編者的話

本期學報（23 卷 2 期）共收錄了四篇論文，各篇的主題簡述如下：

陳暎仁、簡禎富、黃馨滿之「建構彩色濾光膜及微透鏡缺陷樣型分析之資料挖礦架構」：彩色濾光膜及微透鏡為製造 CMOS 影像感測器的關鍵製程。為了提昇產品良率，必須在製造過程中找出造成缺陷樣型的可能原因，以進行修復、減少重工。目前彩色濾光膜廠多半憑藉工程師的領域知識與經驗法則來做故障排除，然而這種方式很容易因為經驗不足而誤判，同時不夠快速且準確度不高。該研究根據實際需求發展一套彩色濾光膜及微透鏡資料挖礦架構模式，以協助工程師診斷造成缺陷樣型的原因，具體步驟包括蒐集影像感測元件彩色濾光膜廠的缺陷樣型相關資料及資料預處理、透過列聯表分析進行卡方獨立性檢定與 Cramer's V 相關係數分析個別變數之相關性、透過隨機重複切割方式與 Apriori 演算法產生關聯規則並利用測試集資料進行規則篩選，最後統合列聯表分析以及關聯規則模型所產生的顯著規則，以支持度、信賴度與增益三個指標進行規則評估。該研究以新竹科學園區某影像感測元件彩色濾光膜廠進行實證以檢驗效度，結果顯示該研究所提出之資料挖礦架構能夠有效的輔助工程師進行缺陷分析，達到故障排除與良率提昇之效。

鄒鴻泰、陳家祥、徐暄淯之「透過敏捷性探討學習對客製化能力之影響—以資訊科技業為例」：該研究透過知識基礎觀點來檢視敏捷性在學習與客製化能力間是否具有中介效果。資料蒐集取自台灣資訊科技業，製造部門經理為主要研究對象。該研究發放 795 份實體問卷共回收 163 份，有效回收率為 20.5%。透過 PLS 統計分析軟體得知，學習對敏捷性有正向影響，而敏捷性對客製化能力有正向影響。該研究亦證實敏捷性在學習與客製化能力之間具有中介效果。鑑此，管理者應該積極管理公司之人力資本，透過各種組織學習活動來促進敏捷性製造並形成客製化能力。此外，管理者更應該利用外部與內部學習來培養顧客敏捷性、夥伴敏捷性及營運敏捷性，以促成客製化能力的建立。

陳育仁、朱慧娟、陳裕民之「中文網路口碑之消費者觀點擷取」：消費者觀點係為企業產品創新、服務改善的重要依據；過去企業主要透過銷售人員與消費者之間的互動、專家訪談以及問卷調查等方式來瞭解消費者觀感，然而隨著網路技術的蓬勃發展，越來越多消費者會在網路上發表企業評論，這也意味著企業有著另一種不同的管道可以更客觀地瞭解消費者觀點。但是，大量且過載的網路資訊難以有效地被整理、歸納與分析，導致企業往往無法迅速且清楚地瞭解消費者觀

點或需求，進而作出正確的決策。該研究目的在於針對中文網路口碑發展出消費者觀點獲取方法，以協助企業能自動歸納與獲取消費者網路評論，快速瞭解網路評價內容中潛藏的消費者觀點，進而作為企業內部改善以及服務創新之依據，藉此提昇企業整體競爭優勢。針對上述目的，該研究主要研究項目包括: (i)消費者觀點架構設計，(ii)消費者觀點獲取流程設計，(iii)消費者觀點獲取方法發展以及(iv)消費者觀點獲取機制實作。

陳美如、王渝薇、范錚強之「玩線上遊戲是計劃行為嗎？從非計劃型的因素探討」：雖然計劃行為理論（Theory of Planned Behavior, TPB）對意圖與行為的解釋能力，已在眾多實徵研究中受到相當程度支持與重視。但是，真實世界中人類有許多行為卻不全然都是計劃行為，單純使用計劃型的理論並無法對人類行為解釋完全。因此，該研究以雙重處理模式（Dual Process Model）為立論基礎，在線上遊戲的研究情境下，將焦點放在可能對使用者實際行為造成改變的「當時狀態」，試圖探討「非計劃型」因素，對計劃行為理論模型的影響。該研究以問卷調查方式進行資料的蒐集，共取得 344 份有效樣本。研究結果發現：(1)行為意圖在研究中能夠被細緻化為玩線上遊戲意圖與當次投入遊戲時間量意圖，並分別為不同因素所影響。(2)在線上遊戲的情境下，沉浸經驗確實能夠延伸 TPB 來提高對實際投入遊戲時間量的瞭解；(3)描述性規範亦有助於對玩線上遊戲意圖的瞭解。

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Editor's Introduction

In this issue of *Journal of Information Management*, we are delighted to present four research papers. The summaries of these papers are as follows.

Ying-Jen Chen, Chen-Fu Chien and Hsin-Man Huang in their paper "Constructing a Data Mining Framework for Analyzing Defect Patterns of Color Filter and Microlens" employ data mining and big data analytics for troubleshooting and yield enhancement of CMOS image sensor (CIS) manufacturing and develop an effective solution. CIS manufacturers usually rely on domain knowledge for troubleshooting, yet it may not be effective nor efficient due to lack of experience and increasing complexity. Focusing on realistic needs, their study aims to develop a framework based on data mining and big data analytics for analyzing defect patterns in color filter and microlens to enhance yield. The proposed framework integrates data collection and preprocessing of defect patterns, univariate correlation analysis (by Chi-square independence test and Cramer's V correlation coefficient), and association rules (generated by Apriori algorithm via splitting dataset into training and testing repeatedly). The derived rules were evaluated by the indices of support, confidence, and lift. An empirical study was conducted in a leading CIS manufacturing company in Taiwan to validate the proposed approach. The results have shown the practical viability of the proposed approach to effectively and efficiently resolve the present problem. The study focuses only on three data types (including process tools, recipes, and process time) to generate rules to support troubleshooting. Future research could incorporate inline data such as metrology and equipment parameters to construct the model for further investigation. The color filter and microlens processes are critical for CMOS image sensor manufacturing. It is crucial to identify possible root causes of defect patterns to troubleshoot and enhance product yield and reduce the loss of reworks in short time. The proposed framework provides a systematic approach to identify the root causes of specific defect patterns effectively and efficiently.

