

Optimizing Instagram Content Data Analysis

FINC306-430 Fall 2025 Data Project
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Index

1. Introduction
2. Material and Methods
3. Results with Interpretations
4. Conclusions
5. References

Introduction - My background : Contents Marketer



@ready_setlist
Follower:21.6k



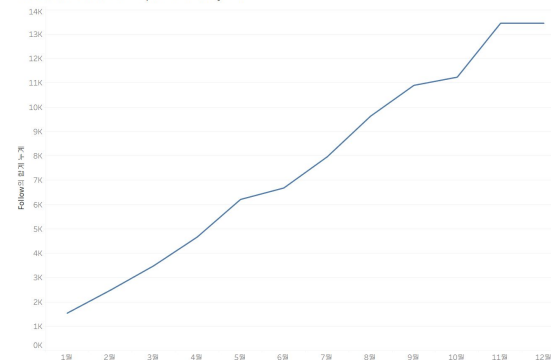
@chapter.pick
Follower:3.3k

Anime/Webtoon
Promotion on Instagram



Part Manager
Team Management and
Content Feedback

<Growth of Follower Apr2024 - May 2025>



My primary focus is how to
consistently generate **excellent**
results (view & followers)

Data Process

[illegible]

- ## 1. Content Creation



- ## 2. Content Acquisition from Meta



- ### 3. Data Cleaning and Analysis Execution

Material and Methods - what's in the data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Creator_N ame	Contents Name	Content_L ink	Upload_Date	Post type	Impression	Reach	Likes	comments	Shares	Saves	Total Reaction	Follow	Upload Time	Upload Day	Category
1	박수현	구원 서사 맛집 네이 버 월튼 5	https://www.instagram.com/p/C2Vo9NEuvAr/	2024년 1월 22일 월요일	Feed	59,950	51,406	1,244	29	519	2,089	3,881	39			
2	전소영	2달 에도일 하고 교환 학생 합격 한 애니	https://www.instagram.com/p/C2dyjp2CJmj/	2024년 1월 24일 수요일	Feed	408	343	27	10	0	11	48	0		11:00 Wed	웹툰
3	공서현	꿈도 희망 도 없는 매 콤한 세계 관 애니 주 천	https://www.instagram.com/p/C2gzyBvpoeq/	2024년 1월 25일 목요일	Feed	5,164	5,073	184	10	47	185	426	4		11:00 Sat	애니
4	김우경	형관처들 이라면 반 아랄 웹툰 추천	https://www.instagram.com/p/C2jQuqGPe9B/	2024년 1월 26일 금요일	Feed	87,327	78,093	1,907	34	927	2,442	5,310	57		15:00 Wed	애니
5	김다영	최애타구 하타 소 요	https://www.instagram.com/p/C2lhBNWKnud/	2024년 1월 27일 토요일	Feed	144,939	104,809	10,263	57	3,171	4,708	18,199	329		14:00 Sun	웹툰
6	김다영	지친 나를 끌어올리 는 애니메 이션 추천 5	https://www.instagram.com/p/C2qxYxxU8a/	2024년 1월 29일 월요일	Feed	996	896	73	9	19	25	126	0		11:00 Sat	애니
7	신지혜	하이큐 명 장면	https://www.instagram.com/reel/C2rasNSPysD/	2024년 1월 29일 월요일	Reels	2,096	2,068	109	4	15	7	135	0		12:00 Sat	애니
8			https://www.instagram.com/reel/C2rasNSPysD/												18:00 Sat	애니

[Table]

