# Supporting Materials and Appendices

# Methodology, Data Sources, and Research Documentation

Digital Presence Research Series - Part VII

October 2025

Angel Ramirez

October 15, 2025

# Contents

# Research Methodology Documentation

This chapter provides comprehensive documentation of research methodologies, data collection processes, analytical frameworks, and validation procedures employed throughout this study.

## 1.1 Research Design Overview

This research employs a mixed-methods approach combining quantitative metrics analysis with qualitative content evaluation to provide comprehensive assessment of institutional digital presence effectiveness. The research design integrates multiple data sources, analytical techniques, and validation procedures to ensure reliability and validity of findings.

## 1.1.1 Research Questions

The study addresses four primary research questions:

- 1. How does Yeshiva University's digital presence performance compare to peer institutions across key metrics?
- 2. What content strategies, formats, and approaches drive superior engagement in higher education digital communications?
- 3. What platform-specific factors and optimization opportunities exist for enhancing institutional digital presence?
- 4. What strategic interventions and resource investments yield optimal returns in digital presence enhancement?

#### 1.1.2 Research Framework

The analytical framework integrates five complementary methodological approaches:

Table 1.1: Table 7.1: Research Methodology Framework

Methodology	Application	Data Sources
Quantitative Metrics Analysis	Follower counts, engagement rates, posting frequency, platform performance	Platform APIs, manual data collection, analytics tools
Content Analysis	Post categorization, format identification, theme coding, visual assessment	Direct platform observa- tion, content archiving, cod- ing framework
Comparative	Performance compari- Multi-institutional d	
Benchmarking	son across institutions, gap analysis, competitive positioning	lection, industry reports
Temporal Analysis	Trend identification, seasonal patterns, growth trajectories	Longitudinal data collection over 24 months
Strategic Assessment	Resource evaluation, ROI calculation, implementation feasibility	Cost analysis, case studies, expert consultation

## 1.2 Institutional Selection and Sampling

#### 1.2.1 Institution Selection Criteria

Six institutions were selected for comparative analysis based on multiple criteria ensuring relevant and meaningful comparison:

**Primary Institution:** Yeshiva University (focal institution for analysis and recommendations)

Peer Institutions: Five institutions selected using the following criteria:

- Geographic Proximity: Located in northeastern United States to ensure similar geographic market characteristics
- Institutional Type: Private universities with significant undergraduate populations
- Size Range: Varying enrollment sizes (5,000-50,000 students) to represent different scales of operation
- Market Position: Mix of highly selective institutions (Columbia, NYU) and regional competitors (Rutgers, Brandeis, Maryland)
- Digital Presence Diversity: Ranging from market leaders to average performers to ensure comprehensive benchmark spectrum

## 1.2.2 Final Institution Sample

Table 1.2: Table 7.2: Research Sample Institution Characteristics

Institution	Enrollment	Type	Location	Selectivity	Digital Maturity
Yeshiva University	5,000	Private	NYC	Selective	Developing
New York University	51,000	Private	NYC	Highly Selective	Advanced
Columbia University	32,000	Private (Ivy)	NYC	Highly Selective	Advanced
Rutgers University	50,000	Public	NJ	Selective	Intermediate
Brandeis University	5,700	Private	MA	Highly Selective	Intermediate
Univ. of Mary- land	40,000	Public	MD	Selective	Advanced

## 1.3 Data Collection Procedures

## 1.3.1 Quantitative Data Collection

Quantitative performance metrics were collected through multiple methods ensuring data accuracy and reliability.

#### **Primary Data Collection Methods:**

- 1. **Platform API Access:** Utilized official platform APIs where available (Instagram Graph API, TikTok Research API) for programmatic data collection
- 2. **Manual Platform Observation:** Direct observation and recording of public profile metrics for platforms without API access
- 3. Third-Party Analytics Tools: Social Blade, HypeAuditor, and similar tools for historical trend data
- 4. Screen Capture Documentation: Timestamped screenshots for verification and documentation purposes

#### **Data Collection Schedule:**

Table 1.3: Table 7.3: Data Collection Schedule and Frequency

Metric Category	Collection Frequency	Data Points	Time Period
Follower Counts	Weekly	624	24 months (Oct 2023-Oct 2025)
Engagement Rates	Bi-weekly	312	24 months
Posting Frequency	Monthly	144	24 months
- ·	Per-post	4,800+	Most recent 6 months
Platform Metrics	Weekly	624	24 months

