

# Papers Sorted by ID

(for full papers or abstracts, please see the online proceedings on the WDSI Web site)

**Paper ID: 1 FUNDING A ROTH IRA WITH A QUALIFIED TUITION PROGRAM BALANCE**

Wednesday, April 3, 2024

8:00 AM SONOMA MOUNTAIN

The SECURE 2.0 Act of 2022, part of the Consolidated Appropriations Act of 2023 (P.L. 117-328), made many changes to the tax law to promote employer retirement plans and encourage retirement savings. This act included a provision allowing transfers from a qualified tuition program (QTP) account to a Roth IRA. This paper describes and discusses this new opportunity, including some of the ambiguities with the new law that will need legislative clarification or IRS interpretation of legislative intent.

**Paper ID: 2 FOREIGN DIRECT INVESTMENTS AND MANAGEMENT EARNINGS FORECASTS**

Thursday, April 4, 2024

8:00 AM SONOMA MOUNTAIN

We investigate the relationship between Foreign Direct Investment (FDI) and the characteristics of earnings forecasts made by both managers and financial analysts. We find that both management earnings forecasts (MEFs) and analyst earnings forecasts (AEFs) made after a larger number of FDI projects undertaken by a firm are less accurate. We also find that this negative relationship is partially mitigated by the firm's managerial ability. This suggests that FDI projects introduce uncertainty about a firm's earnings not just to external market participants, but also to the firm's management. Additional analyses suggest that the negative relationship between FDI forecast accuracy may extend over multiple years. We document that FDI projects are also associated with lower precision MEFs, higher frequency of MEF revisions, and higher dispersion of AEFs. Overall, our results suggest that FDI is an important factor in a firm's information environment and FDI disclosure may be useful to facilitate the decision making of market participants.

**Paper ID: 3 EVOLUTION OF THE WORLD WIDE WEB TO WEB3**

Thursday, April 4, 2024

1:00 PM CHALK HILL

Over the last few years, we have extended the uses of the Web, and are at the start of a new Web era, now referred to as Web3. It aims to put the control and advantages to content creators, and take some power away from the powerful Platforms, like Google, Meta Platforms, Spotify, and Netflix. Web3 can also be the infrastructure to power the Metaverse, in which virtual spaces are created by the convergence of enhanced, replicated physical entities, and digital reality. Transactions on Web3 can be decentralized using cryptocurrencies, digital currencies and non-fungible tokens (NFTs). This purpose of this research is to discuss the various trends that are reshaping and advancing the Web. The latest avatar of the Web is referred to as Web3, which greatly enhances decentralized transactions without the need for platforms like Facebook or trusted institutions like banks. Web3 also allows the development of the Metaverse, and takes us to a whole new level of details in three-dimensional virtual space. This research enhances the understanding of Web3 and reveals its tremendous potential.

**Paper ID: 4 'GHOST FRANCHISES' IN THE POST-COVID ERA: ARE THEY HERE TO STAY?**

Thursday, April 4, 2024

8:00 AM RUSSIAN RIVER VALLEY I

A very recent phenomenon in the wake of the pandemic is the emergence of 'ghost kitchens', and among franchised food operators, 'ghost franchises'. They rely on space for food preparation only, from which delivery drivers pick up food orders. While myriad variations exist, of particular interest are those franchised versions that rely exclusively on ghost kitchens, without any physical spaces in which customers interact with the brand. This research pulls together marketing literature to elucidate the benefits offered for their franchisees, inclusive of cost savings and proximity to customers' residences, versus challenges related to the reduced brand interactions.

**Paper ID: 5 ON A SPECIAL DECISION PROBLEM**

Wednesday, April 3, 2024

8:00 AM RUSSIAN RIVER VALLEY II

A special game theory problem is analyzed with two decision makers and real numbers as decision variables. The uniqueness of response functions are guaranteed by the assumption that each profit function is strictly concave in its own decision variable. The existence can be guaranteed by several alternative conditions. Special dynamic extensions are analyzed when the decision makers are not in equilibrium states but try to reach equilibrium with a dynamic process. Three such models will be considered: under discrete time scales, under continuous time scales without and with delayed information.

**Paper ID: 6 DO GENERAL PARTNER INCENTIVES IMPACT THE DURATION OF PRIVATE EQUITY FUNDS?**

Friday, April 5, 2024

8:00 AM CHALK HILL

Using private equity fund data for 2,855 funds initiated in the period 2000-2012, we ask how general partner (GP) incentives impact the duration of a fund. Consistent with the premise that GPs maximize the lifetime revenue of their firm, i.e., both fees from the current fund and expected future funds, we find that a fund's duration is shorter when GPs raise a follow-on fund, even when distributed capital is below 100%. Funds with very long durations (Zombie Funds) are more likely when incentives are misaligned- smaller funds with low distributed capital and low expectations of raising future funds.

**Paper ID: 7 SOCIAL COGNITION THEORY AND ONLINE SOCIAL COMMUNITY USER'S PARTICIPATION ON GREEN ENERGY TECHNOLOGY PRODUCT STICKINESS**

Wednesday, April 3, 2024 10:00 AM CHALK HILL

This study applies triadic reciprocity from social cognitive theory to explore whether users of green energy technology (GET) products participate in brand online communities, as well as to determine whether participation in a community forum causes users to stick with GET products. Besides, expectancy confirmation is considered to be the moderator. The results of SEM shown the most consistent with our proposal. Thus, managers should increase participation by increasing interaction and community identification with enhancing user perceptions of receiving benefit from their online communities. Furthermore, GET products manufacturers are advised to promote product stickiness by meeting users perceived expectations. Keywords: Green energy technology (GET), social cognitive theory (SCT), expectancy confirmation, triadic reciprocity, user's participation.

**Paper ID: 8 A GEOMETRIC MEDIAN DECOMPOSITION METHOD TO MINIMIZE AGGREGATE FIT LOSS**

Thursday, April 4, 2024 10:00 AM RUSSIAN RIVER VALLEY II

The quest for absolute precision in bra sizing is an imperative of utmost significance. In this study, we introduce the Geometric Median Decomposition (GMD) methodology design to remedy the inevitable fit loss, particularly given the formidable constraints of large-scale customization. The ramifications of imprecise sizing are far-reaching: discomfort and a glaring absence of essential support. It is abundantly clear that custom-fitted bras rise to an echelon of excellence that casts a profound shadow over their mass-produced counterparts. GMD's iterative refinement of the geometric median offers a potent solution for diverse body shapes, bridging the gap between size and fit. This method marks a significant stride in enhancing bra sizing techniques

**Paper ID: 9 THE EFFECTS OF INFORMATION PRESENTATION AND SITUATIONAL COMPLEXITY ON EFFECTIVE DECISION-MAKING**

Wednesday, April 3, 2024 3:00 PM RUSSIAN RIVER VALLEY II

This research examines and quantifies the effects of both information presentation modality and situational complexity on an individual's ability to determine an effective strategy in a competitive environment. An empirical study presents a series of two-player, normal-form games with complete information to a set of participants and asks participants to identify their best response for each game. The games vary both in their complexity and their manner of presentation to participants. Dual channel theory directly informs the experimental design; it specifies how humans process information and posits the existence of capacity limits to such cognitive mechanisms. Aside from their relevance to descriptive decision theory, the insights derived from this analysis provide utility to a wide array of decision-maker-centered tools and techniques.

**Paper ID: 11 FEMALE USER PERCEPTION TOWARD THE OVER-THE-TOP VIDEO STREAMING SERVICES**

Wednesday, April 3, 2024 3:00 PM CHALK HILL

This study examines the over-the-top (OTT) video streaming services using the data derived from mixed-method research. Means-end chain (MEC) theory and Kano model are integrated to establish MEC-Kano hierarchical value maps for further analysis. A preliminary qualitative survey with 28 interviewees is used to establish the questionnaire items for data collection during the pre-COVID-19 and COVID-19 pandemic periods. The comparison of the MEC-Kano hierarchical value maps with the integrated e-leisure-MEC-Kano hierarchical value map for binge-watchers with high e-leisure attachment, constraints, and addiction groups reveal the differences in the importance and the structures of attribute-consequence-value linkages. All valid respondents (400 from pre-COVID-19 period and 377 from COVID-19 pandemic period) considered "copyright," "low interference from advertising," "quickly updating on programs," and "easy to retrieve the programs one often viewed," which are classified as Kano's attractive qualities, as important attributes that attract binge-watchers using an OTT service. However, binge-watchers with high e-leisure attachment, constraints, and addiction in different periods have different perspectives toward the rest of the attributes. By understanding the differences of the e-leisure-MEC-Kano hierarchical value maps, the academia and the practitioners can gain insights into formulating effective business strategies.

**Paper ID: 12 A PARTIALLY FLEXIBLE STRATEGY FOR EMERGENCY DEPARTMENT ADMISSIONS TO HOSPITAL WARDS**

Thursday, April 4, 2024 8:00 AM RUSSIAN RIVER VALLEY II

Emergency department (ED) crowding remains a significant challenge for healthcare systems worldwide. Boarding time, the time ED patients wait for admission to inpatient wards, is recognized as a critical contributor to this problem. We propose a partially flexible approach for admitting ED patients to hospital wards with the goal of minimizing board time while avoiding negative impacts on the quality of care and staff satisfaction. To achieve this, we consider a two-class queueing system with two heterogeneous server pools as our base model and analyze it by adopting a Matrix Analytic approach. By utilizing probability-generating functions (PGFs), we derive closed-form expressions to approximate the queue length and waiting time for the corresponding queueing system. We further introduce a partially flexible routing policy, designed based on process flexibility principles and the findings from the base model. To assess the effectiveness of our proposed approach, we conduct a simulation study using a fully flexible structure as a benchmark. The fully flexible structure allows all patients to be assigned to any inpatient ward. Our approach achieves similar performance in terms of boarding time as the fully flexible structure while reducing complexity and avoiding the negative impacts of high flexibility levels.

**Paper ID: 13 NEURODIVERSITY AND SELF-DISCLOSURE IN THE WORKPLACE**

Wednesday, April 3, 2024 10:00 AM RUSSIAN RIVER VALLEY I

The decision to self-disclose what have been termed "invisible disabilities" has gained recent attention in the popular press and academic literature. In contrast to physical disabilities, which may be more easily perceived in organizations, individuals with invisible disabilities face decisions about whether to self-disclose their diagnosis (Clair, Beatty, & MacLean, 2005). Interest in and recognition of the benefits that neurodiverse individuals bring to the workplace has focused on this category of invisible disabilities and the individual and organizational issues surrounding self-disclosure (Patton, 2019). This paper will examine neurodiversity and self-disclosure in organizations, including the stigma of disclosing a diagnosis of neurodiversity.

**Paper ID: 14 EXTREME LEADERSHIP AND POLAR EXPLORERS**

Thursday, April 4, 2024

3:00 PM RUSSIAN RIVER VALLEY I

The Heroic Age of Antarctic Exploration is a historical timeframe that is filled with amazing stories of courage, endurance, and the human spirit. The polar expeditions led by Roald Amundsen, Robert Falcon Scott, and Sir Ernest Shackleton offer Management scholars and educators a unique lens through which to view management history in action. One hundred years after the South Pole was reached, their stories continue to provide inspiring and cautionary lessons for CEOs and managers operating in the metaphorical "rough seas" of today's global business environment.

**Paper ID: 15 USING NONCONVEX OPTIMIZATION METHOD TO MODEL COMPLEX ASSET ALLOCATION AND LOCATION PROBLEMS**

Wednesday, April 3, 2024

10:00 AM RUSSIAN RIVER VALLEY II

Policy decisions regarding allocating goods, selecting locations, and determining storage facility types and capacities often employ conventional optimization methodologies such as linear or nonlinear programming. This prevailing approach is partly grounded in the assumption of a consensus among diverse decision-makers, consequently favoring the adoption of a singular objective or a hierarchy of ranked objectives. Nevertheless, certain scenarios warrant a departure from this norm. Particularly within specific semi-hierarchical contexts, the influence of one group of decision-makers can subtly constrain another group. Such circumstances manifest notably in problems that align with the Stackelberg leader-follower game in the realm of policy challenges. In the present study, we introduce an empirical quandary concerning the allocation and positioning of real-world assets. We have conceptualized and effectively addressed this issue as a bilevel programming problem, meticulously capturing the intricate web of decision trade-offs that it entails.

**Paper ID: 16 WITH DRAWING: EXPLORING PERSONAL VISUAL STIMULI AND SPENDING**

Thursday, April 4, 2024

8:00 AM RUSSIAN RIVER VALLEY I

Financial planners advise consumers to start saving early for retirement. This research examines if young adults' spending levels can be influenced by aged visuals they create of themselves. Participants tracked their expenses for three weeks, then viewed a self-photo that they (a) drew on to depict themselves at 65 years old, or (b) simply viewed without aging instructions. Subsequent spending revealed gender differences across the conditions. The approach used by males and females to the aging task, related applications, and future research are discussed.

**Paper ID: 17 RECOMMENDATIONS TO INTERNAL AUDITORS REGARDING THE AUDITING AND ATTESTATION OF MATHEMATICAL PROGRAMMING MODELS**

Wednesday, April 3, 2024

1:00 PM SONOMA MOUNTAIN

Mathematical programming planning models increase operational efficiency and minimize operating costs but the underlying mathematics generally is complex. Combinatorial optimization is technically sophisticated which requires a strong quantitative background to successfully implement. Most internal auditors will not have the technical training to critically assess the underlying mathematics of mathematical programming planning models but the internal auditor can still provide insight and attestation which can increase the efficiency of mathematical programming planning models.

**Paper ID: 18 MENTAL BUDGETING: MODERATING FACTORS OF CONSUMER BUDGET COMPLIANCE**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY II

Mental budgeting is an encompassing strategy individuals employ to manage personal finances, where psychological facets shape budget adherence. This study seeks to enrich our understanding of mental budgeting's sustained impact on real-world consumer spending. It investigates moderating factors (e.g., product categories) influencing individuals' adherence, flexibility, and compliance with budgets. Moreover, this research examines budgetary context effects and potential variations in the relationships between psychological processes and consumer budget compliance across diverse budgetary types. Through looking into these dynamics in mental budgeting, this study contributes to a deeper comprehension of the intricate interplay between mental budgeting and individual spending behaviors.

**Paper ID: 19 AN EXPLORATION OF PARALLELISM FOR SOLVING MULTIPLE MATH PROGRAMMING INSTANCES USING A COMMERCIAL SOLVER**

Wednesday, April 3, 2024

3:00 PM RUSSIAN RIVER VALLEY I

This paper introduces a problem that motivates the use of parallelism when invoking commercial solvers. It formulates the network vulnerability identification problem as a bilevel programming problem. Although a customized genetic algorithm (GA) is an effective metaheuristic for this NP-hard problem, it is not typically efficient because it assesses population member fitness functions sequentially. Moreover, our problem's fitness function is separable over the shipments being routed. This work documents several endeavors to parallelize this latter aspect of optimal shipment routing, ultimately identifying an opportunity with specific recommendations for software developers to advance the state of optimization software and computing capability.

**Paper ID: 20 PEDAGOGICAL TENSIONS? EXPLORING THE INTEGRATION OF CATHOLIC PRINCIPLES AND BUSINESS EDUCATION**

Thursday, April 4, 2024

10:00 AM SONOMA MOUNTAIN

Catholic universities tend to share educational purposes of developing a sense of service, forming ethical leaders, and fostering moral virtues and social responsibility. However, as criticisms against capitalism and the role of business in addressing societal challenges increase, business school professors in Catholic universities face the challenge of aligning their institutional mission with teaching students how to maximize wealth, outperform competitors, and influence consumers. Is there a pedagogical tension between the principles of Catholic higher education and business education? If so, how can it be reconciled? This qualitative and exploratory study aims to illuminate these questions by interviewing business professors at Catholic universities. The study reveals divergent perspectives and intriguing suggestions that contribute to the discussion and emphasize the need for further attention to this topic. We also discuss strategic implications for administrators and educators at Catholic as well as non-religious universities.

**Paper ID: 21 GLOBAL SUPPLY CHAINS AND SUSTAINABILITY SOLUTIONS**

Wednesday, April 3, 2024

10:00 AM ALEXANDER VALLEY III

Supply chains of organizations are major contributors of Greenhouse Gases (GHGs) According to the CDP Global Supply Chain Report, supply chain emissions are about 11.4 times operational emissions, translating to about 92% of an organization's GHG emissions. Clearly we have a long way to go if we want Nations to go to zero Carbon over the next few decades. Organizations are beginning to improve tracking of their GHG inventories and improved GHG-Accounting practices to measure and reduce their Scope 1 (direct emission during production) and scope 2 (indirect emissions through use of goods and services produced) GHG emissions. Globalization of supply chains continue to thrive because of labor cost differentials, environmental regulation differences, innovative communication and coordination technologies and further reduction of transportation costs. This purpose of this research is to discuss the various trends and developments that affect GHG emissions of organizations. We will also discuss the efforts of Nations to address sustainability issues. For instance the US SEC Carbon Disclosure Rule also is developing the notion of Scope 3 emissions, which refer to GHG emissions in an organization's supply chain, but not under the control of the organization. Another important legislation is the European Union's Corporate Sustainability Due Diligence Directive, which would require larger companies operating in the EU to identify, prevent and remedy risks to human rights and the environment in their supply chains. This research enhances the understanding of the role of Global Supply Chains on Sustainability.

**Paper ID: 22 IDENTIFYING AND RANKING SUPPLY CHAIN RISKS**

Friday, April 5, 2024

10:00 AM RUSSIAN RIVER VALLEY II

Companies seek to improve their competitive advantages, reduce costs, and increase flexibility through outsourcing more of their processes but this has led to a corresponding increase in supply chain risk. Supply chain risks have also increased with the growth in globalization, complexity, and natural disasters. Managers need to identify and prioritize different risks in the supply chain, to develop proper mitigation strategies. This paper uses survey data collected every quarter on ten distinct supply chain risks to provide a better understanding of how to identify and rank risks in a supply chain

**Paper ID: 23 DETECTING CRIMINAL DISRUPTIONS OF SUPPLY CHAINS**

Wednesday, April 3, 2024

10:00 AM RUSSIAN RIVER VALLEY II

Criminals tend to take advantage of widespread disturbances like the COVID-19 pandemic to disrupt supply chains. Through case studies from the pharmaceutical and medical device industries, we present a rigorous methodology to identify such disruptions and suggest promising mitigation strategies. Our generalizable approach provides the Department of Homeland Security, other government agencies, and private sector with a framework for (1) constructing supply chain maps with physical and information flows, (2) posing what-if questions regarding "optimal" ways to disrupt supply chain performance, (3) making supply chains more resilient to disruptive attacks, (4) mitigating attacks in-progress, and (5) restoring attacked supply chains.

**Paper ID: 24 A DESIGN OF EMERGENCY LOGISTICS NETWORKS USING SOCIAL VULNERABILITY INDICES AND LOGISTICS COST**

Wednesday, April 3, 2024

8:00 AM ALEXANDER VALLEY III

This paper presents a Goal Programming (GP) model to design balanced emergency logistics networks (ELNs) using the Centers for Disease Control and Prevention's Social Vulnerability Index (SVI) and Total Logistics Cost (TLC) concurrently. An ELN distributes disaster relief items promptly to affected areas in case of an emergency. A community with a higher SVI should be given a higher priority due to its high vulnerability. Simultaneously, TLC should be considered too. Through a case study, we analyze the performance of GP-guided ELNs with respect to the capacity of distribution facilities and variable weights between SVI and TLC.

