

Appendix

“Everything Has Changed”:

A Qualitative Study of Trends in University Communication

Over the Past Decade

Table of Contents

SM 1 Description of clusters	2
SM 2 Case selection	5
SM 3 Interview guides	6
SM4 Codebook	11

SM1. Description of clusters

As a first step, we conducted a whole-population, quantitative survey of communication practitioners (N=203) working in central communication departments of all 42 universities in Switzerland—i.e., of all 14 research universities (**RU**), 10 universities of applied sciences (**UAS**), and 18 universities of teacher education (**UTE**). This initial survey was conducted between September 1 and December 1, 2020.

Based on hierarchical cluster analysis, we identified four distinct types of university communication that differed in the level of the diversity, intensity, professionalism, and strategic orientation of their communication (see Table 1; for details on the survey and clustering, see Authors, 2024). The four types of communication departments are:

- **Minimalists** (n=5 universities), which consist mostly of UTE that are rather small in terms of students and staff; they also have the smallest communication teams, produce the least output with little strategic alignment, have low levels of professionalism, average diversity of the number of target groups, and below-average use of communication channels.
- **Well-resourced Competitors** (n=16 universities), which consist mostly of RU but also some UAS, are by far the largest universities in terms of students and staff. They also have by far the largest communication teams, producing an above-average amount of output, with diversity both in terms of stakeholders and channels, but with a medium level of strategic alignment and below-average levels of professionalism.
- **Specialized Strategists** (n=9 universities) consist mostly of UTE that are very small in terms of students and staff. They also have small teams and produce less output than most other universities, but with a pronounced strategic alignment in their communication and an average level of professionalism.
- **Professional All-rounders** (n=7 universities) consist primarily of UAS and UTE, both in equal proportion, and are rather small in terms of staff but have moderate numbers of enrolled students. Their communication teams are of medium size, scoring high in all dimensions but particularly in professionalism. They also have high levels of intensity (e.g., output), diversity both in terms of target groups and channels, and a strongly pronounced strategic alignment.

Table 2 shows the perception of changes in university communication over the last five to ten years across the four clusters and differentiates between the responses of communication professionals and university leaders (for details on the survey, see Authors, 2022).

Table 1: Description of clusters

Cluster	RU	UAS	UTE	Stu- dents	Share of 3 rd party funding	Diversity		Intensity			Professionalism			Strategic orientation	
	%	%	%	M	%	Target groups (H)	Channels (H)	Human resources (M)	Output (M)	Competi- tion (M)	Guide- lines for depart- ment (M)	Guide- lines for university (M)	Train- ing (M)	Goals and strat- egies (M)	Goals of university leader (M)
Cluster 1 <i>Minimalists</i> (HEIs: n=5)	20	20	60	2'722	16	2.30	1.85	6.2	3.3	3.4	3.5	3.5	3.6	3.7	2.6
Cluster 2 <i>Well-Re- sourced Com- petitors</i> (HEIs: n=16)	63	31	6	12'379	21	2.36	2.02	26.6	4.5	3.9	4.2	3.6	3.0	4.1	4.3
Cluster 3 <i>Specialized Strategists</i> (HEIs: n=9)	22	0	78	1'388	8	2.10	1.92	6.5	4.1	2.9	4.7	3.8	2.9	4.9	4.6
Cluster 4 <i>Professional All-rounders</i> (HEIs: n=7)	14	43	43	5'518	15	2.33	1.99	8.8	4.7	3.6	4.9	4.5	4.3	4.9	4.3
Total	38%	24%	38%	7,102 (7,699)	16.0% (11.2%)	2.23 (0.13)	1.97 (0.09)	15.6 (16.34)	4.3 (0.62)	3.5 (0.64)	4.4 (0.68)	3.8 (1.13)	3.3 (0.82)	4.4 (0.85)	4.2 (1.20)

Notes. HEIs = higher education institutions; RU = research universities; UAS = universities of applied sciences; UTE = universities of teacher education; Students = number of enrolled students; M = arithmetic mean; SD = standard deviation; H = non-standardized Shannon diversity index. Agreement scale (seven-point scale from 0 = “not at all” to 6 = “very much”). Example items: Diversity: “What are the target groups for the communication work of your department?”. Intensity: “To what extent does your department use the following channels to communicate?”. Professionalism: “To what extent does your department have clear rules and guidelines for the following areas?”. Strategic orientation: “How much do you agree with the following statements? My department is guided by communication strategies and plans”. For a full description of the clustering see Authors, 2024.