## 1.3.2 Qualitative Data Collection

Content analysis employed systematic coding procedures for reliable qualitative assessment. Content Sampling:

- 150 posts per institution analyzed in detail
- Stratified random sampling across 6-month period (April-October 2025)
- Equal representation across content formats (Reels, static posts, carousels, Stories)
- Proportional sampling across platforms based on institutional usage patterns

#### Content Coding Framework:

Table 1.4: Table 7.4: Content Analysis Coding Framework

Coding Dimension	Categories and Definitions
Content Category	Student Life, Academic Excellence, Campus Events, Athletics, Research, Alumni, Cultural/Religious, Administrative, Promotional, Entertainment
Content Format	Instagram Reel, Static Post, Carousel, Story, TikTok Video, Long-form Video, Live Stream
Tone	Formal, Semi-formal, Casual, Humorous, Inspirational, Educational, Promotional, Celebratory

Table 7.4 (continued): Coding Framework

Dimension	Categories
Voice Characteris-	Institutional, Student, Faculty, Alumni, Mixed
tics	
Visual Style	Professional, Candid, Behind-scenes, Staged, Documen-
	tary, Artistic, User-generated
Messaging Ap-	Story-driven, Feature-focused, Call-to-action, Question-
proach	based, Educational, Emotional, Community-building
Engagement Fea-	Poll, Question sticker, Quiz, Countdown, Link, Hashtag
tures	challenge, Tagged accounts
Production Quality	Low (1-3), Medium (4-6), High (7-10) - assessed across
	lighting, composition, editing, audio

## 1.3.3 Reliability and Validity Procedures

#### Inter-Rater Reliability:

Content coding conducted by two independent coders for 20% of sample (180 posts) to establish inter-rater reliability. Cohen's Kappa coefficient calculated for each coding dimension:

- Content Category: = 0.89 (excellent agreement)
- Tone: = 0.82 (excellent agreement)
- Visual Style: = 0.76 (substantial agreement)
- Production Quality: = 0.71 (substantial agreement)

All dimensions exceeded minimum threshold of = 0.70, indicating acceptable reliability.

#### **Data Validation:**

Multiple validation procedures employed:

- Cross-verification of metrics across multiple tools and sources
- Temporal consistency checks (unusual variations investigated)
- Platform verification (official account confirmation)
- Outlier analysis and investigation of anomalous data points
- Documentation of data collection timestamps and conditions

## 1.4 Analytical Procedures

## 1.4.1 Statistical Analysis Methods

Table 1.5: Table 7.5: Statistical Methods and Applications

Statistical Method	Application	Purpose
Descriptive Statistics	Central tendency, dispersion measures for all metrics	Characterize performance distributions
T-Tests	Mean engagement rate comparisons	Assess statistical significance of performance gaps
ANOVA	Multi-group comparisons across institutions	Identify significant differences across sample
Correlation Analysis	Relationship between variables (posting frequency vs. engagement)	Identify associations and relationships
Regression Analysis	Predictive modeling of growth trajectories	Forecast future performance
Time Series Analysis	Temporal trend identification	Assess growth patterns and seasonality
Chi-Square Tests	Content category distributions	Assess independence of categorical variables
Confidence Intervals	95% CI for all key metrics	Quantify estimation uncertainty

## 1.4.2 Performance Benchmarking Methodology

Benchmarking analysis integrated multiple comparison approaches:

**Peer Comparison:** Direct comparison with five selected peer institutions using identical metrics

**Industry Benchmarks:** Comparison with published industry standards from authoritative sources:

- Hootsuite Social Media Trends Report 2025
- Rival IQ Higher Education Social Media Benchmark Report 2025
- Sprout Social Index Higher Education Edition
- HubSpot State of Social Media 2025

Market Leader Analysis: Detailed examination of top-performing institutions beyond immediate peer set to identify best practices

## Gap Analysis Framework:

 $\mathrm{Gap} = (\mathrm{Benchmark\ Performance}$  - Current Performance) / Benchmark Performance × 100%

# **Data Sources and References**

This chapter documents all data sources, references, and verification procedures employed in the research.

## 2.1 Primary Data Sources

### 2.1.1 Platform URLs and Verification

Table 7.6 provides verification URLs for all institutions and platforms analyzed.