Hung-Tai Tsou, Ja-Shen Chen and Hsuan-Yu Hsu in their paper "Learning for customization capability through agility: The case of the IT industry" present a new conceptualization of the relationship between learning and agility, demonstrating how

agility can be affected by learning. Their study also fills the gap in the literature that calls for an empirical examination of the mediating effect of agility in the relationship between learning and customization capability. The purpose of the paper is to examine this effect from the knowledge-based view (KBV). Data were collected from information technology (IT) firms in Taiwan. They contacted manufacturing managers to collect data. The questionnaires were distributed to 795 IT firms and 163 returned questionnaires were deemed usable. Further, the findings via the partial least squares (PLS) method indicate that learning relates positively to agility, which in turn relates positively to customization capability. In addition, learning relates positively to customization capability. Additionally, the mediating effect of agility on the relationship between learning and customization capability is significant. Given the wide range of potential antecedents to agility and the limited theoretical and empirical research that has been conducted to date on factors that lead to agility, future research studies might widen their examination to include other potential factors. Further, the self-reported measures for all constructs were obtained from the manufacturing managers, which may increase the potential for common method bias. Future research studies that rely on top or middle managers as their sources could help clarify whether the results reported herein are informant-sensitive. Managers need to actively manage the human capital of their firms through a variety of organizational learning practices to stimulate the capability in managing agile manufacturing and forming customization capability. To facilitate the link between learning and favorable customization capability, managers need to recognize the importance of agility. They should utilize external and internal learning to cultivate a better level of customer agility, partnering agility, and operational agility, which in turn will result in better customization capability.

Yuh-Jen Chen, Hui-Chuan Chu and Yuh-Min Chen in their paper “Acquiring Consumer Perspectives in Chinese eWOM” design an acquisition process to help an enterprise automatically acquire consumer comments from the Internet and rapidly reveal hidden consumer perspectives in Chinese eWOM contents. Based on the designed consumer perspective acquisition process, the techniques for acquisition are developed to facilitate the implementation of the consumer perspective acquisition system. Finally, the system is implemented to instantaneously acquire the Chinese eWOM articles of consumers and effectively extract hidden consumer perspectives to assist enterprises in

internal improvement and service innovation. The methodology can be developed by performing the following tasks: (i) designing a consumer perspective framework, (ii) designing a process for acquiring consumer perspectives, (iii) developing techniques related to consumer perspective acquisition, and (iv) implementing a mechanism for acquiring consumer perspectives. Finally, a system evaluation with the Delphi method for firm satisfaction is conducted to demonstrate that the developed method and system worked efficiently. After measuring firm satisfaction with the Delphi method, the findings indicated that over eighty percent of companies satisfied with the results from acquiring consumer perspectives in Chinese eWOM. Future research can extend the development of eWOM polarity analysis to effectively help an enterprise rapidly and accurately realize the current situation of eWOM to improve customer relationships. It is expected that the consumer perspectives offer enterprises an important reference of improving the internal environment and service innovation, and thus increase their global competitiveness.

Mei-Ju Chen, Yu-Wei Wang and Cheng-Kiang Farn in their paper “Is Playing Online Games a Planned Behavior? An exploration of the Realm of Unplanned Behavior” apply dual process model to investigate the unplanned behavior in the online game context. It advances TPB literature in explaining a novel realm of unplanned behaviors. The Theory of Planned Behavior (TPB) has been supported by many empirical studies for explaining the relationship between intention and behavior. In fact, many human behaviors do not always have plan before they actually display in the real world. Therefore, it is difficult to explain adequately human behavior simply through the TPB. The aims of this research are to think outside of TPB and to explore how the unplanned factor affects the subsequent behavior. Through the dual process model, the study focuses on the concept of temporal stability that could lead to the behavior changed from the unplanned behavior realm. Under the context of online game, 344 usable samples were collected from an empirical survey in Taiwan. Partial Least Square, a latent structural equations modeling technique, was utilized to test the posited research hypotheses. The results reveal that the behavior intention could be divided into general intention and specific intention for user to play online game. Besides, flow experience not only positively affects actual time amount of playing game, but also negatively moderates the relationship between specific intention to play online game and actual

time amount to play. Finally, the results also reveal that the descriptive norm could be seen as a good antecedent for explaining the behavior intention of playing online game. The paper provides several managerial implications with online game practitioners. First, game developers should concentrate on creating the flow experiences to their customers. Specifically, online game developers have to provide various mechanisms and opportunities to socialize in order for users to achieve complex goals and advance in the game. Furthermore, marketers should focus their attention on attracting more potential users by using various social media, such as Facebook, Line, etc.

Finally, on behalf of the editorial team, I would like to thank all the authors and reviewers for their collaborative efforts to make this issue possible. It is our sincere wish that this journal become a bilingual knowledge exchange platform among information systems researchers around the world.

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