**Paper ID: 25 PREDICTING COST GROWTH ON MAJOR DEFENSE ACQUISITION PROGRAMS THROUGH FORECAST MODELING**

Friday, April 5, 2024

10:00 AM RUSSIAN RIVER VALLEY I

Department of Defense (DoD) overspending and unpredictability through its major defense acquisition programs (MDAP) challenge the U.S. budget. This study was a review of data internal and external to the program to establish correlations and predict whether MDAP will meet the following year's budget. A forecasting model to assess MDAP factors to predict execution in future budgets contributes to reducing DoD unpredictability on the top programs and priorities. This research incorporated multiple independent and dependent variables to find the best forecasting model and produce the most actionable predictions for MDAP annual performance. The independent variables were internal and external, and the dependent variables were specific to annual cost overrun. The results suggest new methods to program annual prediction with the external variables and provide an actionable model for risk reduction when considering annual program predictive performance.

**Paper ID: 26 EVALUATING FOOD CONSUMPTION PATTERNS IN BRAZIL'S LOW-INCOME POPULATION**

Wednesday, April 3, 2024

1:00 PM ALEXANDER VALLEY III

This study assesses the food consumption patterns among low-income families in Brazil and their alignment with government dietary recommendations. Using market basket analysis on recent data from the Family Budget Research, which tracks household spending, the research investigates if low-income households follow the government's recommended food choices. The study proposes to examine how economically disadvantaged families in Brazil select foods consistent with prescribed staples. The results offer insights into whether low-income dietary habits align with policymakers' guidelines. These findings have implications for public health initiatives, social welfare policies, and strategies to improve the nutritional well-being of Brazil's low-income communities. This research provides insights into promoting healthier eating habits among vulnerable populations and informs evidence-based policy decisions to address food security and nutrition disparities in Brazil.

**Paper ID: 27 DEFENSE AND UNIVERSITY CAPSTONE PARTNERSHIPS: SOME LESSONS LEARNED**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY II

The United States Department of Defense builds and maintains capacity via fostering collaborations that include a variety of stakeholders, such as service components, industry contractors (small and large organizations), research laboratories, academic institutions, program managers, and others. These partnerships provide access to skills that may not be readily available within the government while also exposing university students to defense research and consulting topics, motivating more participation in defense problem-solving. We have been a part of various defense and university capstone partnerships and hope that our experiences, shared in this presentation, can serve as a springboard for future collaborations and enhance national security and strategic education outcomes.

**Paper ID: 28 EFFICIENCY-DRIVEN EVALUATION APPROACHES FOR RANKING DECISION-MAKING UNITS IN THE DEA AND BIG DATA CONTEXT**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY I

The data envelopment analysis (DEA)-based models are viewed as a tool for Big Data-enabled analytics in efficiency evaluation for the decision-making units (DMUs). However, the critical issue is all DEA-based methods require excessive computational times for a large set of DMUs, let alone the poor discriminatory power and inconsistent ranking results. This paper proposes two types of efficiency-driven evaluation (EDE) methods, which overcome several issues of DEA-based methods. The EDE methods do not require any optimization software that DEA-based methods need but show better evaluation results. A well-known numerical example demonstrates the outstanding performance of the EDE methods.

**Paper ID: 29 RISK ASSESSMENT FOR INTEGRATED CYBER AND PHYSICAL ATTACKS ON CRITICAL INFRASTRUCTURE**

Wednesday, April 3, 2024

8:00 AM ALEXANDER VALLEY III

We address the homeland security theme that future attacks might be multimodal, with cyber and physical components, where one component is designed to increase the likelihood of success of another. Current risk assessment methodologies assess cyber or physical risks separately, potentially underestimating risk of integrated attacks, leading to non-optimal selection of security and mitigation measures. We provide sample scenarios of integrated cyber and physical attacks for critical infrastructures: the maritime transportation system, railroads, sports/entertainment venues, and power systems. We review approaches to risk assessment of integrated attacks and illustrate ways in which one might obtain relative risk rankings by comparing integrated to non-integrated.

**Paper ID: 30 HIDDEN IN THE WOODSHED: BIG BATH HERDING**

Thursday, April 4, 2024

8:00 AM SONOMA MOUNTAIN

This paper investigates both theoretically and empirically, how firms' reporting is affected by their peers in a situation of a systematic economic shock. We show that the optimal reporting strategy is consistent with bad news herding – after the firms most affected by the shock (Leaders) disclose bad news, it is optimal for their peers (Followers) to also report bad news, even when such disclosure can be further postponed. Importantly, Followers not only strategically time the release of bad news, but also undertake a “big bath” by reporting excessive amount of bad news. We empirically test our model and find evidence of big bath herding. We demonstrate that Leaders' write-offs are more strongly associated with economic indicators than those of Followers, while Followers' write-offs have a greater association with big bath and smoothing reporting incentives. Further, consistent with the over-reporting strategy, we find that Followers demonstrate superior future operating performance in terms of accrual accounting earnings but not in terms of cash flows.

**Paper ID: 31 WHEN DO DIVIDEND CHANGES SIGNAL CHANGES IN FUTURE PROFITABILITY?**

Thursday, April 4, 2024

3:00 PM CHALK HILL

We study financial performance after firms announce their dividend decisions right after releasing quarterly earnings reports. We first separate firms with positive or negative earnings for the quarter and further group them into five mutually exclusive portfolios: initiating, increasing, keeping, decreasing, or eliminating dividends, based on their prior quarter dividend practices. We confirm a reversal pattern: Firms reporting negative earnings tend to outperform thereafter. In particular, firms with a negative-earnings quarter and consequently initiating or increasing dividends exhibit significantly positive future performance while firms with a positive-earnings quarter and deciding to decrease or eliminate dividends exhibit significantly negative future performance. Firms in other earnings-dividend portfolios don't show significant changes in future profitability. Our findings shed light on research into firms' dividend policy changes and their future performance.

**Paper ID: 32 EXPLORING THE EFFECTS OF STUDENT AND FACULTY SIMILARITY: INSIGHTS FROM STUDENTS IDENTIFYING PRIMARILY AS HISPANIC OR WHITE**

Thursday, April 4, 2024

8:00 AM RUSSIAN RIVER VALLEY I

Decades of research have demonstrated how matching values and traits help individuals establish trust. Two studies explored Hispanic and White students' evaluations of faculty, and effects based on shared characteristics. In Study 1, both groups provided higher mean teaching evaluations for faculty with, than without, shared ethnicity. Study 2 survey results suggest the effects were driven in part by Hispanic students wanting connection, and White students not wanting disconnection, with instructors. Discussion emphasizes the importance of understanding the causes behind similarity effects.

**Paper ID: 33 THE TELECOMMUNICATIONS INDUSTRY AND CORD CUTTING**

Thursday, April 4, 2024

3:00 PM RUSSIAN RIVER VALLEY I

The telecommunications industry started in the 1830s and has gone through many changes over time. After providing a brief history of the industry, this research study focuses on the current state of the industry, specifically how the cord cutting phenomenon has shaped the industry. Cord cutting is normally applied to the Cable and Pay TV industry. It refers to consumers cutting their subscriptions to expensive Pay TV services and replacing them with streaming TV services. In 2022, the number of Non-Pay TV households exceeded Pay TV households for the first time. This trend will continue in the future. The concept of cord cutting can also be applied to consumers replacing their landline telephones with mobile phones over the past three decades, which will lead to the death of landline telephones eventually! A more recent type of cord cutting is the reduction of the use of mobile phone lines, replacement strategies, and the future of mobile phone lines and numbers.

**Paper ID: 34 A FRAMEWORK FOR GLOBAL NATURAL DISASTERS RESPONSE ILLUSTRATED WITH EXAMPLE OF UNITED STATES NAVY**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY II

This monograph introduces frameworks for humanitarian operations to respond to natural disasters worldwide in ways that are effective and efficient. We will illustrate the frameworks using a case of the United States Navy (USN). We will suggest ways in which Non-Government Organizations (NGO) can apply the lessons learned from previous disaster responses that consider capabilities, cost, and proximity of resources to the disaster location. However, we will point out that dependence on the USN for HADR may not be the best solution for countries in the Asia Pacific region. With this perspective in mind, we make some recommendations for what Southeast Asian countries can do to become self-sufficient in the domain of disaster response. We also propose addressing disaster response as a design problem and identifying the fundamental components for developing a design to more effectively confront disaster response challenges in the future.

**Paper ID: 35 CO-MOVEMENTS OF GLOBAL STOCK MARKETS DURING THE PANDEMIC: AN ANALYSIS OF DEVELOPED AND DEVELOPING COUNTRIES**

Wednesday, April 3, 2024

10:00 AM SONOMA MOUNTAIN

This study examines the co-movements of the global stock markets during the pandemic. Based on a sample consisting of stock market indices in developing countries (such as China) and developed countries, over the period from January 5, 2020 to November 14, 2021. The findings reveal that there are strong co-movements among global stock markets. The results of the study also provide useful insights for individual and institutional investors, and financial intermediaries to mitigate financial risk.

**Paper ID: 36 OPTIMAL PRICING OF A SERVICE**

Wednesday, April 3, 2024

3:00 PM RUSSIAN RIVER VALLEY II

The pricing of services is a difficult and important task for companies. Using the price elasticity of demand to help determine the optimal price of products is well-documented in the literature. In this work, we use price elasticities as inputs to a mathematical model which is used to determine the optimal price of a service. The model is illustrated through the use of case studies, including a special case study which looks at the pricing of graduate academic programs. Now, through the use of this model, companies will know exactly what prices to charge for their services in order to maximize net revenue.

**Paper ID: 37 UNLOCKING SUPPLY CHAIN EXCELLENCE: EXPLORING THE SCOR DIGITAL STANDARD (SCOR DS)**

Wednesday, April 3, 2024

10:00 AM RUSSIAN RIVER VALLEY II

In today's dynamic business landscape, optimizing supply chain operations is critical for achieving competitive advantage and sustaining success. This presentation will delve into the Supply Chain Operations Reference Digital Standard (SCOR DS). The presentation highlights the key differences between SCOR and SCOR DS. An in-depth exploration of the SCOR DS structure follows. We dissect the SCOR DS framework, which includes processes, metrics, and best practices, enabling organizations to adapt and thrive in today's ever-evolving business environment. Furthermore, this presentation will provide examples of how LMI has leveraged SCOR DS to enhance supply chain performance for its clients.

**Paper ID: 38 THE ULTIMATE CHALLENGE: MARKETING THE SMALL WINERY**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY II

**ABSTRACT**The Ultimate Challenge: Marketing the Small Winery  
In 1995 the number of U.S. wineries was around 1,800, but the number has exploded exponentially. According to the Wines Vines Analytics Winery Database, the United States is now home to 11,691 wineries, which is nearly 400 more than in 2021 and 1,215 more than in 2020. Since 2019, the number of U.S. wineries has grown at a rate of 4 percent, which matches the growth rate since 2010. Wine is now produced in every state in the country. The number of wine distributors, on the other hand, has gone in the opposite direction, shrinking from 3,000 in 1995 to roughly 1,000 at present. How do smaller wineries (production of less than 2,000 cases annually) best market and promote their wines? How can they get access to the market dominated by a few long-standing giants? This study addresses how a smaller winery can best market its product and brand. Importantly, what is the optimum balance between tasting room and wine club sales, how should a smaller winery best leverage social media, how can it grow direct to consumer sales and how can it optimize the tasting room experience?

**Paper ID: 39 COMPARATIVE STUDY OF INTERNET AND E-BUSINESS FIRMS**

Wednesday, April 3, 2024

10:00 AM CHALK HILL

Companies grow differently in the modern internet economy. Advertisement and subscription are two distinct revenue streams of the e-business model. We present descriptive research examining the revenue metrics of companies to depict insights such as, (1) Ad-based companies grow faster initially, but both ad-based and subscription companies' growth rates are comparable in the long run, and (2) Subscription companies are a safer bet initially, but ad-based companies are more profitable, and exhibit a "cross-over" effect. Key implications of these results for business strategy are discussed.

**Paper ID: 40 THE COMPLEX INTERACTION BETWEEN VALENCE AND AROUSAL AND ITS EFFECT ON INFORMATION DIFFUSION**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY I

Previous research shows that sentiment of text influences its diffusion in social media. Each emotion can be located on a three-dimensional space formed by dimensions of valence (positive–negative), arousal (passive / calm–active / excited), and tension (tense–relaxed). While previous research has investigated the effect of different dimensions of emotion on information diffusion in social media, the interaction between valence and arousal and its effect on information diffusion remains unexplored. We propose a research model and test it using data collected from Twitter.

**Paper ID: 41 INNOVATIONS IN EXCHANGE-TRADED FUNDS: A COMPREHENSIVE ANALYTICAL OVERVIEW**

Thursday, April 4, 2024

10:00 AM CHALK HILL

A review of the prior innovations in ETFs including arbitrage trading, price discovery process, short selling, hedging, and leveraged ETFs. An examination of the latest innovation, single-stock ETFs, provides preliminary insights. Approved for trading by the SEC in the summer of 2022, single-stock ETFs are based on highly liquid stocks. They appear to track the promised leveraged daily returns with an average deviation of one basis point. Single-stock ETF liquidity could be a concern going forward as financial institutions continue to create more of these ETFs.

**Paper ID: 42 PERFORMANCE EVALUATION OF CALIFORNIA PUBLIC UNIVERSITIES USING DATA ENVELOPMENT ANALYSIS**

Wednesday, April 3, 2024

1:00 PM ALEXANDER VALLEY III

As one of the largest public university systems in the US, California State University (CSU), render extensive educational services that substantially contribute to both the state and its economy. The provision of these services necessitates the allocation of various inputs, encompassing human and financial resources as well as materials, all aimed at facilitating the transformation of students into a skilled and qualified workforce. Given the multi-dimensional value of university education, a meaningful assessment of the transformational performance of CSU campuses necessitates a comparative analysis of the inputs and outputs inherent in the educational production process. In conducting this study, we utilize the Data Envelopment Analysis (DEA) method to evaluate the relative efficiency of the 23 campuses under consideration. This evaluation encompasses a comparison of significant inputs and outputs, including but not limited to graduation rates and alumni earnings. Consequently, this study elucidates managerial implications pertinent to public university systems.

**Paper ID: 43 SUSTAINABLE TOURISM: EXPLORING THE ADOPTION OF LOCAL FOOD AND PRODUCTS IN THE CONTEXT OF PROMOTION**

Wednesday, April 3, 2024

10:00 AM ALEXANDER VALLEY III

Supporting local food and products aligns with sustainable tourism practices by reducing the environmental impact of importing goods and instead promoting local, environmentally friendly products and operations. The research examines consumer interest at the community level in the availability and support for local food/products. Results of this research can be further extrapolated to support the promotion of local food/products and the small businesses that provide these products. A survey was developed, and 2,276 panel participants were invited to participate in the survey. Of these, 1,465 completed at least 85% of the survey and are included in the final data, resulting in a 64.4% response rate. Using a 95% confidence interval, the final data have a 2.6% margin of error.

**Paper ID: 44 GAMIFYING COLLABORATIVE SYSTEMS: TEAM VS TRADITIONAL LEADERBOARDS IN IMPROVING ONLINE DISCUSSIONS**

Wednesday, April 3, 2024

1:00 PM CHALK HILL

Gamified collaboration systems can be effective in improving user motivation to engage with an online community. Leaderboards are among the most popular methods used to improve system engagement in various non-game applications. The aim in the present study is to compare two popular leaderboards, traditional (individual) and team leaderboards, for improving engagement in online discussions. Overall, traditional leaderboards were significantly more effective in increasing two dimensions of engagement: behavioral and cognitive. The research provides insights into the efficacy of leaderboards and alternatives to address low engagement in collaboration systems such as online discussions.

**Paper ID: 45 PRODUCT DIFFERENTIATION AND COMPETITIVENESS. EVIDENCE FROM THE AUTOMOTIVE INDUSTRY**

Thursday, April 4, 2024

10:00 AM ALEXANDER VALLEY III

We would like to present our present findings on the automotive industry.. The network characteristics of each firm and their supply chain partners was analyzed using Social Network Analysis techniques. Results generated include the following information: network- level characteristics, such as supply chain density; dyadic-level characteristics, such as reciprocity; and triadic-level characteristics, such as transitivity. This information is then generalized to uncover characteristics common to all firms in the sample. Implications for supply chain excellence from a network perspective will be discussed.

**Paper ID: 46 HOW SUPPLY CHAIN TRANSPARENCY INFLUENCES THE AGILITY DIMENSIONS OF THE RESPONSIVENESS VIEW**

Wednesday, April 3, 2024

8:00 AM ALEXANDER VALLEY III

Researchers in supply chain have called to adopt a Responsiveness View of supply chain management and logistics to understand our field better. This study explores IT utilization, and its relationship to supply chain transparency and agility from a Responsiveness View of logistics and supply chain management. We examine how organizations achieve the operational dimension of Responsiveness (agility) by leveraging two dimensions of supply chain transparency. Drawing on the Responsiveness View and RBV, a model is proposed and evaluated using data collected from 212 supply chain managers in the manufacturing and distribution area. The result reveals that two dimensions of supply chain transparency (supplier traceability and stakeholder visibility) mediate the relationship between a firm's technology utilization (RFID) and responsiveness capability, which in turn results in higher supply chain performance. Specifically, technology exerts impact via two dimensions of supply chain transparency. Supply chain transparency translates information collected from IT and disseminated among stakeholders, leading to the development of competitive capabilities. Our research contributes to the theory related to the supply chain Responsiveness view. Combined with RBV, we answer research calls to investigate the role of supply chain responsiveness in supply chain management and for empirical studies with implications for supply chain transparency.

**Paper ID: 47 MARKET FRAGMENTATION AND MANIPULATION**

Thursday, April 4, 2024

10:00 AM CHALK HILL

This study investigates the effects of stock trading manipulation on dynamic trading fragmentation and market liquidity with the population of U.S. stocks from 2014 to 2018. We find novel evidence that different types of trading manipulation do not equally impact the trading volume in each exchange. Our findings suggest that manipulation increases the illiquidity curve while the retail trading flow dampens illiquidity, aligning with the Glosten and Milgrom model's predictions.

**Paper ID: 48 UTILIZING SWARM INTELLIGENCE ALGORITHMS FOR OPTIMIZED TASK ALLOCATION IN MOBILE EDGE COMPUTING**

Thursday, April 4, 2024

1:00 PM CHALK HILL

In Mobile Edge Computing (MEC), the imperative task of efficient workload distribution across edge nodes is paramount for ensuring the success of low-latency Internet of Things (IoT) services. The main challenge is spreading the work fairly across different parts of the system. To tackle this multifaceted challenge, our research focuses on applying swarm intelligence algorithms. Specifically, we will harness the power of Genetic Algorithms (GA), Particle Swarm Optimization (PSO), Ant Colony Optimization (ACO), and Firefly Algorithms (FA) to optimize task allocation in MEC environments. By leveraging these swarm intelligence algorithms, our study aims to significantly enhance the performance, cost-effectiveness, and overall capabilities of MEC, thereby enabling real-time, low-latency IoT services to flourish.