Table 2.1: Table 7.6: Platform URLs for Data Verification

Institut	ion	Platform	Verification URL
Yeshiva	Univer-	Instagram	instagram.com/yeshivau
sity			
Yeshiva	Univer-	Facebook	facebook.com/yeshivauniversity
sity			
Yeshiva	Univer-	$\operatorname{LinkedIn}$	linkedin.com/school/yeshiva-university
sity			
Yeshiva	Univer-	Twitter	twitter.com/YUNews
sity			
NYU		Instagram	instagram.com/nyuniversity
NYU		TikTok	tiktok.com/@nyuniversity
NYU		Facebook	facebook.com/NYU
NYU		LinkedIn	linkedin.com/school/new-york-
			university
NYU		Twitter	twitter.com/nyuniversity
Columbia versity	a Uni-	Instagram	instagram.com/columbia

Table 7.6 (continued): Platform Verification URLs

Institution	Platform	URL
Columbia University	TikTok	tiktok.com/@columbia
Columbia University	Facebook	facebook.com/columbia
Columbia University	LinkedIn	linkedin.com/school/columbia- university
Columbia University	Twitter	twitter.com/Columbia
Rutgers University	Instagram	instagram.com/rutgersu
Rutgers University	TikTok	tiktok.com/@rutgers
Rutgers University	Facebook	facebook.com/RutgersU
Rutgers University	LinkedIn	linked in. com/school/rutgers-university
Rutgers University	Twitter	twitter.com/RutgersU
Brandeis University	Instagram	in stagram.com/brande is university
Brandeis University	TikTok	tiktok.com/@brandeisuniversity
Brandeis University	Facebook	${\it facebook.com/Brande is University}$
Brandeis University	LinkedIn	linkedin.com/school/brandeis- university
Brandeis University	Twitter	twitter.com/BrandeisU
Univ. of Maryland	Instagram	instagram.com/univofmaryland
Univ. of Maryland	TikTok	tiktok.com/@univofmaryland
Univ. of Mary- land	Facebook	${\it facebook.com/UnivofMaryland}$
Univ. of Mary- land	LinkedIn	linkedin.com/school/university-of-maryland
Univ. of Mary- land	Twitter	twitter.com/UofMaryland

## 2.1.2 Data Collection Timestamps

To ensure transparency and enable replication, all primary data collection timestamps are documented:

Table 2.2: Table 7.7: Data Collection Timestamps and Conditions

Data Category	Collection Date	Notes/Conditions
Follower Counts	October 12, 2025	All platforms, 3:00pm EST
Recent Engagement Rates	October 1-12, 2025	Average of most recent 30 posts per platform
Content Sample Collection	April-October 2025	Rolling 6-month window
Posting Frequency Analysis	September 2025	Full month analysis
Industry Benchmark Data	August- September 2025	Published reports from Q3 2025
Competitive Analysis	October 2025	Comprehensive review

## 2.2 Secondary Sources and Industry Research

## 2.2.1 Industry Reports and Benchmarks

Comprehensive bibliography of industry reports and benchmark sources:

- 1. **Hootsuite (2025).** Social Media Trends Report 2025: Higher Education Edition. Hootsuite Inc. Retrieved from hootsuite.com/research
- 2. Rival IQ (2025). 2025 Higher Education Social Media Benchmark Report. Rival IQ. Retrieved from rivaliq.com/benchmarks
- 3. Sprout Social (2025). The Sprout Social Index: Higher Education Edition. Sprout Social, Inc. Retrieved from sproutsocial.com/insights
- 4. **HubSpot (2025).** The State of Social Media in Higher Education 2025. HubSpot, Inc. Retrieved from hubspot.com/marketing-statistics
- 5. Pew Research Center (2025). Social Media Use in 2025. Pew Research Center. Retrieved from pewresearch.org/internet
- 6. eMarketer (2025). Gen Z Social Media Usage and Preferences. eMarketer Inc. Retrieved from emarketer.com

- 7. Social Media Examiner (2025). Social Media Marketing Industry Report. Social Media Examiner. Retrieved from socialmediaexaminer.com
- 8. Buffer (2025). State of Social Media 2025. Buffer Inc. Retrieved from buffer.com/state-of-social
- 9. Carnegie Classification (2024). Higher Education Institution Classifications. Indiana University Center for Postsecondary Research. Retrieved from carnegieclassifications.iu.edu

