## 编者的話

本期學報(24卷2期)共收錄了四篇論文,各篇的主題簡述如下:

周斯畏、許家祥、楊智彰、葉怡伶之「了解虛擬社群持續知識貢獻意圖-效益 與限制雙元觀點」:如何增加虛擬社群知識貢獻,已經成為業界與學界關注的議 題。由於虛擬社群中的知識貢獻存在著挑戰,過去的研究看法也不一致,為了填 補這些研究缺口,該研究整合社會影響力與社會交換中的效益與限制雙元模式, 發展理論模式來解釋持續知識貢獻意圖的成因。理論模式的重點在於了解社會關 係的內涵、成因、與影響。依據雙元模式,該研究將快速關係視為社會關係的具 體實現,並且專注在效益導向與限制導向兩個層面,同時考量其成因與對持續知 識貢獻意圖的影響。另外,該研究將社會影響力視為快速關係的成因,包括社群 參與以及線上自我呈現來反映社會影響力。該研究模式透過分析 233 份問卷的實 證研究結果,支持所提出的模式。結果顯示,社會影響力正面影響快速關係的建 立,這種關係進一步影響持續知識貢獻意圖。該研究並討論結果的理論與管理意 涵。

陳林志、葉國暉、陳大仁、陳冠瑜之「基於時間參數提昇谷歌部落格搜尋引 攀效能」:部落格搜尋引擎是一種類似於谷歌的搜尋引擎,因為它們會自動收集來 自網路上大量的資訊,並利用免費的介面讓一般人能搜索它們的資料庫。兩者之 間的差異在於,部落格搜尋引擎主要是針對部落格進行索引並篩選掉一般的網 頁,這個功能讓部落格搜尋引擎增加了一些特殊和獨特性。首先,每個部落格都 有一個發佈日期,而部落格搜尋引擎可以顯示文章的發佈日期,相比一般搜尋引 攀只能顯示最後更新日期,有時這些日期卻是不可靠的。其次,部落格搜尋引擎 能抓取部落格文章發佈日期,相較於一般的搜尋引擎雖然有進階的搜索選項可以 顯示日期,但這些都僅限於網頁的最後修改日期。該論文使用四種語意模型分析 谷歌部落格引尋引擎:潛在語意分析(LSA)、機率潛在語意分析(PLSA)、潛在 狄利克里分配(LDA)、關係主題模型(RTM)。另外,該研究提出一個利用時間 參數來改良 RTM 的變形模型。根據實驗的結果,改良的 RTM 模型結合時間參數 能提高谷歌部落格引擎效能。

張宏昌之「ccTLDs 在 DNSSEC 建置發展及推動現況之比較」:在這個資訊網路普及的時代,隨著人們對網際網路的依賴日漸增加,網路的安全性早已是不可

忽視的問題。網路攻擊、犯罪手法層出不窮,其中又以「網路釣魚」最為常見, 有鑑於此,許多國家紛紛引入具有「資料完整性」、「來源可驗證性」與「可驗證 之不存在性」三大特性的 DNSSEC 來解決這樣的問題。雖然 DNSEEC 相較於傳 統的 DNS 服務提供了更強大的安全性,可是其需要的較高的技術門檻以及缺乏對 相關人士的升級部署誘因卻也讓 DNSSEC 在推廣上遇到了不少困難。為了瞭解全 球各頂級國碼域名在 DNSSEC 推動發展狀況,以作為台灣未來在部署、維運 DNSSEC 服務上之重要參考,該研究利用問卷和 E-Mail 的方式與各國相關人士進 行訪談,並且同時以於網路上所蒐集的資料輔以佐證,最後再實際透過第三方的 測試軟體對所得資訊進行全球不同區域主要頂級國碼域名在 DNSSEC 整體建置推 動之驗證、比較與分析研究,希望能夠藉由這些寶貴的經驗與資訊實際瞭解並掌 握目前各國在推動 DNSSEC 服務上的發展情形,包括組織編制、實作方法、成本 預算、進度與時程以及遭遇困難和解決方法等等。該研究發現,各國在實作 DNSSEC 方法與推廣、部署過程上都有許多相似的地方,由於現今資訊網路發 達,即使是遭受海洋或叢山峻嶺的阻隔,相隔幾千里的國家也能透過 E-Mail 等交 談工具以及 RIR 與 ICANN 等組織的協助,輕易學習、分享彼此在部署上的技術 與經驗,而造成各國在建設進度上出現落差的原因,除了與可利用的經費有關之 外,該國的風土民情也是影響 DNSSEC 部署建設的因素之一。