Table 2: Quantitative description of changes in university communication in the last five to ten years differentiated by clusters

Cluster	Diversification		Intensification		Professionalization		Strategic Alignment	
	% of CP / UL		% of CP / UL		% of CP / UL		% of CP / UL	
	“The number of target groups important to the HEI has increased”	“The department uses more communication channels”	“The department has received more personnel and financial resources”	“The department produces more output”	“More employees of the department have had vocational training in communication”	“The department has an increasing influence on how HEI members communicate publicly”	“The department has more influence on strategic decisions of the HEI”	“The department is increasingly guided by communication strategies and plans”
Cluster 1 <i>Minimalists</i> (CP: n=5; UL: n=10-11)	20 / 27	100 / 73	0 / 36	80 / 36	40 / 50	60 / 0	20 / 0	40 / 36
Cluster 2 <i>Well-Resourced Competitors</i> (CP: n=108-110; UL: n=133-136)	43 / 43	92 / 82	31 / 50	63 / 35	42 / 39	36 / 25	28 / 8	51 / 39
Cluster 3 <i>Specialized Strategists</i> (CP: n=8-9; UL: n=17)	33 / 47	100 / 82	67 / 41	78 / 35	33 / 47	33 / 41	33 / 18	78 / 59
Cluster 4 <i>Professional All-rounders</i> (CP: n=9; UL: n=16)	67 / 63	89 / 88	22 / 69	67 / 63	33 / 25	44 / 25	0 / 6	33 / 56

Notes. CP = Communication professionals: N=133, UL = University leaders: N=194. Agreement in percent = share of respondents indicating strong agreement with the respective statement (answering 5 or 6 on a seven-point scale from 0 = “not at all” to 6 = “very much”). Reading example: 11% of the university leaders on cluster 2 (Well-Resourced Competitors) strongly agreed with the question about whether it was true that the department has more influence on strategic decisions of the university over the past five to ten years. For a full description of the survey see Authors, 2022.

SM2. Case selection

Table 3. Selection of cases and data collection from the four clusters (aggregated survey data at the organizational level)

Cluster	Case	University type	# Interviews with UL	# Interviews with CP
Cluster 1 <i>Minimalists</i> (n=5 HEIs)	Case A	RU	2 [119 min]	2 [156 min]
	Case B	UTE	1 [44 min]	1 [48 min]
Cluster 2 <i>Well-Resourced Competitors</i> (n=16 HEIs)	Case C	RU	3 [171 min]	4 [310 min]
	Case D	UAS	2 [100 min]	2 [144 min]
Cluster 3 <i>Specialized Strategists</i> (n=9 HEIs)	Case E	UTE	1 [83 min]	2 [134 min]
	Case F	UTE	1 [51 min]	1 [96 min]
Cluster 4 <i>Professional All-rounders</i> (n=7 HEIs)	Case G	UTE	1 [55 min]	2 [115 min]
	Case H	UAS	2 [120 min]	3 [208 min]
Total	8		13 [743 min]	17 [1211 min]

Notes. RU = Research university; UTE = University of teacher education; UAS = University of applied sciences; UL = University leadership; CP = Communication professionals.

SM3. Interview guides

The 30 interviews were conducted in two waves from July 2021 to September 2021 and from March 2022 until March 2023¹ in three languages (German, French, and Italian). Semi-structured interview guides were used that comprised seven larger themes. These were adapted to communicators and university managers respectively and allowed for openness and flexibility in the individual interviews. The following is an English translation of an *exemplary* guide for an interview with a communication professional (Table 4) and a member of university leadership (Table 5).