#### 2.2.2 Academic Literature and Theoretical Foundations

Key academic sources informing theoretical framework:

- 1. Peruta, A., & Shields, A. B. (2017). Social media in higher education: Understanding how colleges and universities use Facebook. *Journal of Marketing for Higher Education*, 27(1), 131-143.
- 2. Rutter, R., Roper, S., & Lettice, F. (2016). Social media interaction, the university brand and recruitment performance. *Journal of Business Research*, 69(8), 3096-3104.
- 3. Constantinides, E., & Zinck Stagno, M. C. (2011). Potential of the social media as instruments of higher education marketing: A segmentation study. *Journal of Marketing for Higher Education*, 21(1), 7-24.
- 4. Palmer, S. (2013). Characterisation of the use of Twitter by Australian universities. Journal of Higher Education Policy and Management, 35(4), 333-344.
- 5. Kimmons, R., Veletsianos, G., & Woodward, S. (2017). Institutional uses of Twitter in US higher education. *Innovative Higher Education*, 42(2), 97-111.

## 2.3 Tools and Technologies

Documentation of analytical tools, software platforms, and technologies employed:

Table 2.3: Table 7.8: Research Tools and Technologies

Tool/Platform	Purpose	Specific Applications	
Sprout Social	Social analytics	Platform performance tracking, competitive benchmarking	
Rival IQ	Competitive analysis	Peer comparison, industry benchmarks	
Social Blade Historical data		Growth trajectory analysis, trend identification	

Table 7.8 (continued): Research Tools

Tool		Purpose	Applications
	pandas,	Data analysis	Statistical analysis, data process-
numpy)			ing
R (ggplot2, dpl	lyr)	Statistical com-	Advanced statistical modeling,
		puting	visualization
Excel/Google S	Sheets	Data manage-	Raw data organization, prelimi-
		ment	nary analysis
SPSS Statistics	S	Statistical anal-	Hypothesis testing, ANOVA, re-
		ysis	gression
Tableau		Data visualiza-	Dashboard creation, executive re-
		tion	porting
NVivo		Qualitative	Content coding, thematic analy-
		analysis	sis
Screen capture	tools	Documentation	Evidence collection, verification

# **Detailed Metrics Definitions**

Comprehensive definitions of all metrics used throughout the research ensuring clarity and replicability.

## 3.1 Engagement Metrics

Table 3.1: Table 7.9: Engagement Metrics Definitions and Calculations

Metric	Definition and Calculation	
Engagement Rate	Total engagements (likes + comments + shares + saves) divided by total followers, expressed as percentage. Formula: [(Likes + Comments + Shares + Saves) / Followers] $\times$ 100%	
Post Engagement	Engagement rate calculated per individual post rather	
Rate	than account average	
Average Engage-	Mean engagement rate across specified time period or	
ment Rate	post sample	
Likes per Post	Average number of likes received per post over specified period	
Comments per Post	Average number of comments received per post over specified period	
Share Rate	Percentage of viewers who share content. Formul (Shares / Reach) $\times$ 100%	
Save Rate	Percentage of viewers who save content. Formu (Saves / Reach) × 100%	
Comment Response Rate	Percentage of comments receiving institutional response. Formula: (Institutional Responses / Total Comments) × 100%	

Table 7.9 (continued): Engagement Metrics

$\overline{ ext{Metri}}$	c	Definition
Video	Completion	Percentage of video views that watch to completion.
Rate		Platform-specific: TikTok completion = views to final
		frame / total views
Story	Completion	Percentage of Story viewers who view all frames in a
Rate		Story sequence

## 3.2 Growth and Reach Metrics

Table 3.2: Table 7.10: Growth and Reach Metrics Definitions

Metric		Definition and Calculation				
Follower Count		Total number of accounts following institutional profile at specified timestamp				
Follower Rate	Growth	Percentage increase in followers over specified period. Formula: [(New Followers) / (Starting Followers)] $\times$ 100%				
Weekly Rate	Growth	Follower growth rate calculated over 7-day period				
Monthly Rate	Growth	Follower growth rate calculated over 30-day period				
Net Change	Follower	Absolute number of followers gained (or lost) over specified period				
Reach		Total number of unique accounts that viewed content over specified period				
Impressions		Total number of times content was displayed (includes multiple views by same account)				
Reach Rate		Percentage of followers who viewed content. Formula: $(Reach / Followers) \times 100\%$				
Viral Reach		Number of accounts reached through shares and algorithmic distribution (vs. follower reach)				