**Paper ID: 49 MUSEUMS' ROLE IN THE POST-COVID-19 ERA: AN E-BUSINESS CASE STUDY OF THE NATIONAL PALACE MUSEUM IN TAIPEI**

Wednesday, April 3, 2024

10:00 AM CHALK HILL

From almost unblemished success to the mishandling of the crisis caused by the COVID-19 pandemic, accountability based on trust is compulsory for making efficient decisions to boost e-business in every industry in Taiwan, including the cultural sector. Therefore, this study aims to evaluate the management of e-business among museums in Taiwan, focusing on the well-known National Palace Museum in Taipei. Decision-makers in the museum have had to draw more consumers' attention online to generate revenue. However, the findings suggest that the exploitation of up-to-date technology substantially boosted the financial consumption at the museum to prove a dynamic online service. Therefore, this may prove to be an exciting new form for consumers regarding post-pandemic cultural e-business. NPM's revenue in 2019 was NT\$561,828,306 (approximately US\$18.7 million) (Wu, 2020, 152). Yet, due to COVID-19, the general revenue in 2020 was NT\$121,853,354 (about US \$4.06 million) (Wu, 2021, 126). The yearly income decreased significantly from 2019 to 2020. Hence, employees at the marketing department in the NPM and the outsourcing company that operates museum shops both onsite and online shop have done their best to execute more creative strategies to co-brand with various companies. For example, a well-known grass jelly brand called Blackball co-branded with the NPM in June 2020 to create a special edition of grass jelly dessert inspired by calligraphy ink, which impressed consumers a lot, and the selling channel expanded from the museum shop to convenience stores including 7-11 and FamilyMart in Taiwan which covered over 10 thousand units in total.

**Paper ID: 50 EMISSION REDUCTION BENEFITS OF TAIWAN'S ENERGY TRANSITION POLICY FOR ROAD TRANSPORTATION**

Wednesday, April 3, 2024

10:00 AM ALEXANDER VALLEY III

The transportation sector is a major contributor to carbon emissions, making it a focus for decarbonization efforts. Conventional fuels in transportation are high-carbon-emitting and difficult to replace. Countries worldwide, including Taiwan, are seeking low-carbon and zero-carbon energy sources. The International Energy Agency (IEA) predicts a significant role for hydrogen, with the transportation sector constituting a substantial portion of hydrogen consumption by 2050. The strategies focus on energy transition and the promotion of electric vehicles. Measures include increasing the share of renewable energy, importing green hydrogen, and applying carbon capture in blue hydrogen production. Hydrogen vehicles have not yet become operational, suggesting that further steps are needed to develop hydrogen-related infrastructure and enhance the supply chain. Road transport is identified as the primary source of carbon emissions in Taiwan's transportation sector, contributing to 96% of total emissions. It aims to evaluate the carbon reduction benefits of both electric and hydrogen vehicles, considering Taiwan's energy transition pathway. In summary, Taiwan is actively engaged in addressing climate change and decarbonizing its transportation sector, with a particular focus on hydrogen as a key solution. However, challenges remain, and the government is encouraged to take proactive steps to develop the necessary infrastructure for hydrogen adoption in the transportation sector. The study's assessment will likely provide valuable insights into the effectiveness of Taiwan's current energy transition strategy in achieving its net-zero emissions goals in the transportation sector. Keywords: green hydrogen, blue hydrogen, renewable energy, hydrogen-powered vehicles, road transportation

**Paper ID: 51 EFFECTIVENESS OF SOCIAL ENGINEERING DRILL ON EMPLOYEES' E-MAIL SECURITY IN ENTERPRISE**

Thursday, April 4, 2024

10:00 AM SONOMA MOUNTAIN

Along with the speedy development of information technology in recent years, IT technicians and corporate employees have used many information tools to complete their work. Therefore, the importance of information security is increasing daily. Many companies have introduced numerous information security equipment to protect essential assets. The prevention action must be stringent. However, many companies still have information security incidents. It is standard that employees' information equipment has been kidnapped as an intrusion point. In the early attack stage, many attackers use social engineering methods to induce employees to click on malicious websites, steal data, or enter malicious programs. The most common way is using email. If employees are aware of information security weaknesses without vigilance to prevent social engineering attacks, they might easily be the attack target. Social engineering is the exploitation of the trust, deception, and manipulation of a person's psyche by convincing them to click on a malicious link or attachment through phishing or to reveal credentials. The success of social engineering largely depends on the weakness of the 'Human Firewall,' so to speak. This study uses email social engineering exercises in both mainland and Taiwan to explore whether regional employees can prevent social engineering attacks. Through education and training, a new social exercise enhances employees' email security awareness and reduces the harm of social engineering misbehavior.

**Paper ID: 52 INCORRECT ASSUMPTIONS ABOUT ARTIFICIAL INTELLIGENCE IN THE ONLINE CLASSROOMS**

Wednesday, April 3, 2024

1:00 PM CHALK HILL

Artificial intelligence (AI) is revolutionizing the business world and education (Dwivedi et al 2023; Paul et al 2023). Specifically, generative AI, such as ChatGPT, can be utilized to write essays, summarize literature, and write computer code (van Dis et al 2023). Although this emerging technology is the fastest-growing web application, most instructors have not openly discussed AI tools in the classroom (Nietzel 2023) or developed guidelines on how it should be used (Surovell 2023). We propose that faculty should not only discuss this technology in the classroom, but should also ensure that they do not make false assumptions. In this paper, we will discuss common misconceptions about generative AI in the classroom and propose alternative views.

**Paper ID: 53 INFORMATION TECHNOLOGY INTEGRATION USING MOBILE DEVICES WITH MEDICAL PLATFORMS**

Thursday, April 4, 2024

8:00 AM CHALK HILL

Along with the speedy development of information technology in recent years, IT technicians and corporate employees have used many information tools to complete their work. With the new coronavirus pandemic spreading, local outbreaks are rampant. Although almost all local cases are mild or asymptomatic, some patients still feel uncomfortable after recovering from a positive to negative test result, such as sore throat, coughing, muscle aches, diarrhea, fever, etc. The pandemic is gradually changing people's habits, and "reduced contact" or "non-contact medical care" has become an important new service. In Taiwan, thousands to tens of thousands of people are confirmed positive daily. As more and more people are reluctant to risk going to the hospital, reducing the risk of medical treatment and remote medical care, have become options that we must know in the post-pandemic era. Primarily, it is crucial for aged adults. This study establishes a collaborated clinic service platform to provide enough medical information to the public and reduce the gap in medical knowledge. To create an excellent doctor-patient relationship for the clinic, optimize the clinic service process, and achieve the goal of enhancing clinic revenue. This study uses an Android system to develop an app with a summary feature. This allows the public users to view updated clinic information, get an appointment number in real-time, save time waiting at the clinic, and reduce the risk of cross-infection. Index Terms: COVID-19, Android System, Mobile Application, Cloud, Internet

**Paper ID: 55 IDEA GENERATION: COMPARING CHATGPT VS. HUMANS FOR HEALTHCARE SERVICES**

Wednesday, April 3, 2024

8:00 AM RUSSIAN RIVER VALLEY I

Idea generation is arguably one of the most important skills for employees in any industry for the development of new products and services. The need is even greater within healthcare for enhancing patient care. Artificial Intelligence (AI) provides an important new tool to aid humans in exploring the creation of positive healthcare outcomes. This study aims to compare the effectiveness of ChatGPT, an AI-powered language model, with college students from varying disciplines in generating innovative ideas for new products or services appealing to healthcare providers. The research seeks to answer whether AI can rival human creativity within this specific domain.

**Paper ID: 56 QUANTITATIVE ANALYSIS OF TRADE NETWORKS: INSIGHT FROM CHINA-AFRICA**

Wednesday, April 3, 2024

3:00 PM RUSSIAN RIVER VALLEY II

This study adds to the assessment of the Belt and Road Initiative (BRI) impact on African countries by examining the influence of economic integration on bilateral trade flows. The empirical analysis makes considerable use of network analytic techniques to characterize the trading activities of SSA nations as a component of the BRI trading network. The paper examines how the initiative has altered the topology of the trading network from 2000 to 2018. Our findings indicate a minor increase in the degree of centrality, average node intensity, and density, with China occupying the network's center position. Additionally, the BRI strengthens intra-regional trade integration in East Africa. This demonstrates that intra-regional commerce has increased across a range of economic development levels among BRI members. As a result, policy recommendations are made in light of the BRI's critical role in reshaping trade policies in an effort to build a sustainable and inclusive African economy.

**Paper ID: 58 ACCOUNTING SYSTEM CONCEPTUAL MODELS: THE EFFECT OF ALTERNATIVE MODELS ON AUDITORS' INTERNAL CONTROL REVIEW EFFECTIVENESS AND EFFICIENCY**

Wednesday, April 3, 2024

1:00 PM SONOMA MOUNTAIN

Auditors' effectiveness and efficiency in examining a company's accounting system will depend on their understanding of the information provided in the system documentation. In addition to information gathered from the client's personnel, this documentation can include flowcharts, system input/outputs, system controls, as well as the conceptual model documenting the system. Understanding the structure of a system and the semantic constraints associated with it is essential for the auditor to accurately assess the control risk associated with that system and to design appropriate audit tests of the client's data. The objective of this paper is to review the literature related to conceptual modeling and its effects on the effectiveness and efficiency of auditors' understanding of the client's information system and controls therein. This paper can serve as a basis for the development of a theoretical foundation for research on the effect of different conceptual model representations on auditors' performance in the review of a client's internal controls.

**Paper ID: 59 THE IMPACT OF SOLAR ANGLE AND CLOUD SHADOWS ON 3D RECONSTRUCTION OF ROLLING STOCK CARGO**

Friday, April 5, 2024 10:00 AM RUSSIAN RIVER VALLEY I

Meeting the relentless demand for more efficient air cargo transportation is paramount. This paper explores an innovative approach, harnessing cutting-edge stereoscopic vision technology to create 3D point clouds of rolling stock cargo, adaptable to varying solar angles and cloud shadow conditions. A virtual cargo image is generated by systematically organizing depth and location points. Accuracy is rigorously tested across six camera positions offering detailed, real-time insights for optimized cargo loading in unpredictable outdoor conditions. The findings reveal the impact of solar positioning, cloud coverage, and camera placement, promising to push the boundaries of possibilities for cargo logistics in challenging environments.

**Paper ID: 60 ALIGNMENT IN THE WORKPLACE: ARE YOU ALIGNED?**

Wednesday, April 3, 2024 10:00 AM RUSSIAN RIVER VALLEY I

This article addresses the concept of alignment by employees in organizational roles. Alignment is the orientation that results from an employee's ability to coordinate their values, interests, and skills with what they perceive are those required by their job. Following a discussion of alignment, including its implications for employees and their organizations, an activity is included in which participants, and students, may assess their alignment in their organization. Person's scores may then be used to steer a discussion about people's experiences in their jobs: which factors lead to positive alignment; which ones contribute to a lack of alignment. Keywords: alignment, engagement.

**Paper ID: 61 INTEGRATING CORPORATE SOCIAL RESPONSIBILITY WITH FINANCIAL OUTCOMES: STOCK PERFORMANCE OF FIRMS HIRING U.S. VETERANS DURING COVID-19**

Wednesday, April 3, 2024 10:00 AM SONOMA MOUNTAIN

Abstract: This study examines if firms employing U.S. veterans, integrating corporate social responsibility, display enhanced financial performance in challenging periods, including the COVID-19 pandemic, recovery, and inflation. It assesses three VETS portfolios, constructed from veteran-focused companies, against the SPDR S&P 500 ETF benchmark from January 2020 to December 2022. Findings reveal that all VETS portfolios surpass the benchmark, showing higher balances and better risk-adjusted ratios like Sharpe and Sortino. Calculations include monthly returns, performance metrics, and style analysis, demonstrating positive alphas, favorable risk-adjusted measures (Treyner, Calmar, information ratio), and desirable investment metrics. These results provide empirical evidence supporting VETS portfolio performance and risk profiles, making them attractive to investors. Furthermore, our findings reinforce that hiring U.S. veterans fulfills corporate social responsibility while aligning with firm and investor interests. JEL classification: E22, G11, G17, G18 Keywords: employing veterans; corporate social responsibility; resilience; thematic ETFs; risk and return; fund performance.

**Paper ID: 62 INTO THE UNKNOWN: A FIRM-LEVEL ANALYSIS OF THE IMPACT OF FOREIGN DIRECT INVESTMENT ON AUDITOR BEHAVIOR**

Wednesday, April 3, 2024 1:00 PM SONOMA MOUNTAIN

Foreign Direct Investments (FDI) are important ventures undertaken by firms in order to initiate or expand operations in foreign markets. Unlike ongoing foreign operations, FDI constitutes new undertakings that inherently introduce firms to heightened risks and unforeseeable outcomes. This paper investigates how FDI engagement (specifically, greenfield FDI) by publicly traded firms in the United States impacts the behavior of their domestic auditors. We find that firms incur higher audit fees and are more likely to receive going-concern audit opinions in the years of FDI announcements, likely due to the elevated complexity and uncertainty associated with these engagements. We also find that firms are less likely to restate their financial statements in the periods after FDI announcements. Our findings suggest that while FDI engagement is crucial to facilitate strategic business objectives, it also significantly impacts a firm's financial reporting environment by influencing auditor behavior and audit outcomes.

**Paper ID: 63 CITIZEN PARTICIPATION AND MUNICIPAL FISCAL HEALTH**

Wednesday, April 3, 2024 1:00 PM ALEXANDER VALLEY III

Citizen participation is an important element of the democratic decision-making process. However, empirical evidence is lacking regarding the impact of citizen participation on local fiscal outcomes. This study addresses two research questions: (1) How do municipal governments engage citizens in the budgeting process using social media? (2) Does the level of citizen participation on social media affect municipal fiscal health? Using a sample of 174 California cities from 2016 to 2022, this study analyzes the social media data and fiscal data of cities. Mixed research methods are used. The study has practical implications for authentic citizen participation in budgeting.

**Paper ID: 64 A COMPARISON OF PRE-PANDEMIC & POST-PANDEMIC STOCK MARKET INDICES IN WUHAN-ADJACENT COUNTRIES**

Wednesday, April 3, 2024 1:00 PM RUSSIAN RIVER VALLEY I

Our world undertook a radical turn in mid-March 2020, when CDC and the WHO recommended lockdowns, shutdowns, and other ways of preventing the spread of COVID-19 virus. Stock exchanges and stock market indices respond to pandemic infections, for example, Ebola and Severe Acute Respiratory Syndrome (SARS) outbreak (Chen, Jang et al. 2007, Ichev and Marinč 2018). Empirical studies on impact of COVID have been limited to developed countries' markets, and very little has been done on stock markets physically close to Wuhan, China. This paper analyzes the effect on selected stock markets during pre, pandemic and post pandemic periods.

**Paper ID: 66 CEO INSIDE DEBT AND MYOPIC R&D BEHAVIOR**

Thursday, April 4, 2024

8:00 AM SONOMA MOUNTAIN

I examine whether CEO inside debt holdings create or reduce incentives for CEOs to reduce investment in research and development (R&D) to meet short-term earnings goals. I find that CEOs with large inside debt holdings are more likely to cut R&D for beating analyst forecasts. The finding is consistent with the prediction that inside debt holdings induce CEOs to manage their firms more conservatively. Hence, they are more likely to achieve performance benchmarks through cutting R&D, considering the potential impact of earnings disappointments on default risk and the greater risk associated with R&D investments. Moreover, the effect of inside debt is stronger when the CEO is more powerful or for firms with higher default risk. This study contributes to the literature by documenting the effect of debt-based compensation on myopic R&D behavior.

**Paper ID: 67 HOW MANY RIVALS SHOULD PROVIDERS OF FREIGHT TRANSPORTATION SERVICES COOPERATE WITH?**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY II

In spot markets for freight transportation services, centralized collaboration among service providers (TSPs) is often regarded as an ideal way to determine which load (a.k.a. shipment) is delivered by each TSP. The challenge of getting all competing TSPs to collaborate under a centralized system (instead of being rivals for loads) has prompted interest in collaboration modes that are on a smaller scale than complete centralization. In this research vein, this paper answers the following question: for the small-scale collaboration of decentralized load exchange among small alliances of willing TSPs, how close do the performance results (profits, etc.) come to the purported ideal results under centralization? Our core finding from extensive computational experiments is that, by collaborating with the right load exchange partners, a TSP in a small and easier to manage alliance can achieve financial savings that closely match and sometimes even surpass the per carrier savings from a fully centralized system. This insight and some closely related ones comprise this work's main contributions to the literature. The practical relevance of the contributions is in facilitating decisions about how much effort is worth expending on creating and operating a centralized system.

**Paper ID: 68 UNLOCKING CREATIVITY: THE ART OF ENRICHING STEM EDUCATION WITH VAPA**

Thursday, April 4, 2024

3:00 PM SONOMA MOUNTAIN

ABSTRACTSTEM-focused high schools, designed for science, technology, engineering, and math education, often omit VAPA (Visual and Performing Arts) classes. This approach challenges students academically but limits their exposure to the arts, which is crucial during their formative years. For example, some schools, like CAMS, incorporate one art credit within their required curriculum, restricting students' exploration of non-STEM subjects. High school is the time for students to discover their passions, depriving them of art classes hinders this exploration. The arts offer a creative outlet for self-expression and can even enhance STEM skills when applied creatively. STEM prepares students for the workforce, but arts classes can be vital for the workforce. The arts can teach problem-solving and creativity which is very important for collaboration. Limiting VAPA classes deprives students of this critical exposure. Conducting a survey would assess the impact of art class availability on high school students in the SoCal area. Keywords: Education, STEM, VAPA

**Paper ID: 69 IMPROVING THE PROCESS OF AN AUTOMATED DISPATCH CONTROL SYSTEM (ADCS) IN THE PETROLEUM INDUSTRY**

Thursday, April 4, 2024

1:00 PM ALEXANDER VALLEY III

The Automated Dispatch Control System (ADCS) in the gas industry is a conventional man-machine control system. Achieving complete automation of the ADCS is a formidable undertaking. Consequently, dispatchers (or operators) take on the role of receiving and consolidating information, making decisions and plans, all the while overseeing the process. The gas industry's dispatching system encompasses a wide array of variables, including price-driven fluctuations in demand, vehicle characteristics, diverse gas stations, and various other factors. This study's primary objective is to evaluate the current gas dispatch process, identify common issues, and propose an improved dispatching process to address several significant challenges.

**Paper ID: 70 THE CBAPP BELONG SERIES: CULTIVATING ACADEMIC IDENTITY & STUDENT ENGAGEMENT TO PROMOTE RETENTION**

Friday, April 5, 2024

10:00 AM SONOMA MOUNTAIN

Student retention is a challenge shared by universities across the United States. The College of Business Administration and Public Policy (CBAPP) Belong series was developed based on retention data that showed the biggest loss in students occurred during their first year at university, a time when many students had yet to take courses in their majors. The series focuses on creating environments that prioritize student engagement, relationship building, exposure to campus resources, and developing academic identity and sense of belonging. The CECE theoretical model, program development process, and data from student feedback will be presented and recommendations will be discussed.