Table 4: Exemplary interview guide with university communication professional (CP)

Introduction [Welcome, background information on study and brief introduction to the conditions of the interview (anonymity, recordings, etc.)]
Part I: Description of own position and tasks 1. To start off: what was your role and your most frequent tasks when you started in 20XX?
Part II: Milestones and main developments 2. Can you tell us about developments that have substantially shaped your communications department? 3. To what extent have new tasks been added to your communications department that did not exist years ago?

¹ The interviews were conducted by the first and the third author. The data were collected in two waves due to the maternity leave of the researcher conducting most interviews (first author). However, since the interview study was focused on long-term developments and established practices in university communication, the overall period of data collection from July 2021 to March 2023 does not compromise the quality and comparability of data.

4. How have the expectations towards your work in the communications department changed over time?
5. Did you conduct any evaluation or measurement of communication back then? How does this look today?

Part III: Diversification of Communication

6. How would you describe your primary target groups when you started? And how has that changed up until today?
7. What channels did you use to communicate with your target audiences back in 20XX? How does this look today?
8. To what extent has the way you obtain feedback from different target groups changed? And the feedback itself, has it changed?

Part IV: Intensification and Competition

9. What about distribution of funds? To what extent do you have to fight to ensure that your department has sufficient resources? Is measurement playing a role here?
10. To what extent do you experience discussions on how your university compares to others?

Part V: Relationships and Professionalization

11. To what extent has the professional profile of university communicators changed over time in your department?
12. How has collaboration with researchers at your institution changed over the years?
13. What standards of 'good communication work' are important to you?
14. What is the relationship between your department and the university leadership? Are you required to report regularly to the rectorate? * The rector personally?
15. Has the relationship changed over time? How?

Part VI: Strategic alignment of communication

16. What are the overarching goals of your department?
17. How aligned is your department's work with plans and strategies of the university?

18. Do you see any changes in terms of your department's strategic influence on the overall goals of the university?

19. To which extend are there plans and strategies for communication to guide your work?

20. To which extend to you evaluate such plans and strategies?

Part VII: Outro & Request for documents

21. Have we not yet talked about something that you think would be relevant?

22. Do you have any documents you can share with us that would help us to get a better understanding of the communication activities of your higher education institution?

Table 5: Exemplary interview guide with member of university leadership (UL)

<p>Introduction</p> <p>[Welcome, background information on study and brief introduction to the conditions of the interview (anonymity, recordings, etc.)]</p>
<p>Part I: Own perception of communication / public image</p> <p>1. When you started as member of the university management in 20XX: How important did you consider the public image of your university to be?</p>
<p>Part II: Communication management and division of tasks</p> <p>2. How was communication managed back then?</p> <p>3. What was the tasks of the rector and what was the tasks of the communications department?</p>
<p>Part III: Diversification of Communication</p> <p>4. Universities have many different stakeholders. What were the key stakeholders back then? Have new groups emerged or become more important since then?</p> <p>5. To what extent do you have the impression that expectations towards your university from society or certain stakeholders have changed?</p> <p>6. Which channels were important for the public image of your university back in 20XX? Have new channels emerged or become more important since then?</p>
<p>Part IV: Intensification and Competition</p> <p>7. Can you recall examples in the past of discussion on justifying spent resources for the communication department?</p> <p>8. Have the resources for communication changed in recent years?</p> <p>9. Do you get any justification for budget spendings? What could such justification look like? What about reports of measurements and evaluation?</p> <p>10. Do you have the impression that the public image of your university has changed in recent years? That your university is perceived differently by the public? How do you know?</p>

11. To what extent do you perceive competition between your university and other universities?
What role does the public image of the university play in this? In your view, has this changed in recent years?

Part VI: Expertise of communications and strategy

12. When you started your job: Was the head of communications involved in certain decisions or unexpected events back then? And today?