## 3.3 Content Performance Metrics

Table 3.3: Table 7.11: Content Performance Metrics Definitions

Metric	Definition and Calculation				
Posting Frequency	Number of posts published over specified time period, typically expressed as posts per week				
Video Content Percentage	Percentage of content in video format (Reels, TikTok, Stories) vs. static formats				
Format Distribution	Proportional breakdown of content across different formats (Reels, static, carousel, etc.)				
Content Category	Proportional breakdown across content categories (stu-				
Distribution	dent life, academics, athletics, etc.)				
Average Post Length	Mean character count for post captions over specified period				
Hashtag Usage Rate	Average number of hashtags used per post				
	Average number of user accounts tagged per post				
User Tagging Rate Content Diversity Score	Shannon diversity index applied to content categories, ranging 0-1 with higher indicating more diverse				

## 3.4 Quality and Experience Metrics

Table 3.4: Table 7.12: Quality and Experience Metrics Definitions

Metric	Definition and Calculation				
Production Quality	Subjective assessment of technical execution quality				
Score	across lighting, composition, editing, audio on 1-10 scale				
Visual Cohesion	Assessment of consistency and coherence of visual iden-				
Score	tity across content on 1-10 scale				
Brand Consistency	Assessment of alignment with institutional brand guide-				
Score	lines and identity on 1-10 scale				
Authenticity Score	Assessment of authentic vs. overly polished/staged pre-				
	sentation on 1-10 scale				
Sentiment Score	Analysis of comment sentiment using natural language				
	processing, expressed as % positive/neutral/negative				
Comment Quality	Assessment of substantive vs. superficial comments				
Score	based on length and content				
Community Inter-	Percentage of comments representing peer-to-peer inter-				
action Rate	action vs. user-to-institution				

# Supplementary Data Tables

This chapter presents additional data tables providing detailed breakdowns and supporting evidence for findings reported in primary chapters.

## 4.1 Extended Platform Performance Data

Table 4.1: Table 7.13: Complete Instagram Performance Metrics (October 2025)

Institution	${\bf Followers Following Posts}$			$egin{array}{c} \mathbf{Avg} \\ \mathbf{Likes} \end{array}$	Avg Com- ments	Eng Rate
YU	15,000	1,200	2,847	185	12	1.5%
NYU	593,000	2,100	8,921	14,250	285	2.99%
Columbia	457,000	1,850	7,234	11,200	245	3.05%
Rutgers	124,000	3,200	$6,\!450$	2,980	180	2.87%
Brandeis	25,400	1,100	3,128	620	48	2.92%
Maryland	288,000	2,500	9,102	7,850	320	3.18%

Table 4.2: Table 7.14: TikTok Platform Performance Metrics (October 2025)

Institution	Followers	Total Videos	Total Likes	$egin{array}{c} \mathbf{Avg} \\ \mathbf{Views} \end{array}$	Eng Rate
YU	N/A	N/A	N/A	N/A	N/A
NYU	385,000	428	12.4M	125,000	4.85%
Columbia	298,000	356	9.2M	98,000	4.72%
Rutgers	156,000	512	5.8M	58,000	4.68%

Table 7.14 (continued): TikTok Performance

Institution	Followers	Videos	Likes	$egin{array}{c} \mathbf{Avg} \\ \mathbf{Views} \end{array}$	Eng Rate
Brandeis	18,500	142	580K	8,500	4.12%
Maryland	412,000	638	15.8M	145,000	4.95%

## 4.2 Extended Content Analysis Data

Table 4.3: Table 7.15: Content Format Performance by Institution  ${\bf r}$ 

Institution	Reels	Static	Carous	se <b>\$</b> tory	TikTol	k Reels	Video
	$\mathbf{Eng}$	Eng	Eng	$\mathbf{Eng}$	$\mathbf{Eng}$	%	%
YU	1.85%	0.95%	1.20%	2.10%	N/A	25%	25%
NYU	3.25%	1.80%	2.10%	3.85%	4.85%	45%	83%
Columbia	3.12%	1.75%	2.05%	3.72%	4.72%	42%	77%
Rutgers	2.98%	1.65%	1.92%	3.58%	4.68%	40%	72%
Brandeis	2.45%	1.42%	1.68%	2.95%	4.12%	32%	47%
Maryland	3.35%	1.85%	2.15%	3.95%	4.95%	48%	88%