陳美如、陳純德之「團購網站中信任確保論述經由中央及週邊路徑對消費者 信任影響之研究:思考可能性模型與團購價格感受調節效果之分析」:該研究以思 考可能性模式(Elaborate Likelihood Model)為立論基礎,試圖瞭解消費者如何透 過中央路徑(論述品質)與周邊路徑(來源可信度),形成對特定團購網站 (Groupon 模式)的信任,以及信任對後續相關行為意圖的影響。此外,該研究 也進一步深入探討,團購價格感受高低差異如何分別調節,論述內容品質及來源 可信度對團購網站信任的關係。研究係以實驗室實驗法進行,研究中共有 8 種實 驗情境(包括 2 種論述內容品質×2 種論述來源×2 種團購價格感受)。實驗結果 總共獲得 274 份完整的實驗數據。研究結果發現:(1)論述內容的品質以及論述來 源的可信度均會正向顯著地影響消費者對團購網站的信任。(2)在調節效果的部 份,當消費者對團購價格的感受為高時,其對團購網站的信任會隨著論述內容品 質的提高而增加。另一方面,當團購價格感受為低時,對團購網站的信任則會隨 著論述來源可信度的提高而增加。(3)消費者對團購網站的信任會分別正向顯著地 影響其購買意圖以及推薦行為。最後,該研究貢獻在於,研究結果除了能夠作為 網路團購環境中,信任確保論述相關研究之積累外,同時對於團購網站業者該如 何增強消費者對網站之信任,也提出諸多建議。

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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.

Shih-Wei Chou, Chia-Shiang Hsu, Chih-Chang Yang and I-Ling Yeh in their paper "Understanding Continued Intention of Knowledge Contribution-Dual Model of Dedication-Constraint" propose new insights into how to build swift guanxi and what is the impact of different types of swift guanxi (dedication-based, constraint-based) on continuance for knowledge contribution in an e-community setting. Their study aims to understand the formation of knowledge contribution in e-communities from a dedicationconstraint perspective. The study uses a survey-based approach to collect data from 233 respondents, and PLS method is used to analyze the data. Empirical results show that social influence positively affects swift guanxi, which in turn exerts positive influence on continuance for knowledge contribution. The generalization of their findings to western countries should focus on the impact of culture difference on social influence, and how this influences knowledge contribution. Their results provide e-community managers with guidelines regarding the antecedents and consequences of building swift guanxi. Specifically, they offer evidence on the impact of these antecedents, in terms of ecommunity involvement and online self-presentation norms. They conceptualize swift guanxi as two dimensions, including dedication-based and constraint-based, and show that they have positive influence on knowledge contribution. The measurement of these dimensions, involvement, and self-presentation norms give managers detailed guidelines about e-community management.

Lin-Chih Chen, Kuo-Hui Yeh, Da-Ren Chen and Guan-Yu Chen in their paper "Improving the Performance of Google Blog Search Based on the Time Parameter" propose a variant of RTM, which mainly focuses on the time parameter. Blog search engines are similar to web search engines like Google in that they automatically gather large quantities of information from the web and give a free interface to allow the public to search their databases. In the paper, they use four kinds of semantic models to analyze Google blog search engine: Latent Semantic Analysis (LSA), Probabilistic Latent Semantic Analysis (PLSA), Latent Dirichlet Allocation (LDA), and Relational Topic Model (RTM). According to the result of experiment, their modified RTM's model can effectively combine the time parameter to Google blog search engine. The main difference between the two is that blog search engines mainly index blogs and ignore the rest of the web. The special features of blogs give blog search engines some specific and unique attributes. First, since each blog posting is dated, blog search engines can reported the date at which the posting was created. For normal web pages, search engines can only report the last updated date, and that is often not very reliable. Second, many blog search engines have a date-specific search capability. Again, some general search engines have that as an advanced search option, but only for the last modified date of pages.

Hung-Chang Chang in his paper "The Comparison of DNSSEC Development and Implementation for ccTLDs" states that deployment system for DNSSEC greatly reduces the complexity of deployment tasks which has many advantages, including Friendly interface, Real-time information, Integration, and Security. In the future, people will actively use the system in DNSSEC deployment. DNSSEC is the next generation of Internet infrastructure. For a more stable and secure network environment, countries around the world are actively promoting the deployment. In view of this, the paper purposeis to survey status of DNSSEC implementation to help technology and promoting staff to do evaluation, promotion DNSSEC deployment easily in Taiwan. Detection and Statistics are the most important features of DNSSEC deployment survey. People can use the feature to detect their service to obtain the status of DNSSEC deployment and its environment. People observe the target object, and record their resource record. Then people can analyze these data to estimate the status of deployment of the target objects. Finally, people will refer the results to the relevant personnel. DNSSEC deployment issue in recent years have been enthusiastically discussed and implemented. DNSSEC is indispensable role next generation. For that reason, the study introduced related knowledge in the first place and proposed an Auxiliary Deployment System for DNSSEC to help our government to more easily promote the deployment. DNSSEC does not provide confidentiality of DNS responses or communications between DNS clients and servers. It also does not prevent attacks on DNS servers using other parts of the network stack - for instance, implementation of DNSSEC does not

