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A STUDY OF ENTREPRENEURS IN CONTENT  
PROCESSING SOFTWARE INDUSTRY  
IN TAIWAN

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### **A Study of Entrepreneurs in Content Processing Software Industry in Taiwan**

#### **Synopsis:**

A preliminary list of potential entrepreneurs' attitudes and behaviors in content processing software industry were identified and compiled. Subsequently, qualitative content analysis and expert interviews were conducted to consolidate this preliminary list into a final set of twelve attitudes and behaviors under eight categories –“commitment and determination”, “leadership”, “opportunity obsession”, “tolerance of risk, ambiguity and uncertainty”, “creativity, self-reliance and adaptability”, and “motivation to excel”, “social media”, “big data” and “experiences”.

# A study of Entrepreneurs in Content Processing Software Industry in Taiwan

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## **Abstract**

Home network and telecommunication network have become so widespread that all of their components such as social network, media, games, videos, and educational materials have upgraded to having the Internet as a platform. This is also changing the ways people communicate and interact accordingly. Nowadays, we can see numerous entrepreneurs offering innovative services and products in this growing field. Nonetheless, ninety percent of all apps in app store are all invisible. Based on existing literature, a preliminary list of potential entrepreneurs' attitudes and behaviors in content processing software industry were identified and compiled. Subsequently, qualitative content analysis and expert interviews were conducted to consolidate this preliminary list into a final set of twelve attitudes and behaviors under eight categories – “commitment and determination”, “leadership”, “opportunity obsession”, “tolerance of risk, ambiguity and uncertainty”, “creativity, self-reliance and adaptability”, and “motivation to excel”, “social media”, “big data” and “experiences”. Through this set of twelve factors, the entrepreneurs who attempt to enter or who are already in this area can make improvements and certain adjustments.

**Key words:** Content Processing Software Industry; Entrepreneurs

## **Introduction**

### **a. General statement of the problem**

Home network and telecommunication network have become so widespread that all of their components such as social network, media, games, videos, and educational materials have upgraded to having the Internet as a platform. This is also changing the

ways people communicate and interact accordingly. Nowadays, we can see numerous entrepreneurs offering innovative services and products in this growing field such as Shang Nong Xiao's Icook, Yi Wei Zhan's Voicetube and Mark Zuckerberg's Facebook. According to Taiwan Industry, Commerce and Services Census, we can see the number of entrepreneurs is increasing (Directorate-General of Budget Accounting and Statistics, Executive Yuan, R.O.C, 2014). Nonetheless, ninety percent of all apps in app stores are invisible (McCarthy, 2016). The Industrial Development Bureau, ministry of economic affairs in Taiwan (2015), points out that the shortage of professions, funding, skills and market is causing a delay in content processing software in Taiwan. On the other hand, without an entrepreneur, the company will fail. Also, there are certain attitudes and behaviors that entrepreneurs should acquire, develop, practice and refine through a combination of experience and study (Timmons and Spinelli, 2006). Consequently, the main purpose of this research is to identify the desirable and acquirable attitudes and behaviors of successful entrepreneurs in content process software industry.

#### **b. Assumptions, Limitations**

According to the traffic statistics of Alexa.com, successful websites are included in the top 500 websites of 2016. Also, the apps, which have entered in the top charts of each category in Apple's app store and Google play, are included.

### **Review of the literature**

#### **Content processing software in Taiwan**

According to the Law for the Development of the Cultural and Creative Industries released by Ministry of Culture of Taiwan in 2010, Taiwan's digital content industry has eight sub-categories, one of which is content processing software. The Ministry of Economics Affairs, R.O.C (2014) contends "A software, tool or platform which makes, manages, organizes and transmits digital contents is called content processing software."

#### **Definition of Entrepreneurs in Content processing software Industry**

One of the earliest definitions of an entrepreneur was that of Cantillion (circa 1700) who described the individual as a rational decision maker who assumed the risk and provided management for the firm (Kilby, 1971).

Based on the above definitions, this research defines the successful entrepreneur in content processing software as "a rational decision maker who assumed the risk and

provided management for a software, tool or platform by making, managing, organizing and transmitting digital contents”.

## Six themes of desirable and acquirable attitudes and behaviors

According to Timmons and Spinelli (2006), there are six dominant themes emerged from what successful entrepreneurs do and how they perform. The six dominant themes include “commitment and determination”, “leadership”, “opportunity obsession”, “tolerance of risk, ambiguity and uncertainty”, “creativity, self-reliance and adaptability”, and “motivation to excel”.

## The attitudes and behaviors of entrepreneurs in content software industry

Based on existing literature, a preliminary list of potential entrepreneurs’ attitudes and behaviors in content processing software industry was identified and compiled.