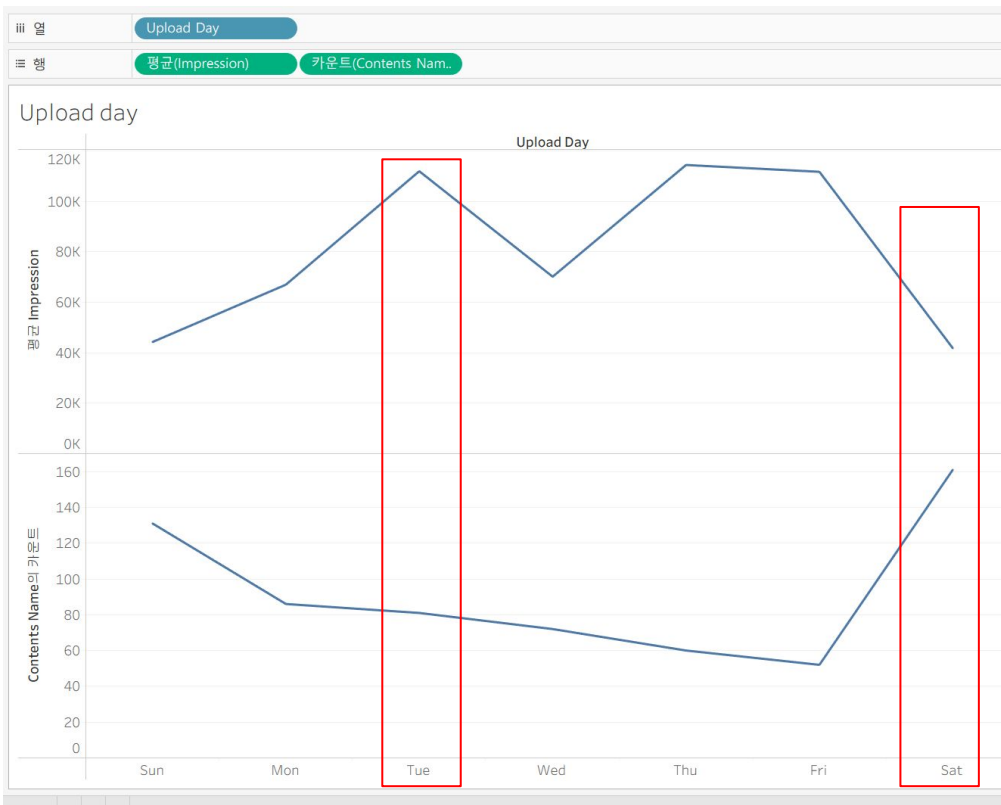
- 1. Creator Name (Categorical)
- 2. Contents Name/Link (Categorical)
- 3. Upload Date (Categorical)
- 4. Post Type (Categorical)
-Feed or Reels
- 5. Impression (Numeric)
- 6. Reach (Numeric)
- 7. Likes (Numeric)
- 8. Comments (Numeric)
- 9. Shares (Numeric)
- 10. Saves (Numeric)
- 11. Total Reaction (Numeric)
- 12. Follow (Numeric)
- 13. Upload Time (Categorical)
- 14. Upload Day (Categorical)
- 15. Category (Categorical)
-Anime(애니), Webtoon(웹툰), Book(책), WebNovel(웹소설)

Material and Methods - what techniques from class or outside you have used

Goal: **Optimize Instagram Content Publishing** to Increase Followers and Streamline Content Production. (Focus Today: Content Publishing Optimization Only)

1. Day Optimization (ANOVA & Tableau)
2. Time Optimization (ANOVA & Tableau)
3. Creation Method Comparison (T-test & jamovi)

Results with Interpretations - discuss what is interpretation of those results.



ANOVA

ANOVA - Impression

	Sum of Squares	df	Mean Square	F	p
Upload Day	5.67e+11	6	9.45e+10	4.40	< .001
Residuals	1.37e+13	636	2.15e+10		

[3]

Assumption Checks

Homogeneity of Variances Test (Levene's)

F	df1	df2	p
6.19	6	636	< .001

[3]

Normality Test (Shapiro-Wilk)