protect against distributed denial of service attacks or IP spoofing. Unlike the majority of Top Level Domains (such as .com and most Asia ccTLDs), .tw does not offer registrations at the second level. The .tw zone is partitioned into 14 second level domains, and the remainder (such as .gov.tw, and mod.tw) are managed within the public sector. In spite of the high level of second level domains, .co.tw is by far the largest of the zones managed by Hinet, accounting for between 92-95% of monthly registrations over the past five years. For a TLD structured into second level domains, like .tw, implementing DNSSEC is more complex than with other TLDs. In reality, it did not introduce DNSSEC to .tw domain name registrants, Only then was it possible for .tw registrars to complete the chain of trust through to individual domains.

Mei-Ju Chen and Chun-Der Chen in their paper "How Trust-Assuring Arguments Affect Consumer Trust in Group-Buying Website through the Central Route and the Peripheral Route: The Perspective of Elaboration Likelihood Model and the Moderating Effect of Perceived Price" are the first that applies ELM model to investigate the effect of trust-assuring arguments on consumer trust from the content quality (central route) and the source credibility (peripheral route), and the consequent impact on consumer's behavior intention within the context of group-buying website. Their paper advances relevant literatures and insights in explaining the effects of dual route persuasion for Internet group buying behavior. The paper concludes with implications for online group buying scholars and practitioners, and future directions for possible research are also discussed. Internet group buying is one of the most successful business models and strategies for e-commerce marketplace. However, increasing problems, such as defective goods or sales entanglements, have swayed consumer's confidence. As a result of lack of trust, these elevated risks and concerns have been found to inhibit and constrain the development of group buying transactions. Therefore, the objective of the study is to investigate the effects of trust-assuring arguments on consumer trust from the content quality (central route) and the source credibility (peripheral route), and the consequent impact on consumer's behavior intention within the context of group-buying website. Furthermore, the study also examines the extent to which argument quality and source credibility influence the formation of trust is moderated by the degree of perceived price (e.g., high or low). The study draws on the elaboration likelihood model (ELM), and they conduct the study with experimental design approach. They chose American fried

chicken website as their experimental context, since it is student's most favorite store for attending. The website for experiment is created by authors and the website layout and functions are all simulated with the real-world online group buying website. Besides, factors, such as content quality, source credibility and perceived price, are treatments to be manipulated under two levels, such as high or low. Data for other constructs are then collected through the usage of questionnaire. Lastly, 123 subjects are for pre-test, and 274 subjects are for formal study. The research result indicates, firstly, the trust-assuring arguments, including argument quality and source credibility, affect consumer's trust toward website of group buying. Second, the price plays significant moderating role. Under a higher perceived price condition but with lower trust-assuring argument perception, consumer will then perceive higher degree of transaction cost and decrease the degree of trust toward Internet group buying website. On the contrary, under a higher perceived price condition but with higher trust-assuring argument perception, that would then increase the higher level of consumer's trust toward the website. Furthermore, under lower perceived price and lower trust-assuring argument perception, even consumers perceived lower degree of risk, degree of their trust would not be increased accordingly. However, under lower perceived price and higher trust-assuring argument perception, consumers would then feel higher degree of assurance, and the degree of trust toward website would be then enhanced too. For limitation, first, experimental subjects in the study are students. Despite their characteristics are homogeneous which are suitable for theoretical perspective testing in general, their findings might not be generalized to other contexts properly. Second, the study employs American fried chicken website as experimental setting. Likewise, their findings from such service might also not be generalized to other service contexts in proper as well. For academic implications, first, the study reinforces that institutional trust building mechanism is an important determinant for enhancing consumer's trust and subsequent transaction intention. Second, the research is consistent with prior ELM studies by illustrating how to facilitate consumer's trust through paths from argument quality (central route) and source credibility (peripheral route). The paper provides several managerial implications for Internet group buying management. First, for augmenting consumer's higher degree of argument quality perception, descriptions for argument should include precise title wording (claim), and then provide acceptable explanation (data and backing). Second,

since trust formation from central route (argument quality) will be long-lasting than from the one from peripheral route (source credibility), they suggest that group buying managers can use persuasive photos or concrete evidences, such as bank guarantee, escrow assurance or risk guarantee from stores, to enhance consumer's higher perception of argument quality. Lastly, due to significant effect of source credibility, the study also suggests the use of well-known third-party recommendations, such as spokesman or opinion leaders, to increase the degree of source credibility perception.

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 abilingual knowledge exchange platform among information systems researchers around the world.

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