編者的話

本期學報(23卷4期)共收錄了四篇論文,各篇的主題簡述如下:

蔡文隆、陳仲儼、李明達之「應用本體論來協助軟體專案進行流程調適」:對於軟體開發管理而言,組織通常會建立流程標準來讓各軟體專案據以執行。但鑒於軟體開發的獨特性,並非一套標準流程就可以完全套用在所有的軟體專案上。因此,企業組織需要訂定一套流程調適準則,讓專案成員根據不同專案所面臨的情境,依據調適準則而去調整實際的作法。然而,軟體流程調適是一個知識密集的活動,調適準則的制定或引用乃需要組織經驗方能提供適切的調適建議。故該研究嘗試建立一個以規則為基底的決策支援系統,運用本體論(Ontology)來建置一個知識與經驗導向的軟體流程本體模型,並據以發展出軟體專案流程調適推薦系統(Ontology-based software process tailoring recommendation system; OntoSPRS)。該系統透過推論規則的設計,收集調適經驗,並以推論引擎對知識本體進行推論並產生調適策略,可協助專案成員在軟體開發過程中能更完整地將組織經驗帶入而導出具體實作方方式。該研究並以一國內物流公司雲端企業資源規劃系統之實際案例來展示該研究所建構的軟體流程本體。

周韻寰、葉培琴、曾守正之「以社群人際關係為基礎之大眾共乘推薦系統」: 汽車共乘可算是友善社會環境的永續機制,因為可以藉此減少碳排放量、降低交 通阻塞的機率、以及停車空間的需求,還有節省燃油成本等。然而,由於某些原 因,例如,可能因為不熟悉共乘夥伴、彼此缺乏信任感、以及處於狹小汽車空間 感覺不舒適等,讓人們參與的意願大大降低。因此,該研究提出一個以社群互動 為基礎的共乘推薦模式,希望透過以人際關係權重高低做為信任因子以促使共乘 行為,並且提供使用者相似路徑資訊,以改善共乘系統的可用性與易用性。關於 人際關係權重的計算,該研究使用語意相似度的概念來設計屬性相似度,同時考 慮線上社群的互動頻率以及內在感受的關係因子。對於陌生的共乘者,透過共同 的朋友產生間接關係,以提升信任因子。在共乘系統部份,該研究分析使用者的 路徑資訊,找尋擁有相似路徑的使用者。該研究所定義的人際關係權重,可以使 用關係網格的伴隨係數得到合理的驗證。最後,該研究將使用者的人際關係權重 與可以共乘的路徑,透過天際線運算,產生具適地性服務的共乘推薦對象。該研 究使用一個小型範例來說明整體模型的可行性,對於共乘服務平台或服務商來 說,未來將可以從會員資料中,收集其參與共乘的歷史記錄,進行整體大數據分 析,以提供更佳的共乘服務,促進更多人的共乘意願。

王紹蓉、梁定澎、賴誼禎之「揭露與隱藏之拉鋸:人氣需求與隱私顧慮對臉書隱私管理行為之影響」: 社群用戶達全球之冠的臉書,具備高度分享性與社交性的平台特色,儘管許多使用者有隱私顧慮,甚至有人因此退出,但是並不影響其高使用人氣,大部分用戶仍不斷分享許多個人資訊,這種隱私與行為悖離的矛盾現象是值得探討的問題。該研究從傳播隱私管理論(communication privacy management; CPM)出發,探討社會隱私顧慮與人氣需求這兩主要因素,如何影響臉書使用者的隱私管理行為。該研究共蒐集 543 份問卷,以結構方程式分析的結果發現,社會隱私顧慮會正向影響邊界擁有行為,臉書人氣需求則會正向影響邊界滲透與邊界連結行為,但是不會影響邊界擁有行為。研究結果不僅延伸 CPM理論至臉書場域的應用,並以理論主軸-隱私管理乃風險與利益之權衡,其目的為追求兼具揭露需求的滿足與保有自我的最佳水平,為隱私態度與行為不一致之「隱私矛盾」現象,提供新的詮釋。

林建宏、周倩之「我國大專院校資訊相關科系學生之資訊專業倫理另有概念探究」:該研究旨在透過「資訊專業倫理另有概念雙層次測驗」440 份有效回收問卷,探討資訊科系學生可能存在之另有概念 (misunderstandings)。依據測驗結果,分析學生對於雙層次測驗之作答情況後,得以下研究結果。資訊科系學生對於倫理思考之另有概念包括「透過社會共識進行思考」以及「偏重手段合理而忽略目的合理」等。他們對於法律概念思考具有之另有概念包括「法律誤用」、「著作權、隱私等法律觀念不健全」以及「保密議題的判斷依據不清」等。對於專業人士的權利與義務,他們具有之另有概念包括「對產品的責任歸屬認同度不高」、「自我權益保障意識較高」以及「對公/私領域的界線劃分不甚清楚」等。該研究根據上述研究結果,對大專院校之資訊專業倫理課程規劃提出具體建議,供授課教師參考。

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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.

