



2018

## Human-centered approach for flourishing: discovering the value of service ecosystem design in psychosocial career counselling service

Nie, Zichao and Zurlo, Francesco

---

### Suggested citation:

Nie, Zichao and Zurlo, Francesco (2018) Human-centered approach for flourishing: discovering the value of service ecosystem design in psychosocial career counselling service. In: Proceedings of RSD7, Relating Systems Thinking and Design 7, 23-26 Oct 2018, Turin, Italy. Available at <http://openresearch.ocadu.ca/id/eprint/2732/>

*Open Research is a publicly accessible, curated repository for the preservation and dissemination of scholarly and creative output of the OCAD University community. Material in Open Research is open access and made available via the consent of the author and/or rights holder on a non-exclusive basis.*

*The OCAD University Library is committed to accessibility as outlined in the [Ontario Human Rights Code](#) and the [Accessibility for Ontarians with Disabilities Act \(AODA\)](#) and is working to improve accessibility of the Open Research Repository collection. If you require an accessible version of a repository item contact us at [repository@ocadu.ca](mailto:repository@ocadu.ca).*

# Discovering the Value of **Service Ecosystem Design** in **Career Counselling Service**

| Zichao NIE  
| Francesco ZURLO  
| Design Department  
| Politecnico di Milano



**POLITECNICO**  
MILANO 1863



**DOTTORATO DI RICERCA IN DESIGN**  
POLITECNICO DI MILANO, DIPARTIMENTO DI DESIGN

# BACKGROUND

- **Career Counselling Service (CCS)**
- **School-to-Work Transition Issues**
- **The Importance of CCS in Universities**
- **Problems in Campus CCS**

# BACKGROUND

## Career Counselling Service (CCS)

### DEFINITION

The aim of this service starts with emphasis on **self-awareness** and **self-directing** (Naicker,1994; Shertzer & Stone, 1981), turning into a holistic approach which means integrating **personal competences, skills, and work habits** with the information obtained on their general **interests, education and work experience** (Litoiu & Oproiu, 2012).

### TERMINOLOGY

It emerges from “career or vocational guidance”, “job or career counselling”, “occupational coaching”, to “psychoeducational models”, and even more (Herr, 1997). This situation of no agreement mainly is due to **linguistic and conceptual differences** (Athanasou,2018) and **the evolution of vocational services** (Herr, 2013). this research chose the career counselling because of this research of career counselling is taking from **psychology perspective**.

# BACKGROUND

## School-to-Work Transition Issues

- Special Period- The nature of “Emerging Adulthood” is self- exploration that everyone seeks out his or her own educational, vocational and personal pursuits (Super, 1970; Perry, 1970/1999).

### Internal Issues

- Psychological Disorders
- Increasing Number of Students Drop Out of School
- Stability within Work Values is the Lowest

### External Challenges

- Socio-economic Climate Changed(digital revolution and globalization)
- Temporary Tasks and Time-limited Jobs
- The Feelings of Insecurity and Anxiety

# BACKGROUND

## The Importance of CCS in Universities

The primary criteria for this list is based on statistics drawn from databasing websites: **Online Education Database** and **NerdWallet**

<b>SYRACUSE UNIVERSITY</b>	reports some of the best job placement statistics in the country. In 2013, of the 3,039 students surveyed, <b>nearly 100%</b> of graduates had full time jobs 6 months after graduation
<b>DICKINSON STATE UNIVERSITY</b>	In 2011 reported a <b>99.2% employment rate of graduates</b> who were either employed, in the military, or continuing their education, and has maintained this rate for many consecutive years.
<b>BABSON COLLEGE</b>	In 2013, <b>99% of graduates</b> were employed 6 months after graduation. Top employers of Babson students include PricewaterhouseCoopers, Bank of America, EY, Staples, and EMC.
<b>THE UNIVERSITY OF PENNSYLVANIA WHARTON</b>	In 2014, the university reported a <b>98.6% employment rate</b> 6 months after graduation with an annual base salary of \$125,000.
<b>BENTLEY UNIVERSITY</b>	a <b>98% “knowledge rate”</b> in 2013, a statistic that was calculated according to those alumni that were either gainfully employed, or enrolled in a graduate program.