Statistic	p
0.519	< .001

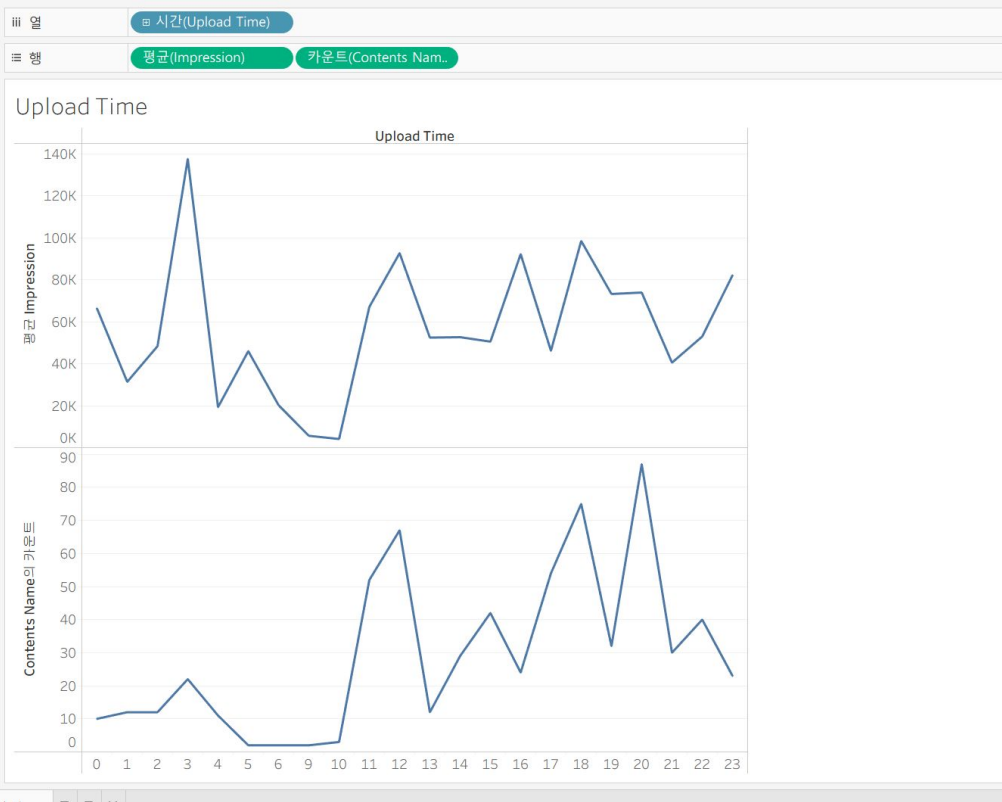
Post Hoc Tests

Post Hoc Comparisons - Upload Day

		Comparison		Mean Difference	SE	df	t	Ptukey
Upload Day		Upload Day						
Fri	-	Mon		44736	25754	636	1.73704	0.591
	-	Sat		69908	23385	636	2.98946	0.046
	-	Sun		67471	24029	636	2.80786	0.076
	-	Thu		-2703	27777	636	-0.09729	1.000
	-	Tue		-231	26052	636	-0.00885	1.000
Mon	-	Wed		41579	26681	636	1.55838	0.709
	-	Sat		25172	19581	636	1.28551	0.859
	-	Sun		22736	20347	636	1.11740	0.923
	-	Thu		-47438	24661	636	-1.92362	0.465
	-	Tue		-44966	22700	636	-1.96091	0.428
Sat	-	Wed		-3157	23419	636	-0.13479	1.000
	-	Sun		-2436	17250	636	-0.14123	1.000
	-	Thu		-72610	22175	636	-3.27441	0.019
	-	Tue		-70138	19971	636	-3.51193	0.009
	-	Wed		-28329	20785	636	-1.36292	0.821
Sun	-	Thu		-70174	22854	636	-3.07053	0.036
	-	Tue		-67702	20723	636	-3.26705	0.020
	-	Wed		-25892	21508	636	-1.20384	0.893
	-	Tue		2472	24972	636	0.09899	1.000
	-	Wed		44281	25627	636	1.72791	0.597
Tue	-	Wed		41810	23746	636	1.76069	0.575

Note. Comparisons are based on estimated marginal means

Results with Interpretations - discuss what is interpretation of those results.



ANOVA

ANOVA - Impression

	Sum of Squares	df	Mean Square	F	p
Upload Time	1.69e+12	134	1.26e+10	0.509	1.000
Residuals	1.26e+13	508	2.47e+10		

[3]

Assumption Checks

Homogeneity of Variances Test (Levene's)

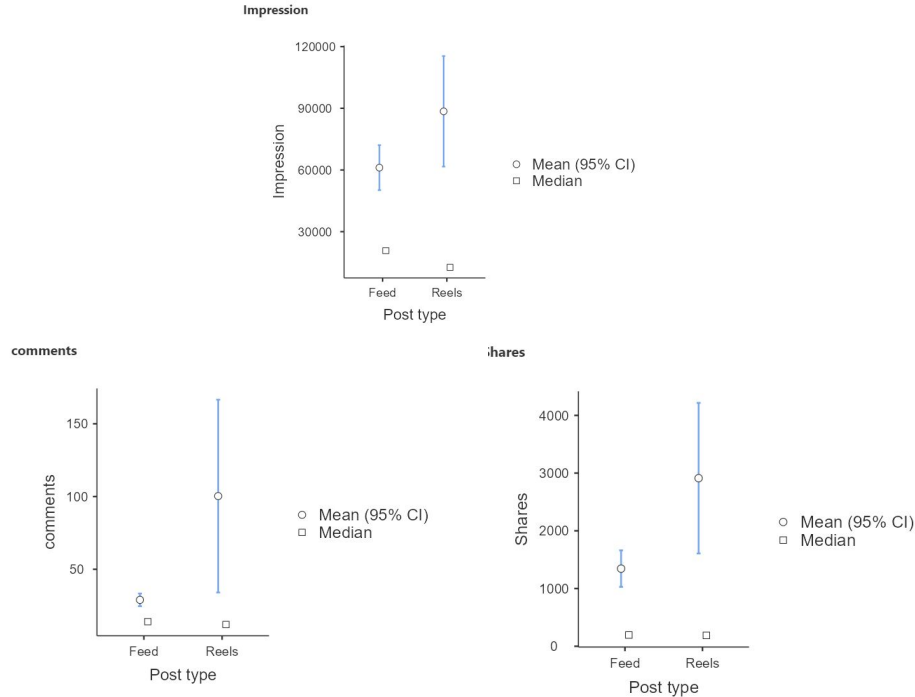
F	df1	df2	p
0.628	134	508	0.999

[3]