Wen-Lung Tsai, Chung-Yang Chen and Irwan Lika present their paper: "Applying ontology to software process tailoring". They are the first to develop a rule-based decision support system for software process tailoring. The study assists project specialists with project tailoring that complies with the organizational tailoring standard. Owing to the uniqueness in software development, their study develops an ontologybased software process tailoring recommendation system to manage quality and consistency in software development. The system includes a knowledge-intensive software process ontology model and features a rule inference engine for deriving tailoring strategies. The study found that the proposed system was able to improve tailoring recommendation outputs and make the underlying tailored strategy knowledge structure more accurate. Due to high project variability and complicated influence factors, more new research is needed in the future. Furthermore, the interactions among tailoring factors will derive even more tailoring rules in practice. Since the system developed is specifically configured to work with the case company, the system may not be able to meet all organizational requirements. In practice, individual organizations should customize the content of ontology, based on the organizational characteristics and its own process standard.

Annie Yun-Huan Chou, Pei-Chin Ye and Frank Shou-Cheng Tseng in their paper, "A carpooling recommendation system based on social network relationships," design a new approach to promote the willingness of carpooling based on interpersonal trust relationships derived from social networks. Their model enhances the degree of trust for users and in turn encourages more ride-share behaviors, which creates a core value of carpooling in terms of the user experience and trust relationships. Carpooling is an environmental-friendly and sustainable way to reduce carbon emissions, traffic congestion, parking spaces, and fuel costs for travelers. However, due to some reasons (e.g., people may not be familiar with each other, lack of trust, and feel uncomfortable in a small space inside the car), the willingness of participating in carpooling still needs to

be enticed. In their paper, they propose a carpooling recommendation model based on the interpersonal relationships derived from social networks. They believe the interpersonal trust is a critical factor to inspire the ride behavior in a carpooling recommendation system. By using the concept of hierarchical semantic network for calculating the attribute weights based on the frequency of interaction in online social networks, they can reasonably evaluate interpersonal relationships. For route analysis, they use Web GIS and spatial database methods to search similar travel routes by the paths generated from users' travel profiles, and then they reduce the obtained similar routes and store them in the spatial database. By taking into account recommendations from common friends, new relationships can be established, and the degree of trust can be promoted, which implies the trust weights of interpersonal relationships can be rationally verified. Their approach collects the similar itineraries and generates the recommendation result as a location-based service by using the skyline operation. The experiment considers only a small set of participants in a carpooling scenario to show the feasibility and illustrate the concept of their model. They suggest that carpooling platform/service providers may consider collecting their big data from their membership and daily riding profile to apply their model for offering better service and engendering more willingness in participation.

Shao-Jung Sharon Wang, Ting-Peng Liang, and Yi-Jen Lai in their paper, "Conceal or disclose: exploring factors affecting Facebook users' privacy management behavior," empirically explore Facebook users' balance between popularity need and privacy concerns within the context of CPM and provide suggestions to social platform developers as well as individual users. The worldwide popularity of Facebook signifies the human desire for identity, popularity, and relationships. While Facebook allows users with an opportunity to ideally present themselves and to reach a large audience base, concerns over privacy has also swirled. The goal of their study is to explore how Facebook users' needs for popularity and privacy concerns may influence their privacy management behaviors on Facebook within the theoretical framework of communication privacy management (CPM). An online field survey was conducted and structural equation modeling using AMOS was conducted to test the research model. The study found that social privacy concern is positively related to boundary permeability behavior. Need for popularity is also a significant predictor of boundary permeability and boundary linkage behavior. Findings of the study support the theoretical framework of

CPM and implications on privacy paradox are also explained. While a convenience sample was drawn in the current study and participants tend to be younger, future research may want to consider comparing Facebook privacy management strategies of two user groups, young and old. For the social platform developers, it is suggested that providing a wild variety of privacy setting functions is essential in the current market.

Chien-Hung Lin and Chien Chou in their paper, "Examining Taiwanese information sciences majors' misunderstandings of professional information ethics' privacy management behavior," provide first-hand information which identifies the important content of professional ethics curriculum. Teachers with acknowledgement of possible misunderstandings may as well reconstruct and build up students' knowledge more effectively while lecturing. Moreover, the self-developed two-tier test on professional information ethics provides a useful and valuable instrument for further studies. The current study intends to investigate and categorize Taiwanese information science majors' misunderstandings regarding professional information ethics. Using a 14-item two-tier test developed by the researchers, the study collected valid responses from 440 Taiwanese information science majors. The results are as follows: (1) The students have misunderstandings in ethical thinking, such as the possession of social consensus-based thoughts and the focus of means rather than goals. (2) The students have misunderstandings in laws, such as law-misinterpretation, the lack of knowledge in copyright/privacy laws, and insufficient conception of confidentiality. (3) The students have misunderstandings in their rights and obligations, such as the lack of attribution of responsibility to the product, over-emphasis on their personal-related rights, and insufficient conception on distinction between the public domain and the private domain. The current study applied convenience sampling, thus inherent bias may occur and the sample is not representative of the population being studied. Moreover, the research used Google forms to create the two-tier test, thus was unable to prevent the respondents from changing their previous answers while taking the test. According to the results, the researchers provided curriculum design implications for fostering ethical thinking, establishing the threshold concept of ethics-related laws and regulations, and identifying the empowerment of information professionals. Such concrete suggestions may benefit the design and development of information professional ethics curriculum in Taiwan's post-secondary education.

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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October 2016