# BACKGROUND

## Problems in Campus CCS

**One of their biggest demands is a good career service in university (Cramer, Herr, & Niles, 2004)**

- **Being unaware of this service** (Ashburn, 2006; Fouad et al., 2006)
- **The lack of understanding student needs** (Engelland, Workman, Singh & Mandeep, 2000; Lee & Johnston, 2001)
- **The need of integrating theory, practice and research** (Murdock et al., 2012)
- **The absence of holistic personalized services** (Sun & Yuen, 2012)
- **The limited resources** (Amundson, Harris-Bowlsbey & Niles, 2009; Pipkins et al., 2014)
- **First-year students** (Hartung, 2010; Sun & Yuen, 2012; Cojocariu & Puiu, 2014; Richițeanu-Năstase & Stăiculescu, 2015).

# **Why Service Ecosystem Design Can Benefit Career Counselling Service**

# THEORETICAL CONTEXT

## What Is Service Ecosystem Design?

### Value constellations

- **providers- providers**

It incorporates operations, service marketing and information technology (Patricio & Fisk, 2013), underscoring a focal point on the boundaries of dynamic resource exchanges between entities.

### Organizational service systems

- **Customers- providers**

improving service experiences concerning on touchpoints, service encounters, and possibly service system within organizations.

### Service ecosystems

- **Actor networks**

solving complex issues related to public service rearrange or social challenges, aligning with the intent of social design (Sangiorgi, 2011) or transformative service research (Anderson et al. 2013).

Figure 1: Service System Design Levels Adapted from Sangiorgi, Patricio & Fisk, 2017

# THEORETICAL CONTEXT

## What Is Service Ecosystem Design?

The definition of service ecosystems has been accorded as “comparatively **self-contained, self-regulating system**[s] of resource-incorporating actors linked by shared system arrangements and common value creation through **service exchange**” (Lusch & Vargo, 2014; Vargo & Lusch, 2016).

This perspective stresses the attention of **the socio-historic contexts**, composed of multiple institutions, that lead value determination and those interactions (Akaka et al., 2013). The emerging trend of service ecosystems in service design (Patrício et al., 2011; Sangiorgi et al., 2017) entangles systemic design from **combining design and system thinking** (Jones, 2013).

In the study of Akaka and Vargo (2015), it argued the context of service is nested **within institutional arrangements or socio-historic structures** and **dynamic systems of service exchanges**, instead of limitedly social and physical encounters.

The service ecosystem perspective integrates **a sociological view** (e.g., Giddens 1984) and underlines the embeddedness of direct microlevel interactions within more complex **mesosystems or macrosystems** (Akaka, Vargo & Lusch, 2013) which is direct or indirect actions of **multiple actors** (Grönroos & Voima, 2013).