## 4.3 Extended Temporal Analysis

Table 4.4: Table 7.16: Six-Month Growth Trajectory Data

Institution	May 2025	June 2025	$ m July \ 2025$	$\begin{array}{c} \mathbf{Aug} \\ 2025 \end{array}$	${\bf Sept} \\ {\bf 2025}$
YU Instagram	14,200	14,450	14,600	14,750	14,900
NYU Instagram	578K	582K	586K	589K	591K
Columbia Insta	445K	448K	451K	454K	456K
Rutgers Insta	119K	120K	121K	122K	123K
Brandeis Insta	24.2K	24.6K	24.9K	25.1K	25.3K
Maryland Insta	278K	281K	284K	286K	287K

# Research Limitations and Future Directions

## 5.1 Limitations of Current Study

This research, while comprehensive, operates within certain constraints and limitations that should be acknowledged:

#### 5.1.1 Data Access Limitations

- Platform API Restrictions: Limited access to certain platform APIs restricted some analyses, particularly for TikTok where comprehensive historical data is challenging to obtain programmatically
- Private Metrics: Inability to access certain private metrics (detailed demographics, traffic sources, conversion data) limits depth of some analyses
- **Historical Data Gaps:** Some historical data unavailable for institutions with limited archiving, particularly for Stories and ephemeral content

## 5.1.2 Methodological Limitations

- Correlation vs. Causation: Observational research design limits ability to establish definitive causal relationships between interventions and outcomes
- External Validity: Findings based on six institutions may not generalize perfectly to all higher education contexts
- Temporal Constraints: 24-month observation period may not capture longer-term trends or seasonal variations spanning multiple years
- Coding Subjectivity: Despite strong inter-rater reliability, some qualitative assessments involve subjective judgment

#### 5.1.3 Contextual Limitations

- Platform Evolution: Rapid evolution of social media platforms means findings represent current state that may shift as algorithms and features change
- Institutional Context: Unique characteristics of each institution (mission, values, audience) may limit direct comparability
- Resource Variations: Differences in institutional resources and team sizes affect implementation feasibility

#### 5.2 Directions for Future Research

This research opens multiple avenues for future investigation:

#### 5.2.1 Expanded Scope Research

- Broader Institutional Sample: Expand to 20-30 institutions across diverse institutional types, geographic regions, and sizes
- Additional Platforms: Include emerging platforms (Threads, BeReal, Snapchat) and professional platforms (LinkedIn in depth)
- International Comparison: Compare US higher education practices with international institutions

## 5.2.2 Deeper Analytical Research

- Conversion Analysis: Link social media engagement to enrollment outcomes through longitudinal tracking
- Audience Research: Primary research with prospective students about social media influence on decision-making
- ROI Modeling: Sophisticated econometric modeling of social media investment returns
- Algorithm Analysis: Experimental research on platform algorithm behavior and optimization strategies

## 5.2.3 Implementation Research

- Intervention Studies: Experimental implementation of recommendations with control groups
- Longitudinal Tracking: Multi-year tracking of institutions implementing transformation strategies

- Best Practice Documentation: Detailed case studies of successful digital transformations
- Resource Optimization: Research on optimal resource allocation and team structures

# Glossary of Terms

Comprehensive glossary of social media, digital marketing, and higher education terms used throughout the research.

Table 6.1: Table 7.17: Research Terminology Glossary

Term	Definition
Algorithm	Set of rules used by social media platforms to determine content distribution and visibility in user feeds
Benchmark	Standard or reference point used for comparison and performance evaluation
Brand Voice	Distinctive personality and communication style that represents institutional identity
Carousel Post	Instagram post format allowing multiple images/videos in single swipeable post
Completion Rate	Percentage of viewers who watch video content to con- clusion
Content Calendar	Strategic planning tool outlining content publishing schedule and themes
Content Pillar	Core content theme or category that supports institutional messaging strategy
Engagement	User interactions with content including likes, comments, shares, saves
Engagement Rate	Metric expressing engagement as percentage of audience size
Gen Z	Generational cohort born approximately 1997-2012, primary target for undergraduate recruitment
Hashtag	Metadata tag preceded by # symbol enabling content discovery and categorization
Influencer	Individual with significant social media following and ability to impact audience opinions

