

MARKET RESEARCH

PROJECT REPORT

A STUDY ON

HOW MEN AND WOMEN DIFFER IN

TERMS OF SMARTPHONE USAGE AND

HOW TO MARKET TO THEM

DIFFERENTLY

DONE BY

GROUP 4 of Section 1

PGDM 2019-21

Abhishek Shaw (DM21105)

Avantika Singh (DM21118)

Gaurav Kumar (DM21128)

Malavika Chatterjee (DM21141)

Sajin Thomas (DM21161)

Yash Rameshbhai Chotaliya (DM21183)

Introduction

Men buy and