# THEORETICAL CONTEXT

## What Is Service Ecosystem Design?

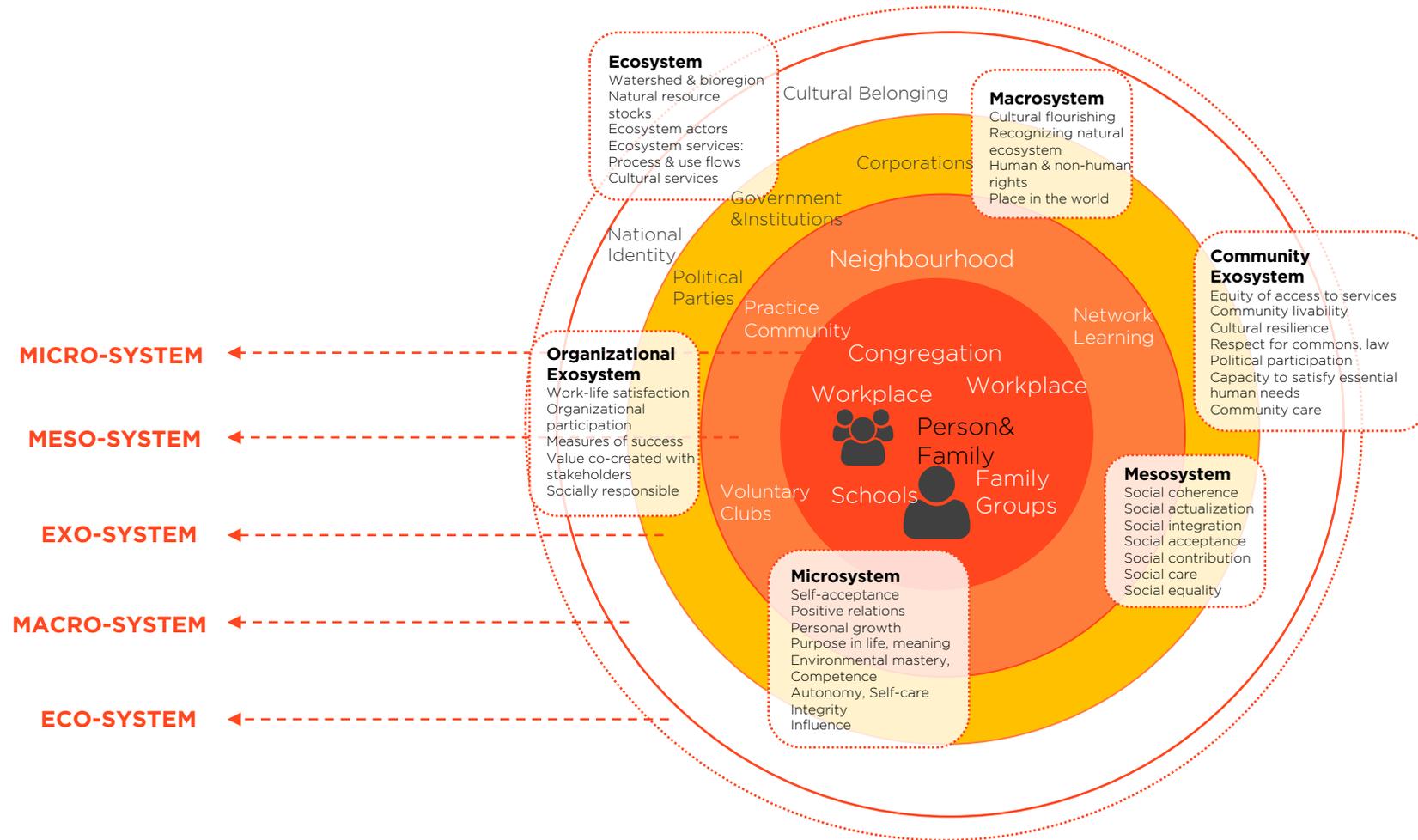


Figure 2: Flourishing in the Social Ecology (Jones, 2017)

# EMPIRICAL RESEARCH

## Research Methods

	CASE STUDY	
	Phase 1 In-depth Interview	Phase 2 Open-ended Questionnaire
	Research Methods	Research Methods
CHINA	1. the relation with university” 2. need and work” 3. service perceptions and expectations”	9 questions the knowledge of service existence, the satisfaction of the service, and the perceptions and expectations of it
ITALY	1. the relation with university” 2. need and work” 3. service perceptions and expectations”	9 questions the knowledge of service existence, the satisfaction of the service, and the perceptions and expectations of it

# EMPIRICAL RESEARCH

## Data Collection

CASE STUDY		
Phase 1 In-depth Interview		
	Data Resource	Record Methods
<b>CHINA</b>	32 participants First-year students  Semi-structured 40-60mins  Gender: 16 females; 16 males	Audio Record; Notes for the key points during interview; transcription after interview
<b>ITALY</b>	26 participants First-year students  Semi-structured 40-60mins  Gender: 19 females; 7 males	Audio Record; Notes for the key points during interview; transcription after interview