13. How important is the expertise of the Head of Communications to the university leadership in general? Has the role of the head of communications changed over the years?

14. Is there a clear strategy for how the university wants to position itself in the public?

15. Did such strategies exist a few years ago? How do you assess the impact of the strategy?

Part V: Relationship with communications

16. Could you describe what the relationship and contact between the university management and the communication department is like? Have there been any events in the past years that have strongly influenced or changed the relationship?

Part VII: Outro & Request for documents

17. Have we not yet talked about something that you think would be relevant for us to know?

SM4. Codebook

The interview transcripts and documents were analyzed using qualitative content analysis in MAXQDA following Rädiker and Kuckartz (2019) and Mayring (2014). Fourteen main categories and 92 subcategories were developed based on deductive and inductive coding. The following Table 6 provides an overview of the structure of the five main categories, which were specifically analyzed in this paper, with examples for subcategories. The coding scheme was designed to capture both perceived changes over time and the current characteristics of communication departments. To this end, the four main categories depicted below (diversity, professionalism, intensity, strategic alignment) describe different dimensions of communication departments in their status quo, while an additional fifth main category “change” was used to code statements that explicitly referred to change. This overarching “change” category was applied across the four dimensions whenever interviewees addressed developments such as increasing or declining importance, the continuation of existing practices, or initiatives still in planning.

Table 6. Structure of the codebook

Category	Description / Coding Rules	Sub-Categories / Examples
Change	Passages addressing changes to university communication practices or structures. Code specific sub-categories depending on the type or direction of change.	<i>Increasing importance, Declining importance, Continuity, In planning</i>
Diversity of communication	Passages referring to communication efforts that involve communication channels, target groups, or modes. Rule: Only when interviewees mention increase in diversity, as such, diversification is coded.	Increase in diversity (Diversification) Channels e.g.: Events, Web, Advertising, Media relations, Social media Target Groups e.g.: Current students, Prospective students, Alumni, Staff, Scientific community, General public, Business, Politics, Media Communication Mode e.g.: Audio, Video, Print, Digital
Professionalism of communication	Passages discussing the increasing professionalization of university communication activities and staff.	Increase in professionalism (Professionalization) Type e.g.: Education / Training, Specialization, Evaluation

	Rule: Only when interviewees mention an increase, as such, professionalization is coded.	
Intensity of communication	<p>Passages referring to a greater intensity or scope of communication efforts and activities.</p> <p>Rule: Only when interviewees mention an increase, as such, intensification is coded.</p>	<p>Increase in intensity (Intensification)</p> <p>Type e.g.: Competition, Cooperation, Feedback, Output, Resources</p>
Strategic alignment of communication	<p>Communication aligned with institutional strategies or goals, or efforts to increase this alignment.</p> <p>Rule: Only when interviewees mention an increase, as such, increases in strategic alignment is coded.</p>	<p>Increase in strategic alignment</p> <p>Focus Areas e.g.: Image & Reputation, Third Mission, Scientific Achievements</p> <p>Strategic Influence e.g.: Autonomy, Recognition, Control by University Leadership</p>

The first author conducted the primary analysis, with iterative reviews of the data and collaborative discussions with co-authors. In the process of conducting inductive categories, the authors leaned on Rädiker and Kuckartz (2019) following the procedure of an initial coding in which the data was first read through to get a sense of the content, and segments were highlighted, and preliminary codes assigned. Successively, categories were formed by grouping similar codes together. Lastly, continuous refinement was conducted in which new segments were compared to the existing categories and, if necessary, adjustments to the existing categories were made to ensure accuracy.

A pre-test of the coding frame was conducted based on six interviews to detect any ambiguities and/or inconsistencies in the coding categories. The first author who conducted the main coding used three strategies to increase validity of the coding frame including (1) peer debriefings involving the other co-authors, (2) regular reflection of own biases and assumptions as well as (3) continuous refinement until a point of saturation was reached in which no new themes seemed to emerge from the data.