Name	Affiliation	Country
EBINS-17-125	Yoo Young Keun	Korea University Business School	South Korea

DAY 01 Monday, (July 3, 2017)

“CITY TOUR”

Gathering of Participants at the Lobby of Astor hotel, Karageorgi
, Athens Greece at 2:00 pm

Departure: 2:30 pm for City Tour

Drop Back at Astor hotel, Karageorgi, Athens Greece at 7:00 pm

Important Note: This tour is organized by Global Illuminators and entry to this tour is free for all participants. You may also bring your Siblings/Family/Friends but you have to register for them on registration desk one day before the tour.



TRACK A: BUSINESS MANAGEMENT & ECONOMIC STUDIES



The Relationships among Lean Production, Operational Performance, and Financial Performance

Piyachat Burawat*

Rajamangala University of Technology Thanyaburi, Thailand

Abstract

The objective of this study is to investigate the relationships among lean production, operational performance, and firm performance; thereby, the study was conducted and accomplished by means of quantitative method using random sampling and snowball sampling. The results were analyzed by descriptive statistics, confirmatory factor analysis, and the structural equation modeling by using statistical software programs. Considering the quantitative approach, a survey was conducted with 629 current middle and top managers working in Thai manufacturing industry. The majority of respondents were male (56.3%) of the age above 40 years old (32.6%), factory/production manager (39.1%), bachelor's degree (75.8%), working in medium size company (36.9%), nonautomotive (60.9%), and company age above 15 years (46.6%). The findings reported that there were positive relationships between lean production and operational performance, lean production and financial performance, and operational performance and financial performance. In addition, the results presented that there was partial effect of lean production on financial performance through operational performance. Considering the structural model level, the results further revealed that the model was not different across the automotive and nonautomotive industry, and the model was not different across the lean production adoption less than 5 years and above 5 years. Regarding the path level, the results reported that all of each path model level was not different across automotive and nonautomotive industry. Similarly, the lean production adoption, whether less than 5 years or above 5 years, did not have any effect on all of the path model levels.

Keywords: Lean Production, Operational Performance, Financial Performance, Manufacturing Industry

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The Impact of Environmental Regulation and Threats of Regulation on Environmental Performance for Canadian Firms: Expectations Versus Reality

Camélia Radu^{1*}, Claude Francoeur²

¹Université du Québec à Montréal, Canada

²HEC Montréal, Canada

Abstract

Environmental regulation in Canada suffers major changes, voluntary approaches are replaced with mandatory standards and regulations. Canada has a mixed regulatory system: federal environmental regulation combine or overlap with provincial regulation to encourage environmental innovative solution and pollution abatement. Following Canadian international commitments for sustainable development and fight against climate change, new guidelines, permits, agreements, authorizations, codes of practice, taxes and regulations are issued to insure a sustainable development of Canadian economy. These changes are deemed to reduce pollution and to enhance environmental performance of Canadian firms. This research investigates the evolution of environmental performance of Canadian firms and the impact of environmental regulation and threats of regulation on environmental innovation and environmental performance and provide insight on the gap between expectations of this impact and reality. We find empirical evidence of a positive impact of changes in regulation and threat of regulation on the environmental innovation at industry level. Environmental performance register important fluctuations and is negatively associated with environmental regulation, the positive changes in environmental innovation are not yet translated in better environmental performance. At country level, both environmental innovation and environmental performance follow the variation of environmental regulation.

Keywords: Environmental Regulation, Environmental Innovation, Environmental Performance, Sustainable Development, Pollution Abatement

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Energy Consumption and Economic Growth in Botswana

Nicholas Odhiambo^{*}
UNISA, South Africa

Abstract

In this paper we examine the causal relationship between energy consumption and economic growth in Botswana – during the period 1980-2016. Our study aims to answer two critical questions: 1) Is the growth of the real sector development in Botswana energy-dependent? 2) Which components of energy demand drive the real sector development in Botswana? In order to answer these two critical questions, we disaggregate energy consumption into five components, namely: Total energy consumption; electricity consumption; motor gasoline; gas/diesel; fuel oil and liquefied petroleum gas. The empirical results of our study show that the causal relationship between energy consumption and economic growth in Botswana is sensitive to the proxy used to measure the level of energy consumption.