**Paper ID: 71 SLOTTING FEE MODELING FOR SOCIAL MEDIA BUSINESS**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY I

Slotting allowances and slotting fees were defined as the payments by social media influencers to display, promote and support new products. Two schools of thought offer different viewpoints on the impact of collecting slotting allowances and slotting fees for retailers. One argues that the collection of slotting allowances and slotting fees improves distribution efficiency and stipulates competition while the other thought argues that these fees damage competition. There is no research focus on the slotting fees for social media influencers. Previous studies focused on the slotting allowance and fees of physical store retailers, and the debate about its rationality has been in progress. But this controversy has not stopped the retailers from charging the fees. On the contrary, the slotting fee charges extend from the store retailers to online retailers. With the fast development of social media business, more and more online platforms implemented a fixed fee structure to charge slotting fees for social media business. However, this approach fails to justify the charges and has led to the opposition of social media influencers and platform providers. What is the rationality of the platform providers to charge social media influencers for the slotting fees? What impact does it have on consumers and platform providers? Keywords: E-commerce, slotting fees, social media business, influencers

**Paper ID: 72 HEURISTICS IN THE PATENTING SYSTEM: HOW TECHNOLOGY BREADTH AND APPLICANT PRIOR INVENTIVE ACHIEVEMENT RELATE TO INTELLECTUAL PROPERTY RIGHTS**

Thursday, April 4, 2024

3:00 PM RUSSIAN RIVER VALLEY I

Impartiality in the patent examination process is critical to preserving the incentives to invent. The United States Patent Office is charged with attending to the interests of the public by maintaining accessibility. Perceived or real bias in the patenting system can delay the diffusion of innovation and damage the overall innovation system. Using archival data on patent applications, we predict and find that technology breadth and prior inventive achievement of the patent applicant are systematically related to the breadth of the patent award, suggesting that these factors influence the outcome of the patenting process and the appropriation potential of intellectual property. Our findings are particularly relevant for policy makers and inventors of boundary spanning technologies.

**Paper ID: 73 A DATA-DRIVEN INDICATOR FOR IDENTIFYING CROSS-DOCK ITEMS**

Thursday, April 4, 2024

1:00 PM ALEXANDER VALLEY III

Cross-docking facilities provide supply chains with a flexible strategy for meeting end-customer order fulfillment timing requirements by facilitating transportation consolidation and reducing warehousing time. Previous research has indicated that items that experience stable demand patterns may be candidates for cross-docking. This paper develops a different indicator for whether an item should be cross-docked by using operationally available shipping patterns as well as demand. The paper describes the decision-making context for the problem including a very realistic minimal set of data requirements needed to compute the indicator metric. Then, the use of the metric is illustrated on actual supply chain data. The key contributions of the work include the proposed metric as well as an operationally useful methodology for computing implied ordering costs.

**Paper ID: 74 PROMOTING CROSS-DISCIPLINARY COLLABORATION IN INNOVATIVE EDUCATION**

Thursday, April 4, 2024

3:00 PM SONOMA MOUNTAIN

This case demonstrates an educational initiative conducted in a business school's New Product Marketing course, designed to promote collaboration between business and engineering students. A team of female engineering students designed the "Drink-Guard," an innovative product aimed at detecting spiked beverages. The collaboration emphasizes the importance of business students enhancing understanding of new product development, particularly the role of marketing during the commercialization phase. Business students were challenged to develop marketing strategies and tactics to launch the "Drink-Guard" product. Business and engineering students also engaged in stimulating discussions on financing and the commercialization of the new product. Key word: Cross-Disciplinary Collaboration, New Product Marketing

**Paper ID: 75 BUILD A RESILIENT AND SUSTAINABLE SUPPLY CHAIN**

Thursday, April 4, 2024

8:00 AM ALEXANDER VALLEY III

Supply chain strategy is an important element to drive business success. Worldwide disasters, as we have seen with Covid-19, can have a big impact on business operations from materials sourcing to the final delivery of products and services. To mitigate the disruptions, a resilient supply chain responds quickly and makes business operations continue and adaptable to the rapid change. This study explores factors to help building a global resilient and sustainable supply chain.

**Paper ID: 76 DOES INSTITUTIONAL HERDING TENDENCY AND DIRECTION DESTABILIZE STOCK PRICES?**

Friday, April 5, 2024

8:00 AM CHALK HILL

We introduce a new methodology to categorize institutional herding tendency and direction that enhances the precision with which herders are identified at the institutional level. The herders are the ones that follow the crowd both on the buy and sell trades, whereas anti-herders are the institutions that tend to move in the opposite direction of the crowd on both sides of the trades. We then focus on the link between institutional herding and stock returns within the context of banks, insurance companies, investment companies, investment advisors, and education endowment funds by using the proposed herding categorization. The results show that herders' trading negatively affects future stock returns, whereas anti-herders' trading is insignificant. Consequently, herders' trading brings a temporary shift in stock prices that is eventually reversed. Thus, herders destabilize stock prices and negatively affect the stock price discovery process.

**Paper ID: 77 IMPACT OF TECHNOLOGY AND AUTOMATION ON OCCUPATIONS IN THE US NAVY**

Wednesday, April 3, 2024

3:00 PM RUSSIAN RIVER VALLEY I

Widespread concern surrounds how emerging technologies may lead to significant job losses across the US economy, prompting our research to investigate this issue for the US Navy. Researchers have traditionally used job attributes such as tasks and abilities to gauge susceptibility of various occupations to automation. We introduce an innovative approach focusing on work activities and context, assessing the potential for automation using various technologies, from mechanical automation to artificial intelligence. Leveraging NAVY crosswalk of the O\*Net occupation data, we provide predictions about the changing nature of occupations and estimate the potential loss of jobs in the US Navy.

**Paper ID: 78 MULTI-PERIOD PRICING AND PRODUCT IMPROVEMENT: HOW INFORMATIVE ARE PRODUCT RATINGS TO NEW CUSTOMERS?**

Wednesday, April 3, 2024

8:00 AM RUSSIAN RIVER VALLEY II

Facing the market's mass adoption of product review platforms, sellers should be conscious of the interaction between product ratings and key product decisions including pricing and performance improvement. On the one hand, such decisions should optimally incorporate prior ratings, which are a major source of information on a product's proven performance in the market. On the other hand, they provide an opportunity for a seller to stimulate the ratings which guide future customers' purchase decisions. Employing a multi-period game-theoretic setting, we analyze a forward-looking firm's pricing and product improvement strategies, facing multiple generations of customers who potentially receive a performance signal from prior product ratings. We show that this signal is fully informative in equilibrium only if the product has received a mix of positive and negative reviews. We further establish that the firm increases its optimal price after a period wherein the true performance proves to be greater or slightly less than the ex ante expectation, and decreases the price otherwise. Moreover, when product improvement is cheap, the firm should decrease its improvement size with an increase in the true product performance. By contrast, when the improvement cost is high, the optimal improvement size increases in the product's baseline performance. Finally, we show that the potential for product improvement, even before it is implemented, changes the firm's optimal pricing.

**Paper ID: 79 DESIGN OF BLOCKCHAIN AND STRATEGIC FINANCING SERVICE UNDER THE PLATFORM ECONOMY**

Thursday, April 4, 2024

1:00 PM ALEXANDER VALLEY III

This paper develops a game-theoretic model to examine the terms of smart contracts in different blockchains and further investigates the optimal blockchain design for the platform. We find that in the private blockchain, the platform and the supplier could reach either a win-win or win-lose outcome. However, in the public blockchain, they reach either a win-win or lose-win scenario. We also consider the supplier's endogenous effort in reducing risk and numerically demonstrate that blockchain may discourage the supplier's effort when the effort efficiency is high, the market potential is large, or the commission rate is low.

**Paper ID: 80 USING CHATGPT FOR NONPROFIT FUNDRAISING AND MARKETING**

Thursday, April 4, 2024

3:00 PM ALEXANDER VALLEY III

The launch of the artificial intelligence (AI) tool, ChatGPT, in late 2022 has sparked wide discussions among educators, researchers, and practitioners. Some savvy tech users saw the potential of ChatGPT in nonprofit grant writing, social media posting, and marketing event planning (Haynes, 2023). However, little research has provided empirical evidence on using ChatGPT in the nonprofit sector. Nonprofit organizations (NPOs), especially small to medium-sized NPOs, often struggle with limited financial and human resources. This study examines the potential of using ChatGPT for nonprofit fundraising and marketing. Data will be collected from a sample of nonprofit practitioners and college students who aspire to become nonprofit leaders or managers. Mixed methods will be used for data analysis. The study will contribute to the literature on organizational innovation and has practical implications for enhancing nonprofit organizational capacity.

**Paper ID: 81 UTILIZING TIME AND TEMPERATURE HISTORY IN THE DISTRIBUTION OF PERISHABLE FOOD ITEMS**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY II

Perishable products such as fresh food items pose unique supply chain challenges. One of these challenges is how to make optimal, or near-optimal, distribution decisions based on product freshness. To obtain insight into this question, we model a supply chain that transports a perishable product from product origin to a destination market via a waypoint. The operational decision of interest is the transportation mode choice from the waypoint to the destination market, dependent on available information, including time and temperature history via RFID and sensors. We use analytical modeling to derive optimal transportation policies and generate generalizable, managerial insights. We then apply the analytical model in a numerical case study investigating the transportation of vine-ripened tomatoes from the Netherlands to the United States.

**Paper ID: 82 EXPLORING THE WORLD OF DESSERT WINES: A CROSS-COUNTRY COMPARISON**

Thursday, April 4, 2024

8:00 AM RUSSIAN RIVER VALLEY II

While there is a substantial amount of research dedicated to table wines, studies focusing on dessert wines, also referred to as sweet wines, are relatively limited. This article seeks to address this gap in the literature by investigating the consumer preferences behind dessert wines originating from five different countries, namely Australia, Canada, France, Italy, and the United States. We describe consumer preferences using the wine rankings collected from nearly 5,000 wine samples extracted from the Wine Spectator website. Besides data visualization, we analyze the data using discrete choice models like ordered logit and probit models to obtain interesting results.

**Paper ID: 83 HOOK, WINE, AND DRINKER – EXPLORING GENERATIONAL NEEDS AND EXPECTATIONS TO IMPROVE WINE CLUB MEMBERSHIP AND SALES**

Wednesday, April 3, 2024

8:00 AM CHALK HILL

Wineries are now reaching more customers through wine clubs than ever. The problem is that the US wine industry has been relying on their tried-and-true prime market – the Baby Boomers. By focusing marketing efforts on this traditional wine market, the wine industry has not been effectively targeting the members of younger generations, putting it at risk losing a significant share of the alcoholic beverage market particularly as Baby Boomers age. At the same time interest in wine among younger generations has shown a significant decrease, which may have more to do with marketing than it does with their palate. To better understand the needs and expectations of different generational cohorts, a content analysis will be conducted on the self-reported data from N=269 current, former or potential wine club members.

**Paper ID: 84 INCREASING STUDENTS' ENGAGEMENT IN OPERATIONS MANAGEMENT AND MANAGEMENT SCIENCE COURSES USING SPORTS**

Wednesday, April 3, 2024

3:00 PM SONOMA MOUNTAIN

Operations management (OM) and management science (MS) courses can be difficult to teach at times in our experiences. One of the reasons we believe is related to the quantitative nature of OM and MS courses. Many of our students were just not interested in those quantitative subjects. We believe the key to change students' passive attitude toward the course subjects is to identify ways of inspiring students' interests and engaging them throughout the learning process. We found students really like when we used examples from sports illustrating the course subjects. In this paper we provided some examples we used when teaching certain subjects in OM and MS courses.

**Paper ID: 85 RISK SHARING IN A TWO-LEVEL SUPPLY CHAIN WITH VARIABLE CAPACITY AND RANDOM YIELD**

Friday, April 5, 2024

10:00 AM RUSSIAN RIVER VALLEY II

Today's intricate and interconnected business landscape necessitates a study of production uncertainty in supply chains. Supply chains are vulnerable to a myriad of uncertainties, including demand fluctuations and disruptions from suppliers. It is important to recognize that these uncertainties can have a profound impact on supply chain efficiency. Our research focuses on three centralized and three decentralized supply chains, delving into two types of production uncertainty: Variable Capacity (VC) and Random Yield (RY). It examines their effects on supply capability, relationships between supply chain members, decision-making behaviors, and overall operational performance. RY typically stems from imperfect processes and can be predicted and measured. In contrast, VC arises from entirely random events, such as unexpected interruptions or unplanned maintenance, making it wholly uncontrollable. Our findings suggest that, in specific contexts, VC and RY do not consistently influence production decisions for manufacturers or ordering decisions for retailers.

**Paper ID: 86 THE IMPACT OF TOURISM DEVELOPMENT ON ECONOMIC GROWTH IN ECOWAS COUNTRIES**

Wednesday, April 3, 2024

8:00 AM RUSSIAN RIVER VALLEY II

The study underscores ECOWAS's rich cultural and natural heritage, making it a promising frontier for tourism. It examines the intricate connection between tourism development and economic growth in member states. A significant positive relationship between tourism development and economic growth is revealed through rigorous econometric analysis of panel data from 2000 to 2020, encompassing diverse economies. This highlights tourism's potential as a catalyst for overall economic advancement. Additionally, the study emphasizes the need for robust policy frameworks supporting sustainable tourism practices, infrastructural enhancements, and regional cooperation to unlock ECOWAS's full economic potential. These findings provide crucial insights for policymakers, emphasizing tourism's pivotal role in fostering inclusive and resilient economic growth in member states.

**Paper ID: 87 DIGITAL TWIN FOR REAL TIME SCHEDULING AT SMART FACTORY IN KOREA**

Thursday, April 4, 2024

1:00 PM ALEXANDER VALLEY III

Smart factory in Korea is revolutionizing the way production processes are managed, leveraging technologies like the Internet of Things (IoT) and Industry 4.0 concepts. Central to this transformation is known as digital twin which is a virtual replica of a physical manufacturing system that enables real-time monitoring, analysis, and optimization. This study explores the integration of digital twins for real time scheduling at smart factory in Korea. An innovative approach that leverages the real-time data from Digital Twins to adapt production schedules dynamically is presented. Real-world conditions, such as machine statuses, maintenance needs, and resource availability are adopted to it. To evaluate the effectiveness, a case study in a smart factory is done by showing significant improvements in production efficiency, lead time reduction, and resource utilization. Our research contributes to the emerging field of digital twin applications in smart factory and offers valuable insights into the practical implementation of real time scheduling system.

**Paper ID: 88 POTENTIALS OF ABM TO ANALYZE ECONOMIC POLICY DECISIONS: FOCUSED ON THE IMPACT OF UNIVERSAL BASIC INCOME**

Thursday, April 4, 2024

10:00 AM RUSSIAN RIVER VALLEY II

Agent-based Modeling (ABM) can describe various behaviors of systems as each agent individually assesses its situation and makes decisions based on its own rules. As the world becomes more complex, ABM has seen a number of applications to real-world decision problems. Nevertheless, few applications could be found in the area of economic policy as ABM is considered a toy model. We investigate the potential of ABM in economic policy decisions. By investigating the impact of Universal Basic Income on the dynamics of wealth distribution under various tax schemes, we show that much insight could be found in a seemingly simple ABM model.

**Paper ID: 89 NETWORK INTRUSION DETECTION USING TWO-TIER DISCRIMINATION OF GENERATIVE ADVERSARIAL NETWORK**

Thursday, April 4, 2024

1:00 PM CHALK HILL

With the increasing number of internet users and inherent vulnerabilities of the global network, there are imminent threats from malicious attackers. These attackers may disrupt networking services or steal unauthorized access, leading to significant losses. While many defense tools were proposed, such as intrusion detection systems and firewalls, there's still room for improvement in efficacy. This paper delves into applying the Generative Adversarial Network (GAN) to enhance intrusion detection capability. We introduce a unique two-tier discrimination framework of GAN for abnormal detection. This framework incorporates two tiers: the collaborative tier and the auxiliary tier. Individual model in both tiers is built upon the discriminators, which are trained through GAN. This GAN architecture comprises a generator synthesizing data and a discriminator that discerns between real and synthetic data. We harness the capability of the discriminator and train multiple variants using different types of data for enhanced detection capacity. Our innovation lies in the two-tier discrimination framework. While previous literature predominantly focuses on GAN's data synthesis ability for detectors, we employ GAN as a classification mechanism. The collaborative tier preliminarily classifies traffic as normal or malicious. Any ambiguous traffic is forwarded to the auxiliary level for further classification. This cascading mechanism ensures higher accuracy in malicious detection. The NSL-KDD dataset is utilized to implement the experiments. It includes normal network traffic and four distinct attack types: DoS, U2R, R2L, and probing. After training, validating, and testing the proposed model, our method has shown superior performance compared to many others.

**Paper ID: 90 HOW AI WILL AFFECT COVERAGE OF BUSINESS STATISTICS**

Thursday, April 4, 2024

10:00 AM RUSSIAN RIVER VALLEY II

Artificial Intelligence (AI) is becoming an unavoidable reality in our daily lives, and it will be an integral part of higher education. If AI has not yet changed how we educate students in higher education, it will certainly change it in the near future. The purpose of this presentation is to report on a preliminary investigation as to how AI can affect teaching of quantitative decision making in business, specifically business statistics. Selected examples will be given on \* data visualization, \* Bayesian analysis, \* decision trees, and \* coin tossing experiments to determine the utility curve of decision maker. We argue that AI will change how to teach these topics. For instance, we will not teach how to construct a decision tree, but simply state the problem and let AI "solve" it. The student's role, then, is to "interpret how to implement" the solution. In the current implementation, for example in Chat GPT, the issue is to be able to use appropriate language that Chat GPT understands in asking questions. Our main conclusion is that as AI tools, like Chat GPT, continue to improve, they will result in structural changes in higher education.

**Paper ID: 91 OMNICHANNEL DECISIONS UNDER EVOLVING CHANNEL PREFERENCES DURING A PANDEMIC: A REGIME SWITCHING GAME**

Thursday, April 4, 2024

8:00 AM RUSSIAN RIVER VALLEY II

The decision-making process within an omnichannel supply chain was significantly impacted by the COVID-19 pandemic. Challenges in decision-making arose due to uncertainties in product demand, alterations in consumer preferences regarding distribution channels, and disruptions in the upstream supply chain. In this study, we have developed a model that encapsulates the evolving consumer channel preferences and the uncertainties associated with a subsequent wave of the pandemic. We have delved into the examination of how the pandemic's anticipation and impact affect channel pricing, channel promotion, and ultimately, the retailer's profits. Our findings underline the necessity for retailers to gauge the probability of a pandemic wave to make informed decisions about channel pricing and promotion strategies. Furthermore, we have determined that consumer channel preference plays a pivotal role in shaping a retailer's profitability. Notably, the pricing of the e-channel should be increased soon after the onset of a pandemic wave. Additionally, it may be prudent for the retailer to curtail promotions for the retail channel when there is a noticeable shift in consumer preference towards the e-channel.