# EMPIRICAL RESEARCH

## Data Collection

CASE STUDY		
Phase 2 Open-ended Questionnaire		
	Data Resource	Record Methods
CHINA	553 Responses 499 Valid Questionnaires 4 Invalid Questionnaires	Paper-pencil questionnaires
ITALY	487 Responses 267 Valid Questionnaires 220 Invalid Questionnaires	Online questionnaires Qualtrics Survey Software Link: <a href="https://goo.gl/cNBpcF">goo.gl/cNBpcF</a>

# FINDINGS

## Phase 1: In-depth Interview

<b>Southeast University</b>	<b>the University of Milano-Bicocca</b>
The Role of the Context	The Role of the Context
Open-Day	Open-Day
University Reputation & Strength	Not Linear Path
Geographical Location	Change Life & Place
Volunteer Choice	Personal Stories
City Resources	Work and Future

Table 4.2 The Themes of the factors of choosing the university

- 
1. were influenced or sometimes even decided by people who around them.
  2. the geographical factor was another important concern for students.
  3. 'city resources' was a similar topic
  4. the university option was considered as a potential for their work and future life.

# FINDINGS

## Phase 1: In-depth Interview

- The different national education system

---

**Participant 3** told the interviewer *'I did not think too much, I chose it based on my scores of **GaoKao exam** which university I was able to apply among my promising choices'*.

*However, in Bicocca, some students said they changed university after they discovered the university or study subject. For example, **Participant 1** depicted 'Last year, I was enrolled in the nurse path, then I **changed** because I understood it wasn't for me.'*

---

# FINDINGS

## Phase 1: In-depth Interview

- The Service Problems

The students from each university said that they **did not know this service** because of the service visibility, and they did **not have enough information** and **indications** from the service.

In SEU, students thought there was **no complete and systematic career counselling service** for first-year students.

In Bicocca, the students who received the service believed that the problems of **dispersive spaces**, the **partial information on the web**, the need of renewing the classrooms, and the temperature in the classrooms.

# FINDINGS

## Phase 1: In-depth Interview

- The Expected Services

### SEU

**Participant 31** expressed *'I did not know this service, I wish the university can have more notifications to let us to know this service first'*. At first, it was critically significant to improve the publicity on the career services, and the methods could be from staffs, online channels, and other ways.

**Participant 2** expected *'I think it can be very useful of one-to-one talk with professional therapist or counsellor, and the tutor can give us an open lecture for general career information, which two ways can be combined together'*

**participant 18** said *'the best way is the face-to-face individually with career counselor'*.

# FINDINGS

## Phase 1: In-depth Interview

- The Expected Services

### SEU

---

In terms of 'optional course', **participant 1** described *'it can be an optional course for us to choose, in this way, it helps some people who is interested in discovering their career development'*.

'Online service' was another very popular proposal among students' ideas. **Participant 7** thought *'I think the online publicity of the service is really needed, and the digital platform also can give a way for staff to guide student career development.'* **Participant 12** said *'the internet platform can receive students' concerns, then the professional staffs can divide their issues by different level, then decide who need to come to the service in person.'*

# FINDINGS

## Phase 1: In-depth Interview

- The Expected Services

### SEU

The 'Lecture' services some students still believed it could **cover a wide range of people** and it was a good to **improve the students' awareness** of their vocational development.

Then the 'Inter-communication' service **was a common bridge for group discussion**, including different stakeholders.

The 'Hands-on Experiences' service met the need of **knowing the company or real workplace** with different jobs, in order to experience a real word and make a decision.

The way of 'Documentary' aimed to **make a video of the working life** from different jobs, then students could watch it online or in the classroom to have a general idea of the different career life.

# FINDINGS

## Phase 1: In-depth Interview

- The Expected Services

### Bicocca

The need of face-to-face service was about "*We are in an era of technology; there are no longer people. But it was better to see a real face*" (**Participant 12**).

The exam information service was about "*I would have chosen better with a more detailed description of the exams to be performed*" (**Participant 19**).