**Table 1: the attitudes and behaviors of entrepreneurs in content processing software industry**

Attitudes and behaviors	Main reference	Entrepreneurs
1. persistent in solving problems	Xiao-Fan, Lai (2013); Qiao-Ting, Chen(2016)	Li-Cheng, Huang Yi-Wei, Zhan
2. Tolerates uncertainty and lack of structure	Timmons and Spinelli (2006); Xiao-Fan, Lai (2013); Y Combinator (2016); Zi-Ning, Liu(2016)	Li-Cheng,Huang You-Cheng, Zhang Yi-Wei, Zhan Mark Zuckerberg
3. able to determine the market and the customers’ needs rapidly	Timmons and Spinelli (2006); Xiao-Fan, Lai (2013); Y Combinator (2016); Ai, Ceng(2016); Jenus(2016); Xiang-Xiang, Hu(2016)	Yi-Wei, Zhan Shang-Nong, Xiao Yi-Ru, Lin Zhi-Wei, Li Jian-Kai, Lup Mark Zuckerberg
4. Has a firm belief and carries it out	Y Combinator (2016)	Mark Zuckerberg
5. taking entrepreneur training programs and courses	Ai, Ceng(2016)	Jian-Kai, Lup

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6. Has a coding /computer science background	Xiao-Fan, Lai (2013); Y Combinator (2016); Ai, Ceng(2016); Zi-Ning, Liu(2016)	Shang-Nong, Xiao Yi-Ru, Lin Zhi-Wei, Li Jian-Kai, Lup Mark Zuckerberg Yi-Wei, Zhan
7. Relevant business experiences	Doutriaux (1992);Yusuf (1995); Xiao-Fan, Lai (2013); Y Combinator (2016); Xiang- Xiang, Hu(2016); Yi-Wei, Zhan	Shang-Nong, Xiao Yi-Ru, Lin Zhi-Wei, Li You-Cheng, Zhang
8. Experiences in content software industry	Xiao-Fan, Lai (2013)	Yi-Wei, Zhan Shang-Nong, Xiao Yi-Wei, Zhan
9. Using social media for marketing	Xiang-Xiang, Hu(2016)	Shang-Nong, Xiao You-Cheng, Zhang
10. Constantly brings forth new ideas and improves the functions of the software	Y Combinator (2016); Jenus(2016); Qiao-Ting, Chen(2016); Ting-Fang, Zheng(2015)	Mark Zuckerberg Li-Cheng, Huang Yi-Wei, Zhan
11. Hires talented people	Y Combinator (2016)	Mark Zuckerberg
12. big data marketing		You-Cheng, Zhang
13. expands into international market	Zhi-Rong, Guo(2016)	Yi-Wei, Zhan
14. Innovative business ideas that attract investments	Xiao-Fan, Lai (2013); Jenus(2016); Zi-Ning, Liu(2016)	Shang-Nong, Xiao Li-Cheng, Huang Yi-Wei, Zhan

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## Research Methodology

Based on Taiwan government reports and existing literature, qualitative content analysis was executed to identify and compile a preliminary list of potential entrepreneurs' attitudes and behaviors in content processing software industry. Subsequently, triangulation and expert interviews as well as interviews with two entrepreneurs in content

software industry in Taiwan and two professional researchers dedicated in business management were conducted, all in an effort to consolidate this preliminary list.

## Research Findings

Synthesizing the content analysis and the result of interviews and their similarities and differences were analyzed as the form.

**Table 2: the list of attitudes and behaviors of entrepreneurs under eight themes in content software industry**

Themes	Attitudes and behaviors	Entrepreneurs
Commitment and determination	persistent in solving problems	Li-Cheng, Huang
Leadership	Hires talented people	Mark Zuckerberg
Opportunity obsession	1. able to determine the market and the customers' needs rapidly	Yi-Wei, Zhan Shang-Nong, Xiao Yi-Ru, Lin Zhi-Wei, Li Jian-Kai, Lup
	2. expands into international market	Mark Zuckerberg Yi-Wei, Zhan
Tolerance of risk, ambiguity and uncertainty	Tolerates uncertainty and lack of structure	Li-Cheng, Huang You-Cheng, Zhang Yi-Wei, Zhan Mark Zuckerberg Yi-Wei, Zhan
Creativity, self-reliance and adaptability	Constantly brings forth new ideas and improves the functions of the software	Mark Zuckerberg Li-Cheng, Huang Yi-Wei, Zhan
Motivation to excel	Has a firm belief and carries it out	Mark Zuckerberg
Experiences	1. Has a coding /computer science background	Yi-Wei, Zhan
	2. Relevant business experience	Shang-Nong, Xiao

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		Yi-Ru, Lin
		Zhi-Wei, Li
		You-Cheng, Zhang
	3. Experiences in content software industry	Mark Zuckerberg
		Yi-Wei, Zhan
		Shang-Nong, Xiao
		Yi-Wei, Zhan
Social media	Social media application in marketing, communication and management	Shang-Nong, Xiao
		You-Cheng, Zhang
Big data	big data for decision making	You-Cheng, Zhang

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## Discussions and Implications

1. The preliminary list of attitudes and behaviors of entrepreneurs in content software industry is a set of twelve attitude and behaviors under eight categories. Due to changes in time, technology and medias, other three themes are found – experiences, social media and big data.
2. Having a coding background, relevant business experiences or software industry related experiences are the basis of success.
3. The entrepreneurs in content software industry all are able to observe the market and the customer needs and provide the services that meet customers' needs.
4. Big data is a basis of information integration for entrepreneurs to make decisions.
5. For the people who are considering entering or who are already in content software industry, it is necessary to enhance the ability of globalization. For example, providing a multi-language platform and considering different cultures are crucial.
6. For the people who are considering entering or who are already in content software industry, entrepreneurs can use social media to increase public exposure to their brand and attract new customers on all social platforms daily.