**Paper ID: 92 SCHEDULING CARGO FLIGHTS WITHIN THE AIR MOBILITY COMMAND**

Wednesday, April 3, 2024

3:00 PM RUSSIAN RIVER VALLEY I

The Air Mobility Command (AMC) is responsible for planning the allocation of airlift resources for the movement of military cargo and personnel at home and abroad. This paper presents a model for scheduling cargo flights within the AMC. The model assigns cargos to flights and determines the number and type of aircrafts required for each route in such a way to minimize the total cost of the airlift missions over the planning horizon. The total cost consists of flight costs and other penalty costs for late arrival and non-delivery of cargos at destinations. The model accounts for limitations on the number of aircrafts and crews at origins, and the carrying capacities of the various types of aircrafts in the AMC fleet.

**Paper ID: 93 THE ATTENTION THEORY OF VALUE: A CRITICAL APPLICATION TO CONTEMPORARY KLARNA'S BUY NOW PAY LATER ADVERTISING**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY II

THE ATTENTION THEORY OF VALUE: A CRITICAL APPLICATION TO CONTEMPORARY KLARNA'S BUY NOW PAY LATER ADVERTISING ABSTRACT We position Klarna's BNPL advertising within the framework of Beller's Attention Theory of Value. Advertising is viewed at as a text and an illustration of an instance of Debord's 'Society of the Spectacle'. This study draws on relevant perspectives of the cinematic mode of production, film theory, critical theory, and semiotics to argue that Klarna advertising functions as an imagined pseudo-community of fashionable, hip consumers, where consumer debt products are offered as part of an identity project. The attention theory of value is offered as a model of consumer behavior whereby looking is considered a type of economic exchange for the consumer's labor. The imagined communities of Klarna are produced by looking at their advertising. We illustrate the functioning of the above concepts through a semiotic analysis of Klarna's Four Quarter-Sized Cowboys television advertising. Keywords: attention theory of value, society of the spectacle, advertising, Klarna, film theory.

**Paper ID: 94 DO DEEP VALUE STOCKS GENERATE EXCESS RETURNS?**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY I

The study raises the question whether Ben Graham's "net net" strategy or the Net Current Asset Value (NCAV) criterion for stock selection generates risk-adjusted excess returns. After controlling for Fama-French five risk factors and the January effect, we find that NCAV stock portfolio generate significant excess returns. However, after we account for several liquidity risk factors such as bid-ask spread, trading volume, and the level of stock price, we document no significant risk-adjusted excess returns. These findings have significant implications for investors and portfolio managers who rely on Ben Graham's value investing strategy.

**Paper ID: 95 A COMPARATIVE ANALYSIS OF CHATGPT COURSES IN INDUSTRIAL AND ACADEMIC DOMAINS**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY I

This study presents an initial investigation into the available courses on ChatGPT, aiming to enhance understanding of its applications and ethical considerations. We have categorized ChatGPT-related courses across both industrial and academic domains, with platforms like Udemy and Coursera representing the former and various U.S. universities representing the latter. The initial data analysis reveals a focus on marketing, content creation, coding, and applications in the industrial domain, whereas the academic domain tends to emphasize fundamental theories and mathematical methods in AI. The future direction includes a more comprehensive review of courses from additional online learning platforms and universities.

**Paper ID: 96 TIKTOK: TAKING OVER THE WORLD**

Thursday, April 4, 2024

10:00 AM RUSSIAN RIVER VALLEY I

This case sheds light on the most popular social media video platform and the struggle they face with national security due to being owned by Chinese company, ByteDance. While its unprecedented success has positioned it as a leader in the market, will TikTok be able to continue growing its brand and meeting customer needs while ensuring they overcome security concerns by the US government to avoid a future ban?

**Paper ID: 97 EFFECT OF DETECTION BY REGULATORS ON GREENWASHING: A DIFFERENTIAL GAME THEORETIC ANALYSIS**

Wednesday, April 3, 2024

3:00 PM RUSSIAN RIVER VALLEY II

In today's sustainability-focused world, there is a growing concern surrounding greenwashing, which involves the misleading practice of providing false or deceptive information about a company's environmental initiatives. Of particular interest is how greenwashing by one firm affects the actual environmental quality choice of the other firms and the consumer perceptions of environmental quality. From a policy perspective, an important issue is to investigate how detection mechanisms at various time points imposed by the regulators affect the incentive of a firm to greenwash. In this connection, this paper investigates environmental quality competition between a greenwashing firm and a genuinely eco-conscious one. It sheds light on the significance of early detection mechanisms and regulatory interventions in mitigating the adverse effects of greenwashing. Using a differential game theoretical framework, this research contributes novel insights into the strategic decision-making processes of firms in the context of environmental quality competition and greenwashing, emphasizing the critical role of appropriate regulatory policy measures in shaping sustainable business practices and upgrading environmental quality.

**Paper ID: 98 REACTIVE OR PROACTIVE? AN ONLINE RETAILER'S OMNICHANNEL STRATEGY FOR MANAGING CONSUMER RETURNS**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY II

This study investigates two popular omnichannel strategies for managing consumer returns. The reactive strategy is online-offline return partnership, which offers eco-friendly and cost-effective reverse logistics. The proactive strategy involves conveying fit information through showrooms, in order to reduce returns. We apply a game-theoretic model to explore online retailers' optimal choice among four strategies, namely, the benchmark strategy of pure online channel, the reactive strategy of return partnership, the proactive strategy of fit information, and the hybrid strategy of joint implementation. Our main findings are as follows. First, online retailers should not implement any omnichannel strategy on extremely low-end products. Second, offering fit information is essential for online retailers who sell sufficiently high-end products. Third, the single reactive strategy is optimal in terms of standardized products with moderate valuation. Finally, implementing both omnichannel strategies simultaneously may hurt online retailers, especially those owning an efficient logistics system.

**Paper ID: 100 HOW WILL THE CRISIS IN SURPLUS OFFICE SPACE BE RESOLVED AND WHAT IS THE GOVERNMENT'S ROLE NOW AND LATER?**

Friday, April 5, 2024

8:00 AM SONOMA MOUNTAIN

There is a crisis of sorts brewing in the United States commercial office space market. A combination of factors, including impracticality and unwillingness of office workers to return to the office, have led to an excess of office space capacity. Could this lead to significant foreclosures? What would be the impact on financial institutions? This study explores the current situation and whether prior crises, especially the savings and loan debacle, provide insights as to what the future holds.

**Paper ID: 101 IMPORT WHEAT TENDERS AND IMPACTS OF THE RUSSIAN INVASION**

Friday, April 5, 2024

10:00 AM RUSSIAN RIVER VALLEY II

Trading in many commodities is highly risky, the elements of prices are extremely volatile and in many cases non-transparent. Risk and volatility escalated sharply following the Russian invasion of Ukraine, having impacts on numerous uncertainties for trading firms and importers, particularly about logistical costs, execution and performance risk, as well the radical changes in geopolitical interventions impacting trade and pricing. The purpose of this study is to analyze bidding behavior in Egypt's wheat import tenders in the pre- and post-invasion period. Detailed data for each bidder in individual tenders are analyzed for the period 2017 to mid-2023. The results indicated changes in bidding behavior following the Russian invasion. The 4-firm concentration ratio and Herfindahl index increased, as did the standard error, and implied margins for individual bids. Optimal bids were determined for a prototypical bidder competing against incumbent rivals. The results indicated that the bid functions changed following the invasion. The impacts of these changes in bidding behavior in the post-invasion period indicated: the probability of winning, profit and expected profit increased. The latter increased from \$.78/mt to \$5.80/mt. The results have important implications for buyers, sellers and the industry which are described.

**Paper ID: 102 VISUALIZING THE AFTER-TAX VALUE OF REQUIRED MINIMUM DISTRIBUTIONS WHEN STILL WORKING VERSUS NOT WORKING**

Wednesday, April 3, 2024

8:00 AM SONOMA MOUNTAIN

A taxpayer just turned age-73. Now what? Are they now required to take required minimum distributions, affectionately known as RMDs, from traditional retirement accounts? An exception applies to "employer" accounts for persons who are still working. This study is a financial analysis of the RMD decision, with visual graphics. Results indicate that there is no after-tax advantage gained by delaying RMDs, which may require continuing to work. Other tax savings and deferral opportunities might be available.

**Paper ID: 103 UNDERSTANDING THE DETERMINANTS OF A FIRM'S IT INVESTMENT AND ITS ECONOMIC SUSTAINABILITY**

Thursday, April 4, 2024

8:00 AM ALEXANDER VALLEY III

Over the last few decades, information technology (IT) has been one of the primary mechanisms managers have adopted to cope with increasing globalization, competition, and product market volatility. Despite the rapid rise in IT spending, the existing IS literature focused on investigation of the relationship between IT expenditure and its environmental sustainability. In contrast, research on the determinants of firm's IT expenditure is limited. In this research, we attempt to build a comprehensive model for the determinants of firm's IT spending. We held that firms' external and internal contingencies will interact with management emotion in organizational strategic IT investment, which in turn affects its economic sustainability (e.g. organizational performance).

**Paper ID: 104 EXPLORING SUCCESS WITH OPEN INNOVATION: WHERE ARE WE NOW WITH MEASURES OF NEW PRODUCT DEVELOPMENT PERFORMANCE**

Thursday, April 4, 2024

10:00 AM RUSSIAN RIVER VALLEY I

Firms can enhance performance through many investments, new product development is one opportunity area where a firm can improve success and gain a competitive advantage. To further improve innovation outcomes, firms are increasingly engaging their external environments using open innovation concepts. Open innovation aids firms to utilize underleveraged resources and capabilities (e.g., Chesbrough, 2003), but it is unclear what measures of firm performance best highlight open innovation activities. While existing research explores the effect of open innovation on firm performance (e.g., Bigliardi, Ferraro, Filippelli, and Galati, 2020; Greco, Grimaldi, and Cricelli, 2016), there is still considerable opportunity to study success.

**Paper ID: 105 UNLOCKING GLOBAL EXPERIENCES FOR URBAN PUBLIC UNIVERSITY STUDENTS**

Wednesday, April 3, 2024

1:00 PM CHALK HILL

Short-term study abroad programs, though unconventional and distinct from traditional academic experiences, have the potential to be life-changing for students. These programs offer a unique opportunity for students to develop high-quality skills, including cultural awareness, enhanced communication abilities, and increased resilience. Despite their transformative potential, participation in such programs is low in many urban public universities. The long-term impact of short-term study abroad programs often exceeds what traditional classroom learning can provide in just a few months. Our research delves into the effectiveness of short-term study abroad programs, focusing on the key components that contribute to their transformative nature. It presents the findings of surveys conducted with students who have participated in these programs, exploring their experiences before and after their international immersion. The insights gathered serve as a foundation for enhancing and potentially improving the quality of short-term study abroad initiatives, ultimately advancing global management education.

**Paper ID: 106 ROLE OF INTRODUCTORY ACCOUNTING CLASS IN GRADUATION RATES**

Thursday, April 4, 2024

1:00 PM SONOMA MOUNTAIN

We study the impact of the introductory Financial Accounting (FA) class on graduation rates. Preliminary results show that the student GPA in the first term, the cumulative final exam in the FA class and the term in which the class is taken seems to have a significant impact on graduation rates within four years. Though past studies have indicated that first term GPA is a good predictor of graduation rates, we find that performance in the FA class is also a good indicator of graduation rates. Our results are supported even after controlling for race, gender, major and embedded tutors.

**Paper ID: 107 STUDYING ABROAD: UNLOCKING SATISFACTION, BENEFITS, AND FACULTY-LED PROGRAMS**

Wednesday, April 3, 2024

1:00 PM CHALK HILL

Studying abroad is an educational journey that transcends boundaries and opens doors to unparalleled experiences. This abstract explores the satisfaction and myriad benefits of studying abroad, specifically focusing on Faculty-Led Study Abroad programs. The satisfaction derived from studying abroad is multifaceted. Students often find themselves immersed in diverse cultures, languages, and academic environments, which fosters personal growth and global perspective. This exposure to new perspectives and challenges instills a sense of adaptability and resilience, equipping students with valuable life skills that extend far beyond their academic pursuits. This research study measures and analyzes the benefits of studying abroad from both an academic and personal point of view. Academically, students have access to a wealth of knowledge, unique courses, and renowned institutions that can elevate their educational experience. The global network they build and the ability to adapt to different teaching methodologies are assets for their future careers. On a personal level, students gain self-confidence, cultural competence, and an expanded worldview. These experiences shape them into well-rounded individuals with a deep appreciation for diversity. Faculty-led study Abroad programs offer a structured and supportive approach to international education.

**Paper ID: 108 THE MARKETING OF MINDFULNESS IN HOSPITALITY USING DIGITAL APPS**

Wednesday, April 3, 2024

8:00 AM CHALK HILL

Mindfulness, while not a commodity in the traditional sense, has increasingly become salable and therefore, marketable. Evolving from the meditation practices of Buddhism, mindfulness has been incorporated into Western life in areas as varied as psychology and corporate teambuilding to general health/wellness and, of course, yoga practice and retreats. Mindfulness accoutrements are marketed and sold with the message that these tangible items will contribute to one's ability to be mindful and therefore reap the benefits of mindfulness. However, this research examines the marketing of the practice of mindfulness itself, specifically using digital apps, in the yoga retreat hospitality sector.

**Paper ID: 109 DEBT REFINANCING AND CORPORATE BOND RETURNS**

Thursday, April 4, 2024

3:00 PM CHALK HILL

This paper empirically examines how the maturity structure of financial leverage affects expected corporate bond returns, specifically through the rollover risk channel. We identify a strong positive effect of debt refinancing risk, as measured by refinancing intensity, on corporate bond excess returns in the subsequent year. Such an effect intensifies with heightened credit and liquidity risks, as well as during periods of constrained credit supply and elevated interest rates. Furthermore, we demonstrate that the premium associated with debt refinancing risk reflects higher exposure to credit risk and liquidity risk. Our study contributes to the literature by providing empirical evidence that the rollover risk of short-term debt is priced in the corporate bond market.

**Paper ID: 110 CULTURE WARS: SHOULD ORGANIZATIONS BE CONCERNED HOW THE WARS AFFECT THEIR EMPLOYEES?**

Wednesday, April 3, 2024

10:00 AM RUSSIAN RIVER VALLEY I

Small and large organizations are being pulled into today's culture wars over abortion, LGBTQ+ rights, employee benefits, the company's stated values, and other social issues by shareholders, activists, internal employees, its community, customers, and other stakeholders. The attacks come from what the company states as its values, what it sells, how it advertises, what cultural events it supports or does not support, and now employee benefits. Sociologists believe that the culture wars have become intense because the various sides see their position as morally correct and represent what it means to be American and their opponents as not just ill informed but morally bankrupt, blasphemous or un-American. The conflict now involves employees.

**Paper ID: 111 MARGIN TRADING AND STOCK INDEX FUTURES REGULATIONS AND THE VARIATION OF STOCK RETURN: EVIDENCE FROM CHINA**

Thursday, April 4, 2024

10:00 AM CHALK HILL

This study empirically investigates the effects of margin trading and stock index futures on stock price synchronicity and the moderating role of institutional characteristics on these relationships. It finds both margin trading and stock index futures exhibit positive effects on stock price synchronicity and margin trading has a greater effect than stock index futures. It also finds that institutional characteristics such as state ownership, efficient institutional environment, political connections, and domestic listing have significantly positive moderating effects. The study further shows that these moderating effects on stock price synchronicity are greater for margin trading than stock index futures.

**Paper ID: 112 FROM CAMPUS TO CORPORATE: HOW INTERNSHIPS EMPOWER IS AND DA STUDENTS**

Wednesday, April 3, 2024

3:00 PM SONOMA MOUNTAIN

Internships have many benefits in preparing students for their jobs after graduating from college. Beyond gaining practical experience, test-driving a career and participating in networking opportunities, students have a chance to improve discipline related skills, soft skills, problem-solving, and critical thinking. In this talk we present recent findings from a closer look of information systems and data analytics students' internship experiences.

**Paper ID: 113 HOW LLMS CAN HELP SOLVING ANALYTICS PROBLEMS IN THE CLASSROOM**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY I

Recent radical improvements in the performances of Generative Artificial Intelligence tools made it possible to use Large Language Models to help writing computer code to solve analytics problems quite efficiently. We illustrate the process of utilizing this tool to analyze a commonly available data set. During the process, we highlight the advantages and pitfalls one encounters using current AI models. These lessons directly apply for the introduction of Large Language Models into Analytics courses and may generalize to other topics and disciplines as well.

**Paper ID: 114 IGNITING SERVICE-LEARNING IN THE CLASSROOM FOR INSTRUCTORS AND STUDENTS**

Wednesday, April 3, 2024

3:00 PM SONOMA MOUNTAIN

Student engagement is a critical piece of an effective learning process. Service learning engages students in a larger community, embedding the courses' learning objectives to meet community needs. In this presentation, we showcase the design and implementation of two different service-learning courses in a business school, one aiming at providing students with community-focused individual/group activities and the other a consulting project for a local Chamber of Commerce. Our pedagogies range from students' direct engagement with the community to classroom activities that serve the course learning objectives and enhance students' understanding of their important role in the larger community.

**Paper ID: 115 VICTORIA'S SECRET: CAN IT CHANGE ITS MARKETING MODEL?**

Thursday, April 4, 2024

3:00 PM RUSSIAN RIVER VALLEY I

This case explores the recent attempts by Victoria's Secret to change its marketing message, reputation, and product line for a new market reputation, new customers while retaining existing customers, and generating growth not stagnation. While its historical branding, segmentation, and messages were successful, its marketing message needs to be changed. Can a company with an established reputation and image successfully rebrand and reimagine itself?

**Paper ID: 116 CUSTOMER REVIEW INSIGHT ON PRODUCT DEVELOPMENT**

Wednesday, April 3, 2024

3:00 PM CHALK HILL

In today's digital environment, online reviews have become an important information source that benefits consumers and e-commerce sellers. Consumers use online reviews to assess the risk of transactions. Existing literature primarily focuses on customer sentiment analysis from customer reviews on different platforms. There is limited research exploring how to leverage the rich information in customer reviews to identify potential consumer needs, explore market preferences, and introduce new products to fill market gaps. Sellers can use customer reviews on e-commerce platforms, evaluate product strengths and weaknesses based on positive and negative reviews, gauge consumer demand, and assess consumer loyalty through electronic Word-of-mouth (eWOM). Online reviews serve as a valuable source of information for marketers in product design to cater to consumers' emotional needs. This study examines customer review data collected from one of the leading e-commerce platforms. We use SellerSprite, JungleScout, and Keepa plugins to identify customer needs and test customer purchase behaviors with four products using experiment design in the e-commerce platform. Our study contributes to the literature by highlighting the effectiveness of utilizing online reviews to develop new products, streamline market research, and expedite the product development process. This study provides valuable insights into how companies can efficiently harness online reviews for new product development.