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Keywords: Botswana, Disaggregated Energy Consumption, Economic Growth, ARDL-bounds Testing Approach

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TRACK B: SOCIAL SCIENCES & HUMANITIES



Reconstruction of Social Science and Humanities through Narrative

Kang, Hyeon-Suk¹, Shin, Hye-Won²

^{1,2} Kyungpook National University, South Korea

Abstract

The purpose of this paper is to present new directions and research strategies through critical analysis of the academic tendencies of existing social science and humanities. The narrative theory of human experience is adopted as a theoretical rationale for critical analyzing existing social sciences and humanities. However, the academic tendency of the humanities and social sciences is still divided into several sub-disciplines, and as a result, there are problems of approaching the discipline from the individual and separate stance that cannot be integrated. These problems are linked to limitations in explaining the totality of human life in an integrated way, and academic researchers also have a tendency to separately approach disciplinary research activities. In order to improve these existing separated and divided attributes, we focus on the new integrity of humanities and social sciences in light of the narrative theory that approaches the totality of human life. The narrative theory for academic inquiry makes use of the position of Bruner, Polkinghorne, Ricoeur, MacIntyre. To do this, we reviewed the literature related to the research topic and took an integrated approach to philosophical analysis of core claims. As a result, narrative theory has a characteristic approach to human life and experience as a whole, and it is possible to integrate by narrative ways of knowing. Based on this narrative theory, existing humanities and social sciences need to be reconstructed into narrative science. And narrative method or narrative inquiry is useful as its specific inquiry method. As a narrative science, humanities and social sciences can be implemented by the integration of human experience and narrative epistemology. It has the advantage of integrating the atomized sub-sciences into the narrative of human experience according to this new method. Also, in-depth research on concrete exploration strategies is expected in the future.

Keywords: Social Science, Humanities, Narrative Theory, Narrative Science, Narrative Ways of Knowing, Bruner, Polkinghorne, Ricoeur

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Bruner's Educational Theory and its Implication: Focusing on New Humanities

Kang, Hyeon-Suk¹, Lee, Ji-Eun²

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Abstract

The purpose of this study is to analyze pre-existing humanities' tendencies and to suggest the new viewpoint based on Bruner's educational theory. As many subordinating disciplines are divided under humanities, humanities have a separate approach. This problem showed many limits to represent the humans' lives in an integrated way. Furthermore, researchers in the humanities field approached them in separate way. To renovate the pre-existing separate traits, this study focuses new totality of humanities based on Bruner's educational ideals. For this, the methodology of this study is to review the literatures and analyze them in philosophical ways. As a result, Bruner's educational ideals have a narrative view of approaching humans' lives and experiences in an integrated way. Regarding his viewpoint, pre-existing humanities should be re-conceptualized into narrative science or narratology. Humanities as a narrative science have advantages for integrating diverted subordinating disciplines into human experience's narrative and for paying attention to the totality. Further research will be expected in the future for development.

Keywords: Humanities, Narrative, Narrative Science, Narratology, Bruner's Educational Theory

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TRACK C: ENGINEERING & TECHNOLOGY STUDIES



Floor Radiant Heating System with PCM

Jin Chul Park*

Chung-Ang University, Korea South

Abstract

This study deals with the application of PCM to the floor heating system. The results of this study are summarized as follows: (1) The existing, in Korea, floor heating system has the problem that a large amount of hot water and energy are consumed because of the low thermal storage performance of light weight aerated concrete and mortar. To solve this problem, we proposed a design of the floor heating system with PCM by applying PCM as a thermal storage material. That is, the floor heating system with PCM is constructed by applying floor construction materials in the order of the 210 mm concrete slab, 20 mm buffer material, 15 mm mortar, 10 mm PCM aluminum case, 55 mm mortar, and the floor finish. (2) The applicable melting point of PCM for the floor heating was calculated using the heat transfer model equation proposed in this study, and when the 5 mm wood floor finish was applied, the melting points of PCM products available were calculated to range from 32 °C to 39 °C.