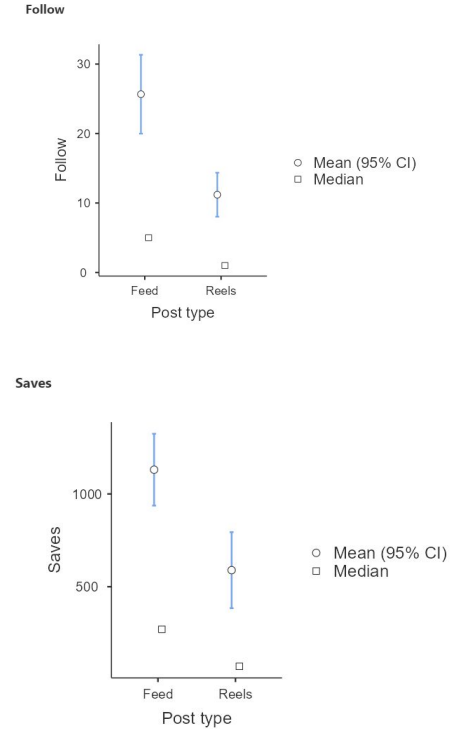
Normality Test (Shapiro-Wilk)

Statistic	p
0.528	< .001

Results with Interpretations - discuss what is interpretation of those results.



Reels > Feed



Feed > Reels

Results with Interpretations - discuss what is interpretation of those results.

Independent Samples T-Test

Independent Samples T-Test

		Statistic	df	p	Mean difference	SE difference
Impression	Student's t	-2.20 *	641	0.028	-27386.6	12470.25
Shares	Student's t	-3.02 *	641	0.003	-1566.8	518.91
Saves	Student's t	3.40 *	641	< .001	541.6	159.08
comments	Student's t	-2.99 *	641	0.003	-71.3	23.82
Follow	Student's t	3.37 *	641	< .001	14.5	4.29

Note. $H_a: \mu_{\text{Feed}} \neq \mu_{\text{Reels}}$

* Levene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

Group Descriptives

Group		N	Mean	Median	SD	SE
Impression	Feed	432	61134.5	20767.00	116011.8	5581.62
	Reels	211	88521.1	12628.00	199164.9	13711.08
Shares	Feed	432	1345.1	195.00	3355.9	161.46
	Reels	211	2911.9	188.00	9664.3	665.32
Saves	Feed	432	1130.7	270.50	2052.1	98.73
	Reels	211	589.2	71.00	1519.1	104.58
comments	Feed	432	29.0	14.00	46.1	2.22
	Reels	211	100.3	12.00	491.1	33.81
Follow	Feed	432	25.7	5.00	60.1	2.89
	Reels	211	11.2	1.00	23.5	1.61

Results with Interpretations -

Consumer responses vary depending on the characteristics of the content.

[TOP1]

제목: 초코하나 고백 장면 중 웃긴 모먼트
게시물 유형: 릴스
공유: 109,399



[TOP2]

제목: 한소 퍼펙트 반장이 알려주는 코드 풀립
게시물 유형: 릴스
공유: 54,376



[TOP3]

제목: 마법사 최현우도 못하는 마술
게시물 유형: 릴스
공유: 44,728



[TOP4]

제목: 애니화 작화 질향판 모음.zip
게시물 유형: 피드
공유: 44,308



[TOP5]

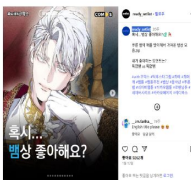
제목: 핑구로 변신한 에렌 예거
게시물 유형: 피드
공유: 27,746



VS

[TOP1]

제목: 흑시..... 뱀상 좋아하세요?
게시물 유형: 피드
저장: 17,063



[TOP2]

제목: 저는... 타마키 흑금발이요
게시물 유형: 릴스
저장: 16,035



[TOP3]

제목: 원결해도 헤어나오지 못하는 애틋 추천
게시물 유형: 피드
저장: 15,773



[TOP4]

제목: 코난은 진짜 유명한 순애 맛집임
게시물 유형: 피드
저장: 14,207



[TOP5]

제목: 전작-차기작 주변커플 비교
게시물 유형: 피드
저장: 11,386



Content Utilizing Recently Trending Memes

Ex: Sharing with a friend and asking if it's funny.

In-Depth Content Focusing on a Specific Character

Ex: Saving the content to rewatch if it features a favorite character.

Conclusions - What is the overall conclusion based on your results and analysis

Therefore, the following feedback was given to the team members:

1. Implement Content Optimization by Day of the Week
(e.g., Increase content volume previously uploaded on Saturday to Tuesday).
2. Optimize Goals Based on Creation Method(Feed & Reels).
3. Understand the Difference in Consumer Behavior Based on Content Characteristics.

References

Contents Data - Comics Part, Media Team, Oranke - 2024.04~2025.05

Thank you!