**Paper ID: 117 DIAMOND PRICE STATISTICS AND MODELING**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY I

Due to its price and unique marketplace, the diamond industry is a relatively late adaptor of Internet sales and e-business. As consumers become more comfortable with doing business online, the diamond industry is expected to increase sales online, especially for the less expensive synthetic diamond market. In recent years, synthetic diamonds have made an important impact on the diamond jewelry industry. The carat price of synthetic diamond continues to decrease as the quality and quantity of jewelry-grade synthetic diamonds increase. Different from the carat value of its natural counterpart, the market value of synthetic diamond has rarely been studied systematically. In this study, we collected over 20,000 data points of diamonds for comparing natural and synthetic diamonds. The 4Cs (Cut, Color, Clarity, and Carat) grading system of natural diamond will be utilized as reference in this paper for price modeling. The factors that affect synthetic diamond pricing will be discussed in this study.

**Paper ID: 118 EMPLOYING PROBLEM-BASED LEARNING (PBL) AND TEAM-BASED LEARNING (TBL) TO INCORPORATE PROFESSIONAL SKILLS INTO THE INTERMEDIATE ACCOUNTING II(III) COURSE AT TWO UNIVERSITIES**

Thursday, April 4, 2024

1:00 PM SONOMA MOUNTAIN

To integrate professional skills (e.g., decision making, teamwork) into Intermediate Accounting II(III), four continuum PBL approaches (e.g., problem-centered learning) and a TBL Project were successfully utilized at two universities in different regions of the country. Pre-Post Tests indicated that the TBL Project was beneficial in learning financial statement analysis topics. The PBL and TBL projects/cases were located/created using the Backward Design method by beginning with the AICPA, Pathways Commission, CGMA, and IFAC professional skill sets. A student survey evaluated 50+ desired professional skills. To assist students in learning, one or more of these PBL approaches can be used.

**Paper ID: 119 SECURE 2.0 ACT UPDATES TO PENALTY AVOIDANCE FOR EARLY RETIREMENT WITHDRAWALS**

Wednesday, April 3, 2024

8:00 AM SONOMA MOUNTAIN

Tax law provides for retirement accounts with tax preferences for both individual and employer sponsored plans. Because these plans are designed for retirement income, early withdrawals are subject to a 10% tax penalty, with some possible exceptions. This paper reviews exceptions to the 10% early retirement plan withdrawal penalty prior to SECURE 2.0 and describes and discusses the additional exceptions to the 10% penalty legislated by the SECURE 2.0 Act.

**Paper ID: 120 BUSINESS MEN OF COLOR: A PILOT PROGRAM TO ENHANCE ACADEMIC SUCCESS AND CAREER READINESS**

Friday, April 5, 2024

10:00 AM SONOMA MOUNTAIN

The College of Business Administration at California State Polytechnic University, Pomona, has begun a pilot program to help in the development and retention of first-time freshmen from underrepresented demographic groups in the college. The Business Men of Color is an academic and student-led program that was launched in Fall 2023 to help these freshmen break barriers in pursuing excellence. The program set forth to recruit thirty students who would be supported with scholarships, mentoring, internships and academic advising. A scale measuring students' sense of belonging will be used to determine how this component may be related to academic motivation and achievement. Keywords: underrepresented college students, student retention, sense of belonging

**Paper ID: 121 HOW MICROTARGETING AND CAMPUS PARTNERSHIPS IMPACT STUDENT RETENTION: AN EXPERIMENTAL MARKETING CAMPAIGN**

Thursday, April 4, 2024

10:00 AM RUSSIAN RIVER VALLEY I

The University Communications and Marketing (UCM) department of Metropolitan State University of Denver (MSU Denver) is launching a 3-month (Nov-Jan) digital advertising campaign to current and re-admit students to increase spring 2024 enrollment which will impact campus-wide retention efforts. This campaign will have three different target audiences including: 1) active current students eligible to enroll, 2) newly admitted students and 3) inactive students who have stopped out within the past 1-5 years. This campaign will be led by UCM and direct partnership with Enrollment Management (EM) and Orientation, Transfer and Reengagement (OTR). Overall budget is \$26,000. The digital campaign will complement a mailed post card campaign sent mid-October. There are two unique aspects of this campaign that we are tracking: the micro-targeting we are doing for the first time as well as the partnering with two other departments on the campus. In the past, we may have targeted retention students but we have not had the level of data that we now have, which is allowing us to target these specific groups. We are also working with these two additional campus departments who also have a vested interest in student retention. If this campaign is deemed successful, we will continue it in the spring. At the WDSI session, we intend to share the data from the first round of the campaign as well as what we are learning from targeting these specific groups and working in a strategic partnership.

**Paper ID: 122 ANTICIPATING THE FUTURE OF EDUCATION: NAVIGATING POTENTIAL CHALLENGES**

Wednesday, April 3, 2024

5:00 PM SONOMA MOUNTAIN

The topic of the conversation is the future of higher education as part of the series that started in 2023. Members of this panel, with audience participation, will examine the persistence of traditional teaching methods in higher education and question their efficacy in an evolving educational landscape. We will explore whether a universal teaching approach is appropriate across varied disciplines and institutions, from community colleges to four-year universities. The panel will also consider the diverse needs of fields like humanities, sciences, and professional studies, questioning the adequacy of a one-size-fits-all method. Additionally, we will discuss the impending impact of Artificial Intelligence (AI) on teaching methodologies, suggesting that AI's integration will necessitate significant pedagogical shifts in higher education.

**Paper ID: 123 EXPLORING SPA CAREERS AND EDUCATION IN LUXURY HOTEL/RESORT SPAS**

Wednesday, April 3, 2024

8:00 AM CHALK HILL

ABSTRACTThe demand for spa and wellness programs is growing, requiring qualified managers who understand the industry and its challenges. The purpose of this exploratory study is to examine spa education and management from luxury spa industry professionals' perspectives and identify how university institutions with hospitality programs can best help develop future leaders for the spa industry. The study attempts to uncover spa industry leaders' perceptions and understandings of luxury resort spa operations and management in relation to education, and explore what it takes to be qualified for a management position in the spa industry. The study follows a qualitative approach through in-depth interviews with luxury resort spa directors in the western part of the United States. Implications and discussions are discussed. Keywords: Hotel, resort, spa education, spa operations, qualitative method

**Paper ID: 124 THE IMPACT OF GOVERNMENT ENVIRONMENTAL ATTENTION TO GREEN TECHNOLOGY INNOVATION?**

Wednesday, April 3, 2024

10:00 AM ALEXANDER VALLEY III

Green innovation activities have become the focus of governments with global climate change and increasing environmental pollution. Governments around the world are paying more concern to environmental issues, which promotes the development of green innovation activities. Only a few literatures have studied the influencing factors of green technology innovation ( ) from a government environmental attention ( ) perspective. Thus, this study aims to explore the relationship between and by using city-level panel data from 2004 to 2020 in China. Our study will enhance the importance of government attention to environmental issues in promoting. .

**Paper ID: 125 PROMISING PRACTICES FOR DIVERSITY, EQUITY, AND INCLUSION IN FACULTY HIRING: IMPLEMENTING STRATEGIES FROM THE LITERATURE**

Friday, April 5, 2024

10:00 AM SONOMA MOUNTAIN

This paper reviews promising practices in recruiting and hiring diverse college faculty in an equitable, inclusive process. Based primarily on published research, this work also reviews key practitioner resources—all informed by my personal efforts to implement these strategies on my own campus. First, I discuss why diversity, equity, and inclusion (DEI) matters in higher education, including demographic and political trends, plus consistency with important values. I then argue for faculty DEI specifically, followed by observing how and why schools struggle to achieve these outcomes. I then summarize promising practices in: 1. Job advertisements, including why and how to signal commitment to DEI, how to ask candidates to demonstrate their ability to contribute to campus DEI, strategies for further broadening an ad's reach, and additional venues for advertisement. 2. Proactive recruiting, including calling for a new recruiting paradigm, how to further engage current faculty, and working with existing pro-DEI organizations. 3. Search committees, including committee membership, identifying and training advocates for equitable process, and identifying good training resources for hiring committees. 4. The hiring process, including potential warning signs during committee deliberation, how and why to use evaluation rubrics, and politically palatable (and legal!) ways to consider DEI contributions. I focus primarily on equipping conference attendees with actionable insights from the four practice areas.

**Paper ID: 126 SHEAR RESPONSE OF SHORT SPAN REINFORCED UHPC BEAMS**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY II

Ultra High Performance Concrete (UHPC) is a cementitious material composed of a relatively large quantity of cement, and a small percentage of short, randomly dispersed steel fibers. Its high compressive strength, durability, longevity, and low permeability make UHPC suitable for a wide range of civilian and military applications. The objective of this research is to study the shear response of steel reinforced UHPC beams (R/UHPC). Longitudinal steel, transverse reinforcement spacing and grade, fiber volume fraction and placement method were varied for 14 small scale beams. Experimental results indicate that narrower spacing of transverse reinforcement and a lower steel volume fraction induces higher specimen ductility while optimizing the contributions of both longitudinal reinforcement and UHPC properties in tension and compression. The views expressed in this abstract are those of the author and do not necessarily reflect the official policy or position of the United States Air Force Academy, the Air Force, the Department of Defense, or the U.S. Government.

**Paper ID: 127 GENDER IN ACADEMIC LEADERSHIP: AN OVERVIEW OF BRAZILIAN FEDERAL UNIVERSITIES**

Friday, April 5, 2024

10:00 AM SONOMA MOUNTAIN

Academic leaders who hold management positions in universities have the potential to impact diversity and gender equality in Higher Education. However, it is not clear how large is the gender gap in leadership positions in STEM and what academic training is needed to pursue leadership positions. The objective of this research was to explore the gender differences in top and middle management positions at Brazilian federal universities, considering their academic training. This exploratory research uses gray literature review and consultation with the government websites (Fala.BR) to identify the proportion of female representation in leadership considering STEM and non-STEM training. This project is part of a larger research that aims making data analysis findings about Latin America available for open access.

**Paper ID: 128 STANDARDIZING CRITICAL AUDIT MATTERS' TITLES: EXPERIENCE FROM THREE YEARS OF IMPLEMENTATION**

Wednesday, April 3, 2024

1:00 PM SONOMA MOUNTAIN

The introduction of the Critical Audit Matters (CAM) standard by the Public Company Accounting Oversight Board (PCAOB) in 2017 marked a significant change in the audit profession. The goal of the new standard was to enrich the information value of audit reports for publicly traded companies audit. However, the enriched information provided by the new requirement came at a price. This price is reflected in costs incurred by audit firms to design and implement CAM procedures that identify accounts or disclosures that are material to the financial statements and involve challenging, subjective, or complex judgment. The PCAOB did not provide a comprehensive list of what might comprise a critical matter. Auditors were expected to use their professional judgment to determine what constitutes a critical audit matter based on the PCAOB standards. Over the last three years, audit firms developed a significant number of inconsistent CAMs in their audit reports. Even though not consistent, many of the CAM titles meant the same matter across different audits. This study recommends that audit firms use consistent communication of CAMs to be disclosed based on the circumstances. The study proposes the use of a set of CAM titles that represent the most extensively disclosed CAM titles since the time the PCAOB standard was implemented.

**Paper ID: 129 ARE SUSTAINABLE PHARMACEUTICAL COMPANIES MORE RESILIENT?**

Thursday, April 4, 2024

8:00 AM ALEXANDER VALLEY III

Resilience and sustainability are critical to businesses in today's highly uncertain and vulnerable environment. This study investigates the relationship between a firm's sustainability performance and practices and the level of supply chain resilience during the onset surge of COVID in 2020. Forty-five U.S. drug manufacturers and biotech companies are selected from the pharmaceutical industry. Profit margin, ROA, and trade credit as the financial measurements for supply chain resilience. Practices in social supply chain management and policies are incorporated. There is some evidence of positive relationships between trade credit and sustainability performance and practices.

**Paper ID: 130 STRATEGIC SOURCING AND PRICING PECULIARITIES IN THE US AIRLINE INDUSTRY**

Thursday, April 4, 2024

10:00 AM ALEXANDER VALLEY III

In this paper, we study the impact of flight outsourcing to regional airlines on ticket prices in the U.S. air transportation market. We used a 20-year quarterly panel dataset from the U.S. domestic passenger air transport market and showed that higher regional airline market shares are associated with higher fares on the routes where flight outsourcing occurs.

**Paper ID: 131 BIG DATA-BASED ACCOUNTING INFORMATION: BENEFITS, CHALLENGES, AND FUTURE PROSPECTS**

Friday, April 5, 2024

8:00 AM SONOMA MOUNTAIN

This paper explores the impact of Big Data on accounting information. With data growing at unprecedented rates, accounting will confront enormous difficulties adapting and capturing pertinent accounting information. The study discusses how big data can overcome the gap between the value of information and its related costs related to risk management, corporate budgeting, and activity-based accounting. We propose a framework to help management understand their information needs and improve the quality and relevance of accounting information. This paper provides insights into harnessing big data to enhance the quality of information and adapt to meet new challenges and opportunities in the evolving landscape of the accounting industry.

**Paper ID: 132 EMPIRICAL STUDY OF DRONE ADOPTION FOR SUSTAINABLE AGRIBUSINESS**

Thursday, April 4, 2024

8:00 AM ALEXANDER VALLEY III

The integration of drone technology in agribusiness has emerged as a transformative force. This research explores how drone technology is empowering agribusinesses to make sustainable decisions. Drones aid in precision farming, enabling resource-efficient cultivation and minimizing environmental impact. This research provides an overview of the key aspects related to the adoption of drones in agribusiness, highlighting its impact on productivity, sustainability, and precision farming practices. By surveying recent developments and emerging trends in drone applications, we aim to offer insights into how this technology is reshaping the agricultural sector. This research explores its role in crop monitoring, pest management, livestock management, and data-driven decision-making, demonstrating the potential benefits and challenges associated with drone adoption in agribusiness. Moreover, this research delves into the regulatory and ethical considerations that accompany this technological shift. In summary, this study presents a concise snapshot of the evolving role of drones in agribusiness and its implications for the future of agriculture.

**Paper ID: 133 INSIDER TRADING PATTERNS DURING THE COVID PERIOD**

Wednesday, April 3, 2024

10:00 AM SONOMA MOUNTAIN

Insider transactions have captured the attention of scholars, regulators, and investors. In this paper, we investigate the patterns of insider trading activities during the pandemic. Our analysis uncovers distinctive trends of insider purchases and sales throughout this specific period. By examining the overall market performance and the surging uncertainty, we discover potential correlations with insider trading behaviors. Empirical evidence from our regressions indicates that insiders acted as contrarian traders during the pandemic. Moreover, we find the pronounced predictive power of insider trading activities in forecasting future firm returns during this period. By carefully excluding routine transactions, our study concludes that opportunistic insider dealings not only maintained their contrarian patterns but also retained their potency in predicting future returns. This underscores the informative value of insider trades, particularly in the face of heightened market unpredictability.

**Paper ID: 134 EXPLORATION OF THE DIFFERENCE BETWEEN TRANSFER AND NON-TRANSFER STUDENTS IN PRINCIPAL STUDENT OUTCOMES AND EXTRACURRICULAR ACTIVITIES**

Thursday, April 4, 2024

3:00 PM SONOMA MOUNTAIN

The present study evaluates the difference between transfer and non-transfer students based on student outcomes and extracurricular activities. The information used in this study was based on exit survey responses which spanned over six years (2014-2019) from students of one department in a University. The results showed that few elements from three data sections have huge influence on students with transfer and non-transfer status. Transfer students were observed to have more focus on student outcomes, fundamental engineering exams, and research programs at other universities, whereas non-transfer students were more drawn towards on-campus jobs or internships during the school year.

**Paper ID: 135 INVESTIGATION OF COVID-19 IMPACT ON TRAFFIC SPEED USING MULTI-LEVEL JOINT MODELS WITH ENDOGENEITY**

Wednesday, April 3, 2024

8:00 AM RUSSIAN RIVER VALLEY II

Speed is considered as a fundamental factor in traffic management and control. Numerous factors have an enormous impact on traffic speed including mandatory traffic policy restrictions. However, there is still lack of conclusive research demonstrating the true impact of COVID-19 on traffic speed for freeways. To fill this gap, the ultimate objective of present study is to investigate the influence of COVID-19 related factors on traffic speed for two multilane highways (I-210 and CA-60). The data were collected from three different sources: Caltrans Freeway Performance Measurement System (PeMS) and Center of Disease Control and Prevention (CDC), which span from February 1, 2020 to April 30, 2020, before and after the implementation of SAH order in the state of California. The study is highlighted with some unique contributions and features. First, multivariate models were utilized to account for the common unobserved heterogeneity shared observational level and hour level for four different lanes. Second, given the strong interdependency between four lanes, endogeneity was explicitly considered. Third, due to the model complexity resulting from multivariate models with the inclusion of endogeneity, the integrated nested Laplace approximation (INLA) algorithm was used over the typical Bayesian hierarchical model based on Markov Chain Monte Carlo (MCMC) approach.

**Paper ID: 136 CUSTOMERS' DEBT FINANCING AND SUPPLIERS' INNOVATIONS**

Thursday, April 4, 2024

3:00 PM CHALK HILL

In this study, we empirically investigate how customers' debt financing affects suppliers' innovation activities with respect to the number of patents, exploration and exploitation. We find that syndicated loan issuance to key customers has positive effects on the number of suppliers' patents, which are mainly driven by their increasing exploration. The results are stronger as the size of the loan to the key customer is larger. Our further tests highlight that such positive influences of customers' debt financing on the suppliers' exploration are weaker if the suppliers are highly dependent on the customers economically.

**Paper ID: 137 FREE PRODUCT UPDATES AS A MECHANISM FOR ENHANCING PROFITS**

Thursday, April 4, 2024

10:00 AM ALEXANDER VALLEY III

In practice sellers often offer free product updates. Given increasingly software-enabled products, these updates are typically installed digitally via software downloads available to existing customers. Offering such free updates may ostensibly appear to be a service for customers, yet, analyzing this practice, we prove it serves as a profit-enhancing mechanism. By effectively extending the life of each product version, not only do updates increase the value proposition (and thus willingness-to-pay) for each new product release, they also make it make it costly for consumers to skip purchasing a new release, due to facing a prolonged wait for a future release.

**Paper ID: 138 EXAMINING THE EFFECT OF CONTRACTOR LOGISTICS SUPPORT ON THE RELIABILITY OF MILITARY AIRCRAFT**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY II

This study utilizes survival analysis for examining the effect of Contractor Logistics Support (CLS) on the reliability of military aircraft. The CLS provider in this study is the original equipment manufacturer that has designed and produced the target aircraft of this study or A-29 Super Tucano. We assume that the effect of CLS on the reliability is at least same as or better than organic maintenance conducted by the Brazilian Air Force. Aircraft failures are compared before and after implementing CLS by using non-parametric and semi-parametric survival models. This study found that CLS alone was inclusive for explaining aircraft failures.