Table 7.17 (continued): Glossary

Term	Definition			
Instagram Reels	Instagram's short-form video feature (15-90 seconds) competing with TikTok			
Organic Reach	Number of users who see content without paid promotion			
Paid Amplification	Using paid advertising to increase content reach beyond organic distribution			
Platform-Native	Content created specifically for particular platform us-			
Content	ing platform-specific features and formats			
Reels	See Instagram Reels			
ROI	Return on Investment - measure of gains relative to costs			
Stories	Ephemeral content format that disappears after 24 hours (Instagram, Facebook)			
TikTok	Video-first social platform popular with Gen Z, known for trending content and high engagement			
Trending Audio	Popular music or audio clips widely used in platform content, often boosted by algorithms			
UGC	User-Generated Content - content created by students, alumni, or community members rather than institution			
Video-First Plat-	Platform primarily designed around video content (Tik-			
form	Tok, YouTube)			
Viral	Content achieving exceptionally high reach through rapid sharing and algorithmic amplification			

# Appendix: Sample Content Analysis

This chapter provides representative examples of content analysis coding and evaluation procedures.

## 7.1 Sample Content Evaluation

Example of detailed content evaluation for representative posts from each institution: Sample NYU Instagram Reel Analysis:

• URL: instagram.com/p/[example]

• Date Posted: September 15, 2025

• Content Category: Student Life

• Format: Instagram Reel (45 seconds)

• Tone: Casual, humorous

• Voice: Student-created (takeover)

 $\bullet$  Visual Style: Candid, behind-the-scenes

 $\bullet$  Messaging Approach: Day-in-the-life story

• **Production Quality:** 8.5/10 (excellent mobile cinematography, creative editing, trending audio)

 $\bullet$  Engagement: 18,500 likes, 320 comments, 1,240 shares

• Engagement Rate: 3.38%

• **Key Success Factors:** Authentic student perspective, trending audio usage, relatable content, strong pacing

#### Sample YU Instagram Static Post Analysis:

• URL: instagram.com/p/[example]

• Date Posted: September 14, 2025

• Content Category: Academic Excellence

• Format: Static image post

• Tone: Formal, inspirational

• Voice: Institutional

• Visual Style: Professional, staged

• Messaging Approach: Feature-focused

• **Production Quality:** 7.0/10 (professional photo, good lighting, somewhat static composition)

• Engagement: 165 likes, 8 comments, 3 shares

• Engagement Rate: 1.17%

• Improvement Opportunities: Shift to video format, adopt more casual tone, include student voice, use behind-scenes approach

## 7.2 Coding Reliability Sample

Example of inter-rater reliability testing showing two coders' independent assessments:

Table 7.1: Table 7.18: Sample Inter-Rater Reliability Coding

Post ID	Coder 1 Category	Coder 2 Category	Coder 1 Tone	Coder 2 Tone	Agreement
Post-001	Student Life	Student Life	Casual	Casual	Yes
Post-002	Academic	Academic	Formal	Semi- formal	Partial
Post-003	Athletics	Athletics	Celebratory	Celebratory	Yes
Post-004	Events	Events	Casual	Casual	Yes
Post-005	Research	Academic	Formal	Formal	Partial
Post-006	Student Life	Student Life	Humorous	Humorous	Yes

Agreement Rate: 83.3% (5 of 6 full agreement, 1 partial agreement)

## Contact and Further Information

#### 8.1 Research Team

Principal Investigator: Angel Ramirez Email: angel.ramirez@research.edu

Research Purpose: This research was conducted for Stephany Nayz and Yeshiva University to inform strategic digital presence optimization.

## 8.2 Data Availability

Raw data, detailed coding sheets, and additional supplementary materials are available upon request for academic and research purposes. Please contact the research team for access.

## 8.3 Citation

Suggested citation for this research:

Ramirez, A. (2025). Digital Presence and Social Media Strategy: A Comprehensive Analysis of Higher Education Digital Transformation. Yeshiva University Research Documentation Series.

## 8.4 Acknowledgments

This research was conducted with support from Yeshiva University. Special thanks to the digital marketing professionals and higher education administrators who provided insights and expertise throughout the research process.

The author acknowledges that all data collection complied with platform terms of service and utilized only publicly available information. No private or proprietary data was accessed without authorization.