Keywords: Floor Radiant Heating System PCM

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An Interactive Real-Time Shadow Play System Using Kinect

Der-Lor Way*

Taipei National University of Arts, Taiwan

Abstract

This paper presents an interactive real-time shadow play system. We propose a novel digital and interactive real-time shadow play system using Microsoft Kinect. Users can operate the shadow characters by employing their body movement without any professional training. A performer's skeleton data captured from Kinect is mapped into the shadow puppet's component automatically. Additionally, users can create own digital shadow play animations. Our system not only accomplishes human-computer interaction, but also promotes the digital archives of the intangible cultural heritage.

Keywords: Human Computer Interaction, Shadow Play, Cultural Heritage, Interactive Art

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FUTURE EVENTS

4th INTERNATIONAL CONFERENCE ON

“Multidisciplinary Innovation In Academic Research”
(MIAR -2017)



Date: July 27-28, 2017

Venue: ibis Astana Hotel Kazakhstan

Email: miar@globalilluminators.org

Abstract Submission Date: June 30, 2017

Full Paper Submission Date: July 5, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

- Business, Management and Economic Studies
- Health and Medicine Studies
- Engineering & Technology Studies
- Social Sciences & Humanities
- Physical Life and Applied Sciences
- Regional and Religious Studies
- Multidisciplinary and Interdisciplinary Studies

For more details visit www.globalilluminators.org

3rd INTERNATIONAL CONFERENCE ON
“Multidisciplinary Academic Research & Global Innovation ”
(MARGI -2017)



Date: August 25-26, 2017

Venue: Holiday Inn Central Plaza Beijing

Email: margi@globalilluminators.org

Abstract Submission Date: July 15, 2017

Full Paper Submission Date: July 30, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

- Business, Management and Economic Studies
- Health and Medicine Studies
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- Social Sciences & Humanities
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- Multidisciplinary and Interdisciplinary Studies

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4TH INTERNATIONAL CONFERENCE ON

“Innovative Trends In Multidisciplinary Academic Research”
(ITMAR-2017)



Date: October 20-21, 2017

Venue: Istanbul Gonen Hotel, Istanbul, Turkey

Email: itmar@globalilluminators.org

Abstract Submission Date: September 20, 2017

Full Paper Submission Date: September 25, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

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- Social Sciences & Humanities
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3RD INTERNATIONAL CONFERENCE ON

“Regional Challenges To Multidisciplinary Innovation ”
(RCMI- 2017)”



Date: October 05-06, 2017

Venue: Radisson Blu Hotel, Nairobi kenya

Email: rcmi@globalilluminators.org

Abstract Submission Date: September 10, 2017

Full Paper Submission Date: September 15, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

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- Social Sciences & Humanities
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2ND INTERNATIONAL CONFERENCE ON

“Interdisciplinary Academic Research And Innovation”
(IARI - 2017)



Date: November 23-24 2017

Venue: Indonesia Computer University

Email: iari@globalilluminators.org

Abstract Submission Date: October 5, 2017

Full Paper Submission Date: October 10, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

- Business, Management and Economic Studies
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5TH INTERNATIONAL CONFERENCE ON

“Innovation Challenges In Multidisciplinary Research & Practice” (ICMRP - 2017)



Date: December 15-16, 2017

Venue: Hotel Grand Pacific Singapore

Email: icmrp@globalilluminators.org

Abstract Submission Date: November 25, 2017

Full Paper Submission Date: November 30, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

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4TH INTERNATIONAL CONFERENCE ON

“Global Issues In Multidisciplinary Academic Research”
(GIMAR - 2018)



Date: February 01-02, 2018

Venue: TKP Conference Center, Ichigaya, Tokyo, Japan

Email: gimar@globalilluminators.org

Abstract Submission Date: November 25, 2017

Full Paper Submission Date: November 30, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

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5TH INTERNATIONAL CONFERENCE ON

“Trends In Multidisciplinary Business & Economic Research” (TMBER - 2018)