**Paper ID: 139 MEASURING THE EFFICIENCY OF MILITARY BEHAVIORAL HEALTH SERVICES**

Friday, April 5, 2024

10:00 AM RUSSIAN RIVER VALLEY I

This research examines the operations of behavioral health clinics in Air Force Continental United States facilities, with a focus on operational efficiency and capacity through Data Envelopment Analysis. Most facilities operate near capacity, demonstrating efficient resource usage, but concerns arise with the potential of increased demand. Days-to-care and leakage are identified as major sources of inefficiency, suggesting that addressing these issues can enhance operations and reduce costs. The study also explores the impact of COVID-19 on care delivery. The research methods used here can be applied to assess capacity utilization and efficiencies in all healthcare services using similar variables.

**Paper ID: 140 IMPACT OF COVID-19 OUTBREAK AND VACCINATION ON RIDE-SHARING SERVICES: A SOCIAL MEDIA ANALYSIS**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY I

We studied the impact of the Covid-19 pandemic on the ride-sharing platform (Uber). The analysis in this study is based on 216,120 tweets in the U.S. between 2019, and 2021, about Uber. Using sentiment analysis, the result shows that usage and popularity of Uber on Twitter negatively affect Covid and death cases. In contrast, vaccination helps mitigate the shock of Covid. Additionally, Uber's policy and business model was beneficial in improving its positive image during the pandemic; On the early breakout of Covid, Uber had a jump on the positive sentiment, mainly because Uber provided safer service than public transportation.

**Paper ID: 141 CO-CURRICULAR EXPERIENCES TO ENHANCE BUSINESS EDUCATION**

Wednesday, April 3, 2024

3:00 PM SONOMA MOUNTAIN

Co-curricular experiences, such as digital badges/microcredentials, student clubs, and experiential learning projects are increasingly used to enhance the higher education experience for students. Benefits of engaging in co-curricular activities range from acquiring life and career skills and hands-on experience to creating community and fostering a sense of belonging. These opportunities can provide a competitive advantage to universities as they navigate an increasingly complex and ever-changing higher education landscape. This paper will provide the context for co-curricular activities in business higher education, and survey the range of experiences available to students in a large public university system with over twenty campuses.

**Paper ID: 142 TOPIC MINING-BASED FINTECH PROGRAM ANALYSIS**

Wednesday, April 3, 2024

8:00 AM RUSSIAN RIVER VALLEY I

FinTech, or "financial technology," describes how contemporary technologies are applied to financial services and products in an effort to enhance, innovate, and broaden the provision of financial services. This evolving field is disrupting and reshaping how traditional financial institutions operate and serve their customers. In order to understand the existing pros and cons of the Fintech program, we are using topic mining to analyze the collected curriculum dataset and utilize the findings to further support the design of a similar Fintech program as a guideline. Firstly, we collected the Fintech curriculum dataset from different universities. Then we cleaned and prepared the dataset. Lastly, we used topic modeling to analyze the dataset. The findings of the analysis are presented as the results. Through this research, we can have a deeper understanding of the Fintech program.

**Paper ID: 143 DEMENTIA SEVERITY CLASSIFICATION USING MACHINE LEARNING AND DEEP LEARNING**

Thursday, April 4, 2024

8:00 AM CHALK HILL

Dementia is one of the seven leading causes of death worldwide, and there is currently a lack of effective treatments. The transformation stage of dementia can be divided into three levels: normal (CN), mild cognitive impairment (MCI), and Alzheimer's disease (AD). If these levels of dementia can be accurately predicted and treated accordingly Interventions will be more effective in slowing the progression of dementia. Past research has shown that using MRI can provide accurate predictions of dementia. Therefore, this study used ACPC alignment correction for preprocessing of MRI data and then used radiomics features, discretization, and principal component analysis for feature selection and optimization. Next, machine learning and deep learning methods are used to analyze the processed MRI images to classify them into three categories: normal, mild cognitive impairment, and Alzheimer's disease. Experimental results show that the analysis results using support vector machine (SVM) have the best accuracy among all methods. The classification accuracy of AD and CN is 92%, the classification accuracy of MCI and CN is 87%, and the classification accuracy of MCI and AD is 78%. The results of this study show that the severity of dementia can be accurately predicted using a combination of MRI and machine learning (SVM), and personalized intervention treatments can be provided for patients at different stages in the future, which will slow down the progression of dementia. and have an important impact on improving patients' quality of life.

**Paper ID: 144 ENHANCING PROPERTY SHOWCASING: THE PROMISE OF METAVERSE TECHNOLOGY ADOPTION IN REAL ESTATE**

Thursday, April 4, 2024

8:00 AM CHALK HILL

The adoption of metaverse technology for virtual tours is showing significant promise as the real estate industry explores alternative methods to enhance property marketing and showcasing. However, the adoption of these technologies brings about challenges and barriers. Previous research focuses on consumer perspectives while this investigation seeks to identify salient factors from industry perceptions. This research aims to provide property management companies with valuable insights to better understand and address the obstacles that may impede integration into their operations. This study will contribute to the advancement of metaverse technology adoption within the real estate industry and highlight areas where innovation and support are needed to facilitate its successful implementation.

**Paper ID: 145 FACTORS AFFECTING CUSTOMER REPURCHASE INTENTIONS AFTER A NOTIFICATION OF A DATA BREACH**

Wednesday, April 3, 2024

3:00 PM CHALK HILL

A data breach occurs when an individual or group gains unlawful access to confidential information such as Personally Identifiable Information (PII). Social exchange theory (STE) stipulates that participation in a mutually beneficial and reciprocal relationship is built upon trust. Grounded on STE, this research used a quasi-experimental design to study the impact of trust, fear, and anger on the relationship between trust and customer repurchase intention (CRI). The study used a control group (N=201) and a treatment group (N=174) based on the exposure to a notification of a data breach. The results of a multigroup analysis comparing the two groups' responses in SmartPLS v4 are presented. Future research and practical implications are discussed.

**Paper ID: 146 MENTORSHIP IS A CONTACT SPORT – SERVING MENTORS AND STUDENTS**

Thursday, April 4, 2024

3:00 PM SONOMA MOUNTAIN

Experimental learning through mentorship can be critical to students' post-academic success. The high-impact practice of mentorship has outcomes that benefit both the mentor and mentee. In this presentation, we discuss the creation and implementation of a mentorship program that not only improves the career-readiness skills of students but seeks to build professional development skills in the mentor, providing regular feedback to both mentors and students. Using a combination of hybrid activities, mentors and students have interactions that create opportunities for social-emotional learning and application to industry, where students become less anxious and uncomfortable with their first positions post-graduation.

**Paper ID: 147 TAX-HAVENS: IMMEDIATE COSTS AND BENEFITS**

Wednesday, April 3, 2024

8:00 AM SONOMA MOUNTAIN

An extensive body of research has documented that tax havens are associated with income statement measures of ETR (i.e., GAAP ETR). However, the literature has largely ignored the potential impact of the IRC Sec. 367 (the "toll charge") – the initial cost of transferring IP to a new tax-haven subsidiary. Prior to 2018, this immediate cash outlay was not reflected in GAAP ETR due to the elimination of intercompany transaction upon consolidation; however, it will be reflected in Cash ETR. Our study is the first to document the cost, not only the benefit, to engage in income shifting. We find that the initial adoption of a tax haven subsidiary is associated with a reduction in GAAP ETR and an increase in Cash ETR. We predict that Cash ETR will increase temporarily and then fall as the benefits of income shifting begin to outweigh the cost. We find that Cash ETR remains higher for about four years. When examining ETRs over time, we find that before establishing a tax haven, GAAP ETR is higher than Cash ETR, but the gap disappears within two years after adoption.

**Paper ID: 148 FOREIGN DIRECT INVESTMENTS AND LABOR RIGHTS IN THE ASIAN-PACIFIC REGION: A PANEL DATA ANALYSIS**

Thursday, April 4, 2024

10:00 AM SONOMA MOUNTAIN

Objectives - The purpose of this study is to investigate how a country's inward foreign direct investments (FDIs) influence its labor rights in the Asia-Pacific region. This study will focus on one of the most important measures of labor rights, wages. In particular, it hypothesizes that a country's inward FDIs will have positive effects on minimum wages and the effects are expected to vary by occupation. It also hypothesizes that inward FDIs will have narrowing effects on wage inequality, i.e., the gender wage gap. The paper uses the system GMM estimation approach to test the hypotheses. Labor rights are measured as minimum wages and gender wage gap. The paper expects to find a positive association between FDI and minimum wages. It is also expected that FDI will help narrow the gender wage gap, thus, reducing wage inequality.

**Paper ID: 149 DOES MUNICIPAL MANAGEMENT CAPACITY MATTER? COMPETITIVE VERSUS NEGOTIATED PROCUREMENT IN CHINA'S PUBLIC-PRIVATE PARTNERSHIPS**

Thursday, April 4, 2024

3:00 PM ALEXANDER VALLEY III

This study attempts to investigate the relationship between municipal management capacity and PPP procurement methods in PPP projects. Using a comprehensive pooled cross-sectional dataset at the municipal level in China, this study finds that, while the complexity of contract types significantly reduces the probability of using more competitive and market-led procurement methods, municipal organizational capacity, fiscal capacity and also prior PPP experiences of the municipal government will lead to more competitive procurement methods. This study helps understand the decision-making mechanism and managerial behavior of municipal governments in China's recent PPP development. The findings provide policy insight into the regulation and administration of PPPs in China and other developing countries.

**Paper ID: 150 A CRITICAL EVALUATION OF THE IMPENDING SUSTAINABILITY REPORTING AND ATTESTATION STANDARD AS PROPOSED BY THE INTERNATIONAL ACCOUNTING STANDARDS BOARD**

Friday, April 5, 2024

8:00 AM SONOMA MOUNTAIN

The purpose of this commentary is to examine the International Accounting Standards Board proposed standard (Exposure Draft, ED) on Sustainability Reporting, ED5000 (the Exposure Draft number) proposes a major change in Corporate Reporting. The traditional financial domain is being challenged by a call for Sustainability disclosures. The green washing of recent years is being critically changed with a proposal for a comprehensive form of reporting including plural Sustainability criteria. The conundrum of Double Materiality is discussed and its effect on the scope of the reports and the attestation thereof.

**Paper ID: 151 THE IMPACTS OF INSTITUTIONAL STOCK OWNERSHIP ON FIRM VALUATION: A STATISTICAL ANALYSIS**

Friday, April 5, 2024

8:00 AM CHALK HILL

Many studies indicated that corporations with high Institutional ownership have higher stock prices than those with less Institutional ownership. Institutions have analysts to investigate the financial and the industry potential of the firms. As a result, the perception is that high institutional ownership indicates good value. This study investigates if the percentage of institutional ownership directly correlates with higher value of stocks. It was found that the higher percentage of Institutional ownership does not support a higher stock valuation.

**Paper ID: 152 CHATGPT AND ACCOUNTING ETHICS EDUCATION**

Thursday, April 4, 2024

1:00 PM SONOMA MOUNTAIN

Since November 2022, the launch of ChatGPT has drawn significant attention from the entire education community. However, within the realm of accounting education, a consensus has yet to emerge regarding whether students' utilization of ChatGPT in their accounting studies will bolster their educational outcomes or potentially hinder their future career potentials. Most research publications in the field of accounting education have focused on how students' technical skill development is influenced by the students' use of ChatGPT. This research project focuses on accounting ethics education and ChatGPT. Specifically, it studies whether incorporating ChatGPT into accounting ethics classes yields benefits or raises concerns regarding the students' development of ethical reasoning skills. The findings of this research endeavor may offer valuable insights into how to effectively manage and regulate the use of ChatGPT in fostering students' development of ethical reasoning skills.

**Paper ID: 153 THE PARIS AGREEMENT IMPACT ON THE COST OF EQUITY CAPITAL: EVIDENCE FROM HEAVY POLLUTING INDUSTRIES**

Wednesday, April 3, 2024

10:00 AM ALEXANDER VALLEY III

Climate governance has become a global issue. Employing a new measure of the cost of equity capital (CoE), this study examines the impact of the Paris Agreement (PA) on the relation between carbon risk and CoE using a sample composed of 24,520 listed companies in China from 2008 to 2021. The results in the difference-in-differences (DID) model show that the PA significantly increases the CoE for heavy polluting firms. Furthermore, this effect is stronger for state-owned enterprises, for firms with higher financing constraints, and headquartered in regions with stricter environmental monitoring. Various robustness tests support the main evidence. This study enriches the current research on the impact of the PA on the cost of capital and provides Chinese companies with important green policy suggestions.

**Paper ID: 154 MAKING FRIENDS IN THE CLASSROOM. DEVELOPING ASSISTANTS WITH PERSONALITY.**

Wednesday, April 3, 2024

1:00 PM CHALK HILL

This study explores how we can use Large Language Models to build technological agents with distinct personalities. It proposes that these LLM-enabled chatbots can be a tool to extend the work currently being done with the Wizard-of-Oz methodology, and presents an instantiation to exemplify it. The instantiation explores how a friendly chatbot agent can be used to explore the influence that interactions with anthropomorphic technology can have over students' engagement and overall performance. The study finalizes with some considerations on how we can ensure the validity of interactions handled by the LLM.

**Paper ID: 155 INVESTIGATING THE ROLE OF THE BALDRIGE FRAMEWORK IN POST-PANDEMIC HEALTHCARE: INSIGHTS FROM TEXT MINING**

Wednesday, April 3, 2024

8:00 AM RUSSIAN RIVER VALLEY I

Text-mining techniques have greatly expanded the types of data available for research. This study employs text-mining methods to examine the impact of the Baldrige Framework on healthcare systems in the post-pandemic era. While earlier studies have developed various frameworks for healthcare quality management, there's a need to update these frameworks to address the changing demands post-pandemic. By utilizing text-mining methods, this research will review patient experience data collected from online platforms. Research results will bridge the gap between academic literature and industry practices in healthcare. Furthermore, research results will offer valuable recommendations to enhance organizational performance in the healthcare sector.

**Paper ID: 156 VOLATILITY PERSISTENCE IN SELECTED EQUITY MARKETS BEFORE AND AFTER 2020**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY I

This paper investigates volatility persistence in the following equity markets: Germany, UK, Turkey, China and the USA. The data period is from January 4, 2017 to September 29, 2023. However, the data period is divided into two parts, before and after January 2020. Data collected and analyzed are daily returns on exchange traded funds (ETFs) of the sample countries. Specific methods used to study the data are GARCH (1, 1) and EGARCH (1, 1). Preliminary results of GARCH (1,1) show that in the selected period before 2020, the USA market's ETF exhibits the highest Arch coefficient  $\alpha$ , meaning that volatility reacts intensely to market movements. On the other hand, Chinese market's ETF has the highest value of Garch parameter indicating that volatility takes a long time to die out following a crisis in the market. Also, China market's ETF shows the highest sum of  $\alpha+\beta$  showing that the effects of the volatility shocks fade slowly. In the second period, (after 2020), the USA market continues to react intensely to market movements (the highest  $\alpha$  value) just like in the period prior to 2020. In this period (after Jan. 2020) the highest Garch parameter  $\beta$  is exhibited by German market's ETF. Also, German market's ETF shows the highest sum of  $\alpha + \beta$ . Finally, we found that EGARCH (1,1) provides a better fit for selected ETFs. These findings should be useful to portfolio managers for better risk assessment, portfolio selection and diversification as well as to international investors.

**Paper ID: 157 EXPLORING BASEBALL ANALYTICS THROUGH DATA VISUALIZATION**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY I

In this project, we use diverse data visualizations to illuminate the baseball statistics in many facets of the sport. We source data from trusted platforms, including Baseball Savant, Baseball Reference, and Spotrac, scrutinize trends spanning the past twenty-three years, identify statistical leaders from the most recent season in 2023, and extract valuable insights on player performance and rankings, encompassing both offense and defense metrics. Furthermore, we examine team payrolls and overall production and reveal the complex relationship between performance and financial investment. While this project does not aim to provide an infallible blueprint for athlete evaluation and team building, it gives insight into one of the myriad approaches teams can adopt to evaluate players and build successful strategies for the future of baseball.

**Paper ID: 158 AN INVESTIGATION OF THE HEALTHCARE QUALITY COMPETENCY FRAMEWORK**

Thursday, April 4, 2024

1:00 PM ALEXANDER VALLEY III

Assessment of healthcare quality is vital for enhancing patient outcomes and achieving organizational excellence. As such, assessment is of interest to healthcare professionals and scholars. This research investigates an industry framework of healthcare quality competencies to explore relevant measurements arising from the dynamic nature of today's healthcare quality landscape. We integrate healthcare quality practices and results to develop a research model and validate its effectiveness using survey data. Findings are discussed to provide insights to practitioners and researchers in the healthcare field.

**Paper ID: 159 PUBLISHING IN A WORLD WITH "PLAGIARISM" (I.E., SIMILARITY) DETECTION SOFTWARE.**

Wednesday, April 3, 2024

10:00 AM CHALK HILL

Literature on academic integrity is often described as a battle between two opposing sides. And, as with any battle, there is a good chance that some non-combatants may get caught in the crossfire. Researchers may be one of those non-combatants. Many editors are now using similarity check software during their initial review of a manuscript. During our presentation we will share a manuscript that was rejected for having a high score, identify some of the manuscript characteristics that generated score, and discuss modifications we made to earn a lower score. We will end the presentation with the implications this software has for editors and researchers.

**Paper ID: 160 PREDICTING STOCK PRICES USING GOOGLE TRENDS AND S&P 500 BASED ON TIME SERIES MODELS**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY I

Using time series models, this study examines the applicability of predicting stock prices using Google Trends search data in comparison to traditional financial indicators, such as the S&P 500 index, as a benchmark. Google Trends is an important search metric that is used widely in business research. However, little is known about the increasing integration of digital information into financial prediction models. The study begins by collecting historical Google Trends data on specific search keywords related to the individual stocks and compares these search trends of each stock to the actual stock market performance (e.g., closing prices). A time series analysis is developed by analyzing the correlation between Google Trends data, the S&P 500's historical prices and the prices of each individual stock and the volatility. Our findings suggest that there is a weak correlation between Google Trends and the stock market movement. In addition, there are certain instances in which economic uncertainties or breakthrough events may play an important role. In addition to the traditional stock tickers we used, other keywords like "AI", "VR", "Technology", etc. were also used for predicting the stock performance of the stocks in the technology industry in the study. We found that these keywords offer better exploratory power when it comes to predicting stock prices. The research contributes to the ongoing debate about the efficacy and limitations of alternative data sources, such as Google Trends, in predicting stock market movements.

**Paper ID: 161 UNDERSTANDING RANKING FACTORS THAT AFFECT RESTAURANTS' RELATIVE POSITIONS ON THE YELP SEARCH RESULT PAGE**

Thursday, April 4, 2024

10:00 AM RUSSIAN RIVER VALLEY I

The increasing power of online review websites has created unprecedented opportunities for marketers. In particular, non-brand-owned review websites like Yelp and TripAdvisor seem to be becoming increasingly popular due to the fact that these platforms get about one-third of the internet traffic to restaurants and hotels. By relying on consumers to create independent reviews, these sites create a market that is focused on managing sentiments using computer algorithms. However, for most small restaurant owners, it is not easy to determine if these platforms are worthwhile for them to invest in time and resources. The current study offers an analytical framework to gain new insights from unstructured web data existing on non-brand-owned social media like Yelp. Using search queries like "Asian food," "Italian food," "Mexico food," etc., we were able to find top lists of restaurant brands and relevant Yelp features from the Yelp search result page. Then we preprocess the raw data for further analysis. The analytical framework utilizes an eclectic mix of analytical tools such as qualitative analysis, t-test, clustering, and word association analyses, which collectively allow for the identification of the main SEO factors that contribute to restaurant brands' success on Yelp. By doing this, the suggested analytical framework provides researchers and practitioners with a systematic approach to interpreting such data, enhancing the comprehension of this evolving online community through the perspective of marketing analytics.