The course information service like **participant 14** said that '*if a person who knows more or less all the universities will go into a class - not in front of 300 people - in order to answer questions from the technical point of view and, macro, macro - are as regards the different universities would be perfect. He would go in a class where one feels comfortable even to ask questions and above all can hear the questions of everyone and things like that.*'

students valued the seniors' opinions "*a senior that offer all the possible opportunities, not evaluating only one, but try to give a complete picture of the situation*" (**Participant 23**).

# FINDINGS

## Phase 1: In-depth Interview

- The Expected Services

### Bicocca

---

According to the digital tools, the scenarios from the Unimib students said that **participant 4** thought “*Maybe Facebook or a social network*”, and **participant 9** represented “*a website where the students can access and follow from home and see the several events and meetings, therefore even if he cannot follow the various meetings face to face.*”

for the student thought about a service for the people who was outside of the university that **participant 15** “*people from outside the university, talking about their projects, about their work, what they do ... for me it's very important ... because we don't know where to ask for help, information ... where we can go for looking for a Job.*”

# FINDINGS

## Phase 2: Open-ended Questionnaire

553 in total  
335- NO  
214- YES (52 USED; 162 NO USED)  
449- VALID  
4- NO VALID

487- in total  
26-NO  
241- YES  
267- VALID  
220- NO VALID

### 52 USED (497 NO USED)

1.It shows 32 participants felt satisfied with the service, and 20 participants felt ok with the service. Therefore, participants who used this service held positive attitude.

2.It shows 14 participants who believed the service help solve their problems completely, 35 participants who believed the service help solve their problems partly, 3 participants who believed the service help solve their problems barely. Thus, the majority of participants value this service.

### 35 USED (212 NO USED)

1.It shows 18 participants felt satisfied with the service, and 15 participants felt ok with the service. Therefore, participants who used, almost all (33/35) this service held positive attitude.

2.It shows 22 participants who believed the service help solve their problems completely, 19 participants who believed the service help solve their problems partly. Thus, the majority of participants (31/35) value this service.