## Reference

- Ai, Ceng. (2016, June 15). From developer to independent startup company. *Business Next*. Retrieved October 1, 2016, from, <http://www.bnext.com.tw/article/view/id/39896>
- Doutriaux, J. (1992) Emerging high-technology firms: How durable are their comparative startup advantages. *Journal of Business Venturing*, 7(4), 303-322.
- Industrial Development Bureau, ministry of economic affairs in Taiwan (2015) *2014 Digital Content Industry in Taiwan*. Retrieved April 25, 2016, from <http://dcipoorgtw.files.wordpress.com/2015/12/2014industry.pdf>
- Janus. (2016, May 6). 17 App founder talk about future strategies. *Techbang*. Retrieved October 1, 2016, from <http://www.techbang.com/posts/43174-17-live-founder-huang-jeff-talks-about-the-future-strategy-we-are-new-media-platforms-and-not-show-host-makes-money-by-gift-is-not-the-right-way>
- Kilby, P. (1971). Hunting the heffalump. In *Entrepreneurship and Economic Development*. New York, NY: The Free Press, 27-35.
- McCarthy, N. (2016, September 5). 90% of all iOS Apps are zombies. *Statista*. Retrieved April 3, 2016, from <https://www.statista.com/chart/5715/90-of-all-ios-apps-are-zombies/>
- Ministry of Culture (2010) *Law for the Development of the Cultural and Creative Industries*. Retrieved October 17, 2016, from [http://www.moc.gov.tw/information\\_306\\_19693.html](http://www.moc.gov.tw/information_306_19693.html)
- Ministry of Culture (2015) *2015 Taiwan Culture & Creative Industries Annual Report*. Retrieved May 1, 2016, from <http://stat.moc.gov.tw/Research.aspx?type=5>
- Qiao-Ting, Chen. (2016, May 23). The secret to success. The biggest English instruction app in Taiwan. *Unbiggie*. Retrieved October 7, 2016, from <http://unbiggie.com/%E5%89%B5%E6%A5%AD%E8%A7%80%E9%BB%9E/2%E5%80%8B%E7%B6%B2%E8%B7%AF%E5%B9%B3%E5%8F%B0%E6%9C%83%E6%88%90%E5%8A%9F%E7%9A%84%E7%A7%98%E5%AF%86-%E5%8F%B0%E7%81%A3%E6%9C%80%E5%A4%A7%E8%8B%B1%E8%AA%9E%E5%AD%B8%E7%BF%92%E5%B9%B3%E5%8F%B0>voicetub/
- Timmons, J. A., & Spinelli, S. (2006) *New venture creation: Entrepreneurship for the 21st century (7th ed.)*. London: McGraw Hill Higher Education.

- Ting-Fang, Zheng (2015, March). Learning English with videos to talk in English fluently. *Global Views Monthly*. Retrieved October 17, 2016, from [http://www.gvm.com.tw/Boardcontent\\_27340.html](http://www.gvm.com.tw/Boardcontent_27340.html)
- Xiang-Xiang, Hu. (2016, February 4). He makes people come up with Orange Bear when it comes to leggings. *Business weekly*. Retrieved October 1, 2016, from <http://www.businessweekly.com.tw/KWebArticle.aspx?ID=60809&pnumber=1>
- Xiao-Fan, Lai (2013). Innovative business attracts investments. *Business Today*. Retrieved October 17, 2016, from <http://www.businessstoday.com.tw/article-content-80408-94550?page=1>
- Y Combinator (2016, August 16). *Mark Zuckerberg: How to build the future* [Motion picture] United States: Ycombinator. Retrieved from <https://www.youtube.com/watch?v=Lb4IcGF5iTQ>
- Yi-Wei, Zhan, & Zi-Ning, Liu. (2016, March 29). Startup business: balance work and family and life. *30* Retrieved October 7, 2016, from [http://www.30.com.tw/article\\_content\\_30985.html](http://www.30.com.tw/article_content_30985.html)
- Yusuf, A. (1995) *Critical success factors for small business: Perceptions of south pacific*. *Journal of Small Business Management*, 33(2), 68-72
- Zhi-Rong, Guo. (2016, June 1). Taiwan-based VoiceTube: Facebook's 2016 App of The Year. *Next Business*. Retrieved October 7, 2016, from <http://www.bnext.com.tw/article/view/id/39785>