**Paper ID: 163 AN IMPROVED MODEL FOR EXPONENTIALLY DETERIORATING INVENTORY ITEMS**

Wednesday, April 3, 2024

1:00 PM RUSSIAN RIVER VALLEY II

The basic Economic Order Quantity (EOQ) model has first been extended to exponentially deteriorating (perishable) items by Ghare and Schrader (1963). In the exponentially deteriorating items model, the inventory deterioration rate is a constant fraction of the inventory level, which leads to an exponentially decreasing inventory level over time. In this seminal paper, Ghare and Schrader (1963) develop an approximate total cost function and propose an iterative heuristic algorithm for the optimal order interval. We show that a closed form solution for the exact optimal order interval in this model is available. We also modify the model to incorporate the opportunity cost of capital in a more accurate way.

**Paper ID: 164 EXPANSIONS TO THE PICK CHART METHODOLOGY**

Friday, April 5, 2024

10:00 AM CHALK HILL

The Possible – Implement – Challenge – Kill (PICK) Chart is a Lean Six Sigma tool that was originally developed by Lockheed Martin to categorize their process improvement projects. The model being presented builds on the generalized PICK Chart methodology. First, a decision maker's risk preference is considered via allocating weights for both "Difficulty" and "Impact" across a broad spectrum of user-defined sub-categories. Second, an optimal combination of "Difficulty" and "Impact" is offered and compared to each "Difficulty" and "Impact" score by way of a utility function wherein the Euclidean distance away from the optimal combination is annotated. Using the proposed methodology, a decision maker will now have more insight into the various projects via a 1-to-n prioritized list while also considering their own risk preferences. As a result, the decision maker can focus their efforts on the projects that are generally easy to implement that also have a high impact on the organization in which they lead.

**Paper ID: 165 THE FINANCIAL AND BANKING BEHAVIOR OF GENERATION Z: AN EXPLORATORY STUDY**

Thursday, April 4, 2024

8:00 AM RUSSIAN RIVER VALLEY I

Generation Z – the generation following Millennials, born between 1997 and 2012 – is considered to be the most diverse generation in the United States. A few papers recently addressed the challenges for different industries as they try to hire long-term employees from Generation Z population. However, so far no in-depth study addresses Generation Z's banking and financial behavior. To this end, this paper constitutes a descriptive study of the online banking and financial behavior of Generation Z consumers based on about 200 completed surveys. Topics covered in this study were drivers behind their choice of bank, online banking behavior, and influencers of financial decisions. The research methodology, findings, and implications will be presented at the conference.

**Paper ID: 166 UNDERSTANDING PATIENT'S DRUG DECISION: INTEGRATED ASPECTS OF INSTITUTION, PHYSICIAN AND HEALTH CONSULTANT**

Friday, April 5, 2024

8:00 AM RUSSIAN RIVER VALLEY II

This study explores the factors related to patients' willingness to use self-paid prescription drugs, including institution reputation, health consultants' listening, physician professionalism, physician affinity, institution satisfaction, health consultant satisfaction, physician satisfaction, and institution loyalty. This study used questionnaires to collect empirical data. Firstly, the measurements of the research questionnaire were developed based on theoretical basis and expert interviews. A total of 300 questionnaires were collected in this study. After deducting 13 invalid questionnaires, the total number of valid questionnaires was 287. The *r* results show that institutional reputation has a positive impact on institutional satisfaction. Health consultant listening has a positive impact on health consultant satisfaction. Physician professionalism and physician affinity have a positive impact on physician satisfaction. Institution satisfaction and physician satisfaction have a positive impact on institution loyalty. Finally, institutional loyalty has a positive impact on intention to adopt self-paid drug. In the study, it was found that physician professionalism and physician affinity have a positive and significant impact on physician satisfaction. The samples in this study were Taiwanese patients. The health insurance system in Taiwan has an important impact on patients' choice and adoption behavior. Institutions should understand the operation and related policies of the health insurance system and formulate service policies based on the characteristics and regulations of the health insurance system, such as: Ensure transparency in the prices and payment methods of out-of-pocket prescription drugs, and provide information and advice related to the health insurance system to help patients make appropriate decisions.

**Paper ID: 167 DETERMINING ELECTRIC VEHICLE CHARGING STATION REQUIREMENTS AT MILITARY INSTALLATIONS**

Wednesday, April 3, 2024

3:00 PM RUSSIAN RIVER VALLEY I

Executive Order No. 14057 mandates U.S. federal agencies to transition to electric non-tactical vehicles by 2035. This study attempts to find the optimal solution for various electric vehicle support equipment (EVSE) types using a linear programming model, which minimizes total procurement and installation costs by considering real-world constraints such as the weekly vehicle mileage demand, charging time, and EVSE capacity. This study contributes to the broader effort of the U.S. military initiative to combat climate changes and enhances understanding of efficient EVSE deployment strategies in large institutions.

**Paper ID: 168 THE IMPACT OF INCREASING ENTRY FEE ON EMERGENCY DEPARTMENT DEMAND: A TERRITORY-WIDE STUDY**

Thursday, April 4, 2024

3:00 PM ALEXANDER VALLEY III

Emergency department (ED) overcrowding is a global health problem. In hopes of reducing patient traffic to mitigate ED overcrowding, several countries have heightened the financial burden for access to ED care by increasing ED entry fees. We perform a territory-wide study of the universal public health system of Hong Kong SAR and empirically investigate the impact of the June 2017 ED entry fee increase from HK\$100 (US\$13) to HK\$180 (US\$23) on ED patient visit behavior and the underlying mechanisms. The study data covers all patient visits from 2014 to 2019 at 18 public EDs. Using a difference-in-differences approach, we find that the fee increase persistently reduced overall patient traffic for at least 2.5 years after the intervention. The estimated effect of the 6.3% reduction is larger than the government-reported 4.4%. This is mainly driven by a significant reduction in less-urgent visits, while urgent visits did not decrease. The intervention has been more effective in reducing revisits than initial visits. At the individual patient level, we find a significant reduction in patient ED visit frequency, and this effect is stronger for frequent visitors. We also find that the fee increase has reduced patients who abandoned and did not revisit in the near future. Overall, we provide empirical validation of the financial access hurdle as an effective policy instrument for alleviating healthcare congestion. We also show the policy's effectiveness in limiting inappropriate use of ED services. We highlight the effectiveness and importance of managing external demand in addition to improving internal processes.

**Paper ID: 169 DEVELOPING MARITIME SHIPPING RESILIENCE: SUPPLY CHAIN FLOWS PERSPECTIVE**

Friday, April 5, 2024

10:00 AM RUSSIAN RIVER VALLEY II

The rise in global trade has increased the vulnerability of maritime supply chains (MSC) to various disruptions. To withstand the impact of such disruptions, shipping companies strive to enhance their resilience. While there are several studies on resilience capabilities, research delving into a flow-centric perspective remains sparse. Much of the current research in the MSC domain focuses on specific capabilities or disruptions, ignoring the fundamental aspect of supply chain flows. This study utilizes the Supply Chain Flows Framework to analyze the performance of critical flows in the MSC network, facilitating the detection of bottlenecks and potential weaknesses. Consequently, areas of vulnerability are identified, highlighting the capabilities needed to preemptively address flow disruptions. Employing a qualitative methodology, this study seeks insights from prominent stakeholders within the maritime industry. The findings of the study are expected to contribute to the MSC literature by providing a newer perspective on capability development and guiding practitioners in understanding and optimizing flows in their network.

**Paper ID: 170 PRODUCT TRADE-IN STRATEGY**

Thursday, April 4, 2024

8:00 AM ALEXANDER VALLEY III

Many companies promote their new products with trade-in incentives, such as smartphone manufacturer Samsung. The used products being traded in are remanufactured and sold to another market, such as overseas or secondhand marketplace. We study the best strategy for the product trade-in and under what conditions this trade-in practice is socially responsible.

**Paper ID: 171 OPTIMAL OUTPATIENT SCHEDULING USING OPTIONAL APPOINTMENT FEES FOR A CLINIC WITH PATIENT NO-SHOWS**

Thursday, April 4, 2024

8:00 AM RUSSIAN RIVER VALLEY II

Efficient and effective outpatient management is imperative for hospitals with limited medical resources and high service demands. This research aims to examine the cost differences between a system with an optional appointment fee and a system without. A single server queueing model is developed to derive theoretical findings with validation by using actual real-world data from a large hospital. Our research concludes that different optimal SWs shall be used for prepaid and unpaid appointments. Empirical results show that a system employs optional appointment fees could result in an average of 20% cost savings.

**Paper ID: 172 AN INVESTIGATION INTO INFLUENCERS' PERSUASIVENESS BASED ON USERS' PERCEPTION OF THE VIRTUAL IDENTITY UNDER STEREOTYPE CONTENT MODEL**

Wednesday, April 3, 2024

3:00 PM CHALK HILL

The objective of this research is to study whether social media users can perceive influencers' virtual nature, users' attitude towards virtual influencers, and the persuasiveness impact of influencers on the users as a result of users' consciousness degree of influencers' virtual nature. This research will investigate social media users' consciousness of influencers, and users' evaluation of influencers from the warmth and competence dimensions in Stereotype Content Model based on three key influencer characteristics: authenticity, credibility, and expertise.

**Paper ID: 173 THE IMPACT OF SUPPLY BASE DISTANCES ON SC RESILIENCE RECOVERY**

Thursday, April 4, 2024

10:00 AM ALEXANDER VALLEY III

The pandemic led to significant supply chain disruption, posing unforeseen challenges for businesses. While certain firms quickly bounced back, others faced a slower recovery. To understand the impact of industrial, geographical, and cultural distances between a company and its supply base on its resilience, we propose that the characteristics of a firm's supply base can influence its level of resilience.

**Paper ID: 174 THE TELECOMMUNICATIONS INDUSTRY AND CORD CUTTING**

Thursday, April 4, 2024

3:00 PM RUSSIAN RIVER VALLEY I

The telecommunications industry started in the 1830s and has gone through many changes over time. This research study focuses on the current state of the industry, specifically how the cord cutting phenomenon has shaped the industry. Cord cutting is normally applied to the Cable and Pay TV industry. The concept of cord cutting can also be applied to consumers replacing their landline telephones with mobile phones over the past three decades, which will lead to the death of landline telephones eventually! A more recent type of cord cutting is the reduction of the use of mobile phone lines, replacement strategies, and the future of mobile phone lines and numbers.

**Paper ID: 175 SUMMARY OF VICTORIA'S SECRET: CAN IT REBRAND ITS MARKETING MODEL?**

Thursday, April 4, 2024

3:00 PM RUSSIAN RIVER VALLEY I

This case explores the recent attempts by Victoria's Secret to change its marketing message, reputation, and product line for a new market reputation, new customers while retaining existing customers, and generating growth not stagnation. While its historical branding, segmentation, and messages were successful, its marketing message needs to be changed. Can a company with an established reputation and image successfully rebrand and reimagine itself?

**Paper ID: 176 RISK, UNCERTAINTY, AND FINANCIAL MARKETS**

Wednesday, April 3, 2024

10:00 AM SONOMA MOUNTAIN

Recent experiences in asset market pricing are anomalous in regards to the relationship between return and risk. This paper examines a potential missing ingredient that may help clarify the relationship between risk and return—that is, the role of uncertainty. Uncertainty is differentiated from risk in several key dimensions and is hypothesized to have differential effects on market participant behavior. These effects are difficult to ascertain because uncertainty is often considered unmeasurable. In this paper, we use the VVIX as a potential proxy measure of uncertainty in analyzing U.S. equity returns. We run our analysis over two time periods of financial market turbulence: the global financial crisis and the COVID pandemic. Using a VAR specification, we obtain significant results for both periods. Additional statistical tests indicate that the VVIX may be used to predict movements in equity returns as measured by the SPY ETF. Our findings suggest that the joint effect of risk and uncertainty on market sentiment, and thus equity returns, is more important than either individually.

**Paper ID: 177 QUALITY SYSTEMS AND THE MULTI-INDENTURED DIGITAL THREAD**

Friday, April 5, 2024

10:00 AM CHALK HILL

Digital Transformation, the process of conducting organizational change through the use of digital technologies such as 3D Printing, Internet of Things, and Cloud Computing, has characterized a new era of supply chain management as businesses around the world work to adapt to an ever-evolving digital market (Ageron, et al., 2020)(Agrawal, Narain, 2018). However, successfully performing this transformation has roadblocks, one of which is more common than others. Research shows that while exponentially more executives across the full range of industries are adopting a digital supply chain platform in the last decade, the transformation has been hindered due to detailed information for each supply chain operation being stored locally. These storage points represent an ineffective collaboration among the individual sections of a supply chain. This failure to collaborate will inevitably result in more complex barriers in the future digitalization initiative and restrict the ability to provide effective response options to potential failures. By creating a formal framework and quality-controlled system for managing the Digital Supply Chain that is effective and valid for all industries, we can move into the fourth industrial revolution (Büyükoçkan, Göçer, 2018). Using powerful tools such as Cloud Robotics and the 6-dimension supply chain model proposed for Industry 4.0, organizations can bring data from each individual storage location into a system that runs efficiently and effectively, which will provide businesses with the power to adapt to the digital market with the same speed with which the market continues to evolve (Garay-Rondero, et al., 2020).

**Paper ID: 178 TRANSPORTABILITY OF DIGITAL ARTIFACTS ACROSS THE DOD SERVICES AND VENDOR ENTERPRISE**

Friday, April 5, 2024

10:00 AM CHALK HILL

The ability to use STEP AP242 protocol for the transportability of digital artifacts across the DoD Services and vendor Enterprise is a highly valuable commodity for the DoD. This capability will give the DoD confidence to derive a STEP AP242 file from an authoritative source of truth, send that file to a vendor knowing that that data is accurate, and the vendor can in turn send back accurate models or parts. The question, however, is do current STEP AP242 files have the functionality and interoperability to achieve this goal? Specifically, this research studies the transferability of product and manufacturing information (PMI). RGSBI Aerospace and Defense LLC (RGSBI A&D) studied the STEP AP242 file across four CAD platforms, Autodesk Inventor, Dassault Systèmes SolidWorks, PTC Creo, and Siemens NX, to obtain the quantity and quality of the 3D technical data that is transferred during the import and export processes. To augment the baseline testing on the CAD platforms, additional research was done on third-party software programs to see if any turnkey solutions are readily available. The third-party software tested were TransMagic, Capvidia's MBDVidia, and Core Technologie's 3D Evolution. The most surprising result found from this study was that even within CAD platforms, there was still data loss by translating PMI to and from STEP AP242. The data that was collected in this study correlated with the results of the research done by NIST and shows that on average, between platforms, only 42.75% of PMI is transferred.

**Paper ID: 179 THE U.S. DEFENSE INDUSTRIAL BASE AND THE ROLE OF SMALL TO MEDIUM MANUFACTURERS**

Thursday, April 4, 2024

1:00 PM RUSSIAN RIVER VALLEY II

U.S. manufacturing has been on a steady decline since the 1990s due to extensive outsourcing to low-cost countries for initiatives to reduce costs. In fact, since 1990 the U.S. Defense Industrial Base (DIB) has lost more than 40% of its Small to Medium Manufacturers (SMM). While outsourcing may have provided some boost to the U.S. economy with lower priced products for the consumers, it has threatened the United States' ability to sustain its position as a global leader. The U.S. DIB is heavily reliant on manufacturing to provide products and services that allow for the fielding, sustainment, and deployment of operational military aircraft, ground vehicles, satellites, ships, and other equipment offensive / defensive capabilities. The focus of this research presentation is to present an SMM strategic investment framework that will help SMMs make strategic investment in manufacturing capabilities that support U.S. DIB objectives and expand U.S. influence in the global manufacturing economy.

**Paper ID: 180 ADDITIVE MANUFACTURING IN THE DEFENSE INDUSTRIAL BASE**

Friday, April 5, 2024 10:00 AM CHALK HILL

The Department of Defense (DoD) Additive Manufacturing Strategy of 2021 set forth a vision to integrate digital manufacturing into the Defense Industrial Base (DIB) to modernize national defense systems, increase materiel readiness, and enhance capabilities of the warfighter. Additive Manufacturing can enable rapid supply chain agility and address Defense Diminishing Manufacturing Sources and Material Shortages (DMSMS) through the evolution of Industry 4.0 techniques, significantly reduced manufacturing lead times, and a shorter product development process. However, the current stigma of loose regulations and subtractive manufacturing equivalency has limited adoption of additive manufacturing processes within the DoD. This work will present the current state, challenges, integration, and future opportunities of additive manufacturing in the DIB.

**Paper ID: 181 PUBLISHING SUPPLY CHAIN MANAGEMENT AND LOGISTICS RESEARCH**

Thursday, April 4, 2024 3:00 PM RUSSIAN RIVER VALLEY II

A panel of editors for various supply chain journals share their vision and experiences editing top level journals. This panel discussion will be interactive and welcoming, and help participants best consider various outlets for their work, as well as hear some of the ways to best position their work for success.

**Paper ID: 182 FASHION SUPPLY CHAIN WORKER EXPLOITATION:A STRUCTURAL CULTURAL KNOWLEDGE THEORY PERSPECTIVE**

Friday, April 5, 2024 8:00 AM RUSSIAN RIVER VALLEY II

Worker exploitation is an ongoing problem globally within the textile and garment industry. Multinational and local retailers often grapple with the issue of identifying and navigating perpetrators along inherently intricate supply chains. This paper examines the critical strategic cross-cultural knowledge within this setting necessary to develop diagnostic and relational competency. Moreover, it introduces Structural Cultural Knowledge Theory (SCKT) within the Thailand fashion industry supply-chain with the aim of demonstrating how critical knowledge structures are essential in developing marketing relationships, while identifying and mitigating worker exploitation. The findings are based upon 24 in-depth interviews among fashion manufacturers within Chiang Mai, Thailand who collaborate within dyadic manufacturing and export relationships. Structural Cultural Knowledge Theory ("SCKT") is grounded on the principle that cultural knowledge is hierarchical in nature, and has a declarative foundation. Well-formed emic-procedural knowledge is grounded on a richly developed network of declarative knowledge. Moreover, declarative knowledge is best developed when based upon a theoretically-driven understanding of cultural variance. In other words, well developed declarative knowledge foundations are critical antecedents to the formation of rich emic procedural structures. As useful cultural knowledge is developed, etic procedural structures are replaced by emic procedural structures. Vital to SCKT is delineation of the three dimensions of cultural knowledge: declarative, etic procedural, and emic procedural. It is the interaction among the three knowledge types, which lead to the development of cultural knowledge structures. Of critical importance is the nature of the knowledge and the type of intelligence advantageously critical to a firm's success.