# FINDINGS

## Phase 2: Open-ended Questionnaire

**Extended Publicity**

**Enhance credibility**

**Personalized Service**

**Increased channels**

**Tacking Service**

**Overall Information**

**Extended Publicity**

**Increased channels**

**Increase availability**

**Others**

# OUTCOME

## The Guideline for CCS Through SED

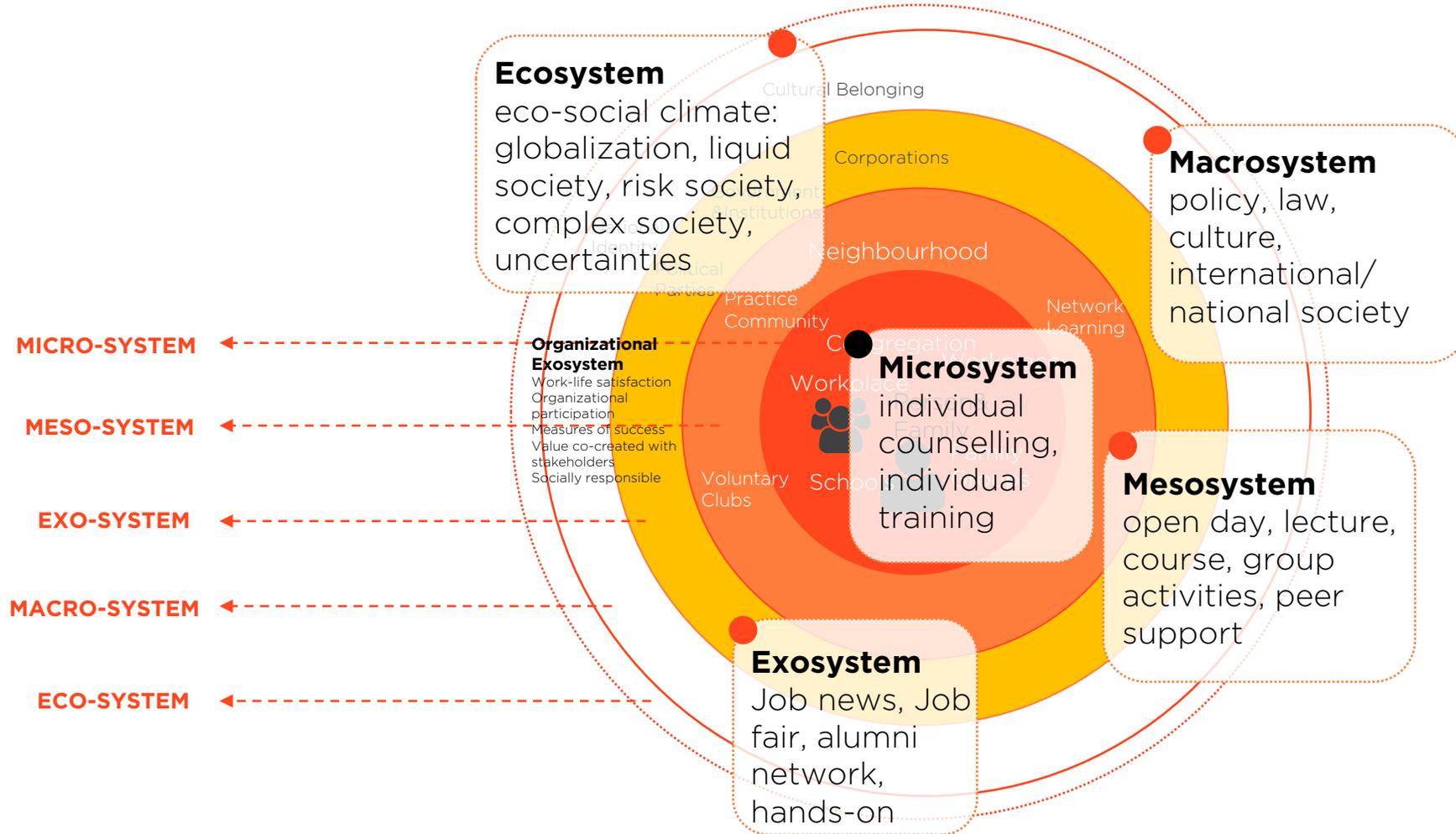


Figure 3: The Guideline for CCS in Uni. Through Service Ecosystem Design

## CONCLUSION

### The SED as A Promising Way to Improve CCS

- to examine not only from the concrete services within micro-level, meso-level, and exo-level, but also from **the service influencer factors within macro-level and eco-level**, which is based on service ecosystem logic.

- 
- **A general guideline** of service improvements in universities through service ecosystem approach.

# REFERENCES

1. Ashburn, E. (2006). 2-Year-College Students Rarely Use Advisers, Survey Shows. *Chronicle of Higher Education*, 53(15).
2. Amundson, Norman E, J. A. Harris-Bowlsbey, and S. G. Niles. "Essential elements of career counseling : processes and techniques." *Cjam Canadian Journal of Addiction Medicine* 6.2(2008):45-53.
3. Athanasou, J. (2018). Vocational Interests and Job Choices Following an Acquired Disability: Results and Implications of an Idiographic Study. *The Australian Journal of Rehabilitation Counselling*, 24(1), 1-11.
4. Anderson, L., Ostrom, A. L., Corus, C., Fisk, R. P., Gallan, A. S., Giraldo, M., ... & Shirahada, K. (2013). Transformative service research: An agenda for the future. *Journal of Business Research*, 66(8), 1203-1210.
5. Akaka, M. A., Vargo, S. L., & Lusch, R. F. (2013). The complexity of context: A service ecosystems approach for international marketing. *Journal of Marketing Research*, 21(4), 1-20.
6. Akaka, M. A., & Vargo, S. L. (2015). Extending the context of service: from encounters to ecosystems. *Journal of Services Marketing*, 29(6/7), 453-462.
7. Cojocariu, V. M., & Puiu, M. (2014). Career-Counselling Practices for University Students. *Procedia-Social and Behavioral Sciences*, 149, 222-227.
8. Engelland, B. T., Workman, L., & Singh, M. (2000). Ensuring service quality for campus career services centers: a modified SERVQUAL scale. *Journal of marketing Education*, 22(3), 236-245.
9. 245.
10. Fouad, N. A., Guillen, A., Harris-Hodge, E., Henry, C., Novakovic, A., Terry, S., & Kantamneni, N. (2006). Need, awareness, and use of career services for college students. *Journal of career assessment*, 14(4), 407-420.
11. Grönroos, C., & Voima, P. (2013). Critical service logic: making sense of value creation and co-creation. *Journal of the academy of marketing science*, 41(2), 133-150.
12. Giddens, A. (1984). The constitution of society.
13. Herr, E. L. (1997). Career counselling: A process in process. *British Journal of Guidance and Counselling*, 25(1), 81-93.
14. Herr, E. L. (2013). Trends in the history of vocational guidance. *Career Development Quarterly*, 61(3), 277-282.
15. Hartung, P. J. (2010). Practice and research in career counseling and development 2009. *The career development quarterly*, 59(2), 98-142.
16. 59(2), 98-142.

# REFERENCES

1. Jones, P. (2013). *Design for care: Innovating healthcare experience*. Rosenfeld Media.
2. Jones, P. (2017). Soft service design outside the envelope of healthcare. *Design for Health*.
3. Litoiu, N., & Oproiu, C. G. (2012, May). The Need of Career counselling in universities: a competencies-based approach. In *International Conference of Scientific Paper AFASES, Brasov* (pp. 24-26).
4. Lee, F. K. & Johnston, J. A. (2001). Innovations in Career Counselling. *Journal of Career Development*, 27, 177-185.
5. Murdock, L. N., Duan, C., Nilsson, E. J. (2012). Emerging Approaches to Counselling Intervention: Theory, Research, Practice, and Training, *The Counselling Psychologist*, 40, 966- 975.
6. Naicker, A. (1994). The psycho-social context of career counselling in South African schools. *South African Journal of Psychology*, 24(1), 27-34.
7. Patrício, L., Fisk, R. P., Falcão e Cunha, J., & Constantine, L. (2011). Multilevel service design: from customer value constellation to service experience blueprinting. *Journal of Service Research*, 14(2), 180-200.
8. Patrício, L., & Fisk, R. P. (2013). Creating new services. *Serving customers globally*, 185-207.
9. Pipkins, K. C., Rooney, G. S., & Jaunarajs, I. (2014). Back to the basics: Career counseling. *New Directions for Student Services*, 2014(148), 35-48.
10. Richițeanu-Năstase, E. R., & Stăiculescu, C. (2015). The Impact of Career Factors on Students Professional Insertion. What Measures to be Taken by the University?. *Procedia-Social and Behavioral Sciences*, 180, 1102-1108.
11. Shertzer, B., & Stone, S. C. (1981). The School Counselor. *Fundamentals of guidance*.
12. Sun, V. J. & Yuen, M. (2012). Career Guidance and Counselling for University Students in China. *International Journal for the Advancement of Counselling*, 34, 202-210.
13. Sangiorgi, D., Patrício, L., & Fisk, R. (2017). *Designing for interdependence, participation and emergence in complex service systems* (pp. 49-64). London, UK: Bloomsbury Academic.
14. Sangiorgi, D. (2011). Transformative services and transformation design. *International Journal of Design*, 5(2), 29-40.
15. Vargo, S. L., & Lusch, R. F. (2014). Inversions of service-dominant logic. *Marketing Theory*, 14(3), 239-248.
16. Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1), 5-23.

---

# THANKS FOR WATCHING!

**Discovering the Value of Service Ecosystem Design in  
Career Counselling Service**

| **Zichao NIE**  
| 31 cycle  
| PhD in Design  
| Design Department  
| service design  
| supervisor | **Francesco Zurlo**

## **Contacts:**



[zichao.nie@polimi.it](mailto:zichao.nie@polimi.it)



[francesco.zurlo@polimi.it](mailto:francesco.zurlo@polimi.it)



38, Durando, Milan City, ITALY