Date: March 25-26, 2018

Venue: Rydges Camperdown, Sydney Australia

Email: tmber@globalilluminators.org

Abstract Submission Date: December 25, 2017

Full Paper Submission Date: December 30, 2017

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

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- Social Sciences & Humanities
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- Regional and Religious Studies
- Multidisciplinary and Interdisciplinary Studies

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4TH INTERNATIONAL CONFERENCE ON

“Multidisciplinary Innovation In Business Engineering
Science & Technology” (MI-BEST - 2018)



Date: April 05-06, 2018

Venue: Holiday Inn Bangkok Silom, Bangkok Thailand

Email: mibest@globalilluminators.org

Abstract Submission Date: January 25, 2018

Full Paper Submission Date: January 30, 2018

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

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- Regional and Religious Studies
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5TH INTERNATIONAL CONFERENCE ON

“Global Trends In Academic Research” (GTAR- 2018)



Date: April 20-21, 2018

Venue: Ai Pini Park Hotel Via Miranese 176, Venice Mestre, Italy

Email: gtar@globalilluminators.org

Abstract Submission Date: February 20, 2018

Full Paper Submission Date: February 25, 2018

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

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4TH INTERNATIONAL CONFERENCE ON

“New Directions In Multidisciplinary Resaerch and Practice”
(NDMRP - 2018)



Date: May 12-13, 2018

Venue: Astor hotel, Athens, Greece

Email: ndmrp@globalilluminators.org

Abstract Submission Date: March 10, 2018

Full Paper Submission Date: March 15, 2018

Selected conference papers will be published in special /regular issue of ISI/Scopus indexed journals associated with this conference.

Conference Main Tracks

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- Social Sciences & Humanities
- Physical Life and Applied Sciences
- Regional and Religious Studies
- Multidisciplinary and Interdisciplinary Studies

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CSR



Environment



Public Health



Growth and
Development



Sustainability



Charities

CSR Activity Conducted By Global Illuminators: Sport Activation for Children against Negative Impact of Internet & Technology

In April 2016, Global Illuminators conducted Corporate Social Responsibility program together with Maestro and the Clover as Sport Facility Provider in Bandung, initiating an event with theme:



The Objectives of this event were:

1. Media of education for parents and children to be aware of digital new era and its impact on children's life
2. Facilitate and promote futsal as one of the kinds of sports activation that can be alternative activity for children against the negative impact of internet
3. Social activity and charity engaging orphans to enjoy sports activities together with their friends
4. Corporate Social Responsibility of Company to contribute to the society especially to solve one of the social problems in Bandung.

Highlights of CSR Activities are given below:



Global Illuminators Malaysia Team conducted its Latest CSR activity at Rumah Charis, Kuala Lumpur, Malaysia Children Home

Global Illuminators Malaysia Team conducted its latest CSR activity at Rumah Charis, Kuala Lumpur, Malaysia Children home. The children home ministry provides care for orphans and single parent children, their homes and activities aim to create a suitable environment to enable children to grow. They help to provide spiritual direction, education, and counselling for the children. Emphasis was given to fellowshiping and spending time with the children over refreshments, as well as presenting them with small gifts and the organizing of special entertainment programmes for the children such as a special game segment. One of the other highlights of the evening was the goodie bags distribution programme carried out by Global Illuminators.



Global Illuminators Indonesian Team conducted its Latest CSR activity in Ramadan for Local Community Welfare, Sharing Happiness and developing Orphan Children

Global Illuminators Indonesian team conducted its latest CSR activity in Ramadan for orphans. The purpose of this activity was to give happiness and develop orphans with the support of more than 60 volunteers and distribute iftar to more than 400 beneficiaries (yateem, orphan and dhuafa). Global Illuminators Indonesian team spent time with children and conducted different activities for their moral self-development.

Highlights of this activity are given below:





MISSION

“Our mission is to persistently nurture the values to promote the human rights, institutional and academic development through quality research contributions. Our unique human capital with constructive attitude is committed to bring change in all spheres of life by using innovative research and intellectual skills. We are here to research and promote the development, prosperity and transparency across the globe without any discrimination”.

VISION

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