

## Course Syllabus: Technology Management Theory II (Spring 2016)

Instructors: Associate Professor Yu-Wen Liu (YL); Associate Professor Tommy Shih (TS)

Class Meetings: 5:30-8:00 pm; Mondays at 台積館 802

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Office hours: After appointment

### Content

This course will be conducted in English and aims to introduce to PhD students in Technology Management various theories and perspectives in *Innovation studies* and *Technology management*. Students are expected after the course to be able to:

- *Independently reflect on the scientific basis of various theories and analytical perspectives in Innovation studies and Technology management.*
- *Demonstrate an ability to summarize main research articles with respect to their contribution, and positioning within a larger field of research.*
- *Present in a clear way, orally as well as written, the above.*

The course will consist of lectures and seminars. The structure of the seminar divides into article presentations and discussion.

### Seminar structure

Two articles will be discussed in each seminar. One student will be a designated presenter of one of the articles. The presenter needs to prepare a 20-minute presentation of the assigned article (the presentation should be made available to all other students at latest the day of the presentation). Thereafter a review of the article shall be presented (20 minutes) and include:

- How does the author(s) problematize and position the article (theoretical field/paradigms, empirical contribution etc.).
- Does the paper contribute as it promises at the beginning of the article?
- What are the strengths and shortcomings of the article?
- How can this article be improved?

The rest of the class is expected to have read the 2 assigned articles for each seminar, and will be based on the presentation, discuss the items, which the review identifies as relevant. Note that it is not a discussion on the review per se but on the points being raised concerning the merits, weaknesses, and potential for new ideas of the presented article. 20 minutes will be allocated for the general discussion. Note that it is important to also relate to other literature and scholarly pieces in the theoretical fields, which the articles seek to contribute to (i.e. you are expected to have read more than the two articles for each seminar).

After both articles have been presented and discussed individually, the seminar will end with a discussion of how the articles relate or do relate to each other. Issues that can be raised are for example: What are the theoretical premises? What are the different standpoints that make them different etc.?

### **Mid-term assignment**

The mid-term assignment consists of writing an extended introduction (to an imagined article), in a topic, which is relevant for your PhD project. The paper should consist of:

- General context
- Identification of a research gap
- How other scholarly work has approached the topic
- How the research position against or with each other

The paper should be complete with reference list, and be around 1500-2000 words (excluding reference list).

### **Final assignment**

Please choose a topic with different research model/framework from your mid-term assignment. The paper guideline is the same as mid-term paper's.

### **Participation and grading:**

The participation in the seminars is mandatory (a make-up assignment will be required for a missed seminar). The grading of the course will be based on:

- Active participation during seminars and classes 20%
- Formal seminar assignments 20%
- Mid-term exam 30%
- Final exam 30%

### Schedule

W.	Date	Class	Content
1	2/15	Introduction and lecture (TS)	<p>The introduction of the course will cover the contents of the course including assignments, readings etc., the learning objectives and the grading. The second part of the class will discuss the topic: What is theory?</p> <p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• DiMaggio, P. (1995) Comments on what theory is not. <i>Administrative Science Quarterly</i>, 40, 391-397.</li> <li>• Sutton, R. &amp; Staw, B. (1995). What theory is not. <i>Administrative Science Quarterly</i>, 40, 371-384.</li> <li>• Weick, K. (1995). What theory is not, theorizing is, <i>Administrative Science Quarterly</i>, 40, 385-390.</li> </ul>
2	2/22	Innovation systems (TS)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Lundvall, B-Å . (2007). National innovation systems - analytical concept and development tool. <i>Industry and innovation</i>, 14, 95-119.</li> <li>• Markard, J. &amp; Truffer, B. (2008). Technological innovation systems and the multi-level perspective: Towards an integrated framework. <i>Research Policy</i>, 37, 596-616.</li> </ul>
3	2/29	No class	
4	3/7	Congruence (YL)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Zhang, Z., Wang, M. &amp; Shi, J. (2012). Leader-follower congruence in proactive personality and work outcomes: The mediating Role of leader-member exchange. <i>Academy of Management Journal</i>, 55(1), 111-130.</li> <li>• Edwards, J. R. &amp; Cable, D. M. (2009). The value of value congruence. <i>Journal of Applied Psychology</i>, 94, 654-677.</li> <li>• Shi, W. &amp; Prescott, J. E., (2012). Rhythm and entrainment of acquisition and alliance initiatives and firm performance: A temporal perspective. <i>Organization Studies</i>, 33, 1281-1310.</li> </ul>

5	3/14	Innovation in networks (TS)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Dhanaraj, C., &amp; Parkhe, A. (2006). Orchestrating innovation networks. <i>Academy of Management Review</i>, Vol. 31, pp. 659-669.</li> <li>• La Rocca, A., &amp; Snehota, I. (2014). Relating in business networks: Innovation in practice. <i>Industrial Marketing Management</i>, 43, 441-447.</li> </ul>
6	3/21	Group Dynamics & Teamwork (YL)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Edmondson, A. (1999). Psychological safety and learning behavior in work team. <i>Administrative Science Quarterly</i>, 44(2), 350-383.</li> <li>• van Knippenberg &amp; Schippers – ARP 2007-Work group diversity.</li> <li>• De Deru, C.K.W. &amp; Weingart, L.R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. <i>Journal of Applied Psychology</i>, 88(4), 741-749.</li> </ul>
7	3/28	Entrepreneurship and systemic innovation (TS)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Autio, A., Kenney, M. Mustar, P. Siegel, D. &amp; Wright M. (2014). Entrepreneurial innovation: The importance of context. <i>Research policy</i>, 43, 1097-1108.</li> <li>• Clarysse, B., Wright, M. &amp; Van de Velde, E. (2011). Entrepreneurial origin, technological knowledge and the growth of spinoff companies. <i>Journal of Management Studies</i>, 48, 1420-1442</li> </ul>
8	4/4	No class	
9	4/11	Value creation and co-creation (TS)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Grönroos, C. (2011), Value co-creation in service logic: A critical analysis, <i>Marketing Theory</i>, 11, 279-301.</li> <li>• Vargo, S. L., Maglio, P. P. &amp; Akaka, M. A. (2008), On value and value co-creation: A service systems and service logic perspective, <i>European Management Journal</i>, 26, 145-152</li> </ul>
10	4/18	Mid-term exam (TS)	The paper is due on the 12 <sup>th</sup> of April and sent to the teachers as well as all classmates via email. During the mid-term seminar each paper will be get 15 minutes for presentation (power point). Each paper will also get assigned a discussant, which will comment on the paper.
11	4/25	Mid-term exam (TS)	The paper is due on the 12 <sup>th</sup> of April and sent to the teachers as well as all classmates via email. During the mid-term seminar each paper will be get 15

			minutes for presentation (power point). Each paper will also get assigned a discussant, which will comment on the paper.
12	5/2	Multi-level research (YL)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Liao, H., &amp; Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. <i>Academy of Management Journal</i>, 47(1), 41-58.</li> <li>• Hitt et al. (2007). Building theoretical and empirical bridges across levels: multilevel research in management. <i>Academy of Management Journal</i>, 50(6), 1385-1399.</li> </ul>
13	5/9	Knowledge sharing (YL)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Hansen et al. (2005). Knowledge sharing in organizations: Multiple networks, multiple phases. <i>Academy of Management Journal</i>, 48(5), 776-793.</li> <li>• Liu, Y., Keller, R.T. &amp; Shih, H. (2011). The impact of team-member exchange, differentiation, team commitment, and knowledge sharing on R&amp;D project team performance. <i>R&amp;D Management</i>, 41(3), 274-287.</li> </ul>
14	5/16	Open innovation (TS)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Chesbrough, H. (2003). The era of open innovation. <i>MIT Sloan Management Review</i> 44, 35–41</li> <li>• Dahlander, L., Gann, D. (2010). How open is innovation? <i>Research Policy</i>, 39, 699–709.</li> </ul>
L	5/23	Organizational culture and climate (YL)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Ostroff Kinicki &amp; Tamkins, 2003, Handbook of IO Psych - Culture and Climate book chapter – Searchable</li> <li>• Jones Felts &amp; Bigley - 2007 - Ethical Theory and Stakeholder-related decisions</li> <li>• Schulte, Ostroff, Shmulyian &amp; Kinicki (2009). Organizational climate configurations: relationships to collective attitudes, customer satisfaction, and financial performance, <i>Journal of Applied Psychology</i>, 94(3), 618-634.</li> </ul>
16	5/30	Network centrality (YL)	<p>Mandatory readings</p> <ul style="list-style-type: none"> <li>• Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. <i>Academy of Management Journal</i>, 44(5), 996-</li> </ul>

			<p>1004.</p> <ul style="list-style-type: none"> <li>• Powell, W.W., Koput, K.W. &amp; Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. <i>Administrative Science Quarterly</i>, 41(1), 116-145.</li> </ul>
17	6/6	Final exam (YL)	The paper is due on the 31st of May and sent to teachers as well as all classmates via email. During the Final exam seminar each paper will be given 15 minutes for presentation (power point). Each paper will be assigned with one discussant who is responsible to comment on the paper.
18	6/13	Final exam (YL)	The paper is due on the 31st of May and sent to teachers as well as all classmates via email. During the Final exam seminar each paper will be given 15 minutes for presentation (power point). Each paper will be assigned with a discussant who is responsible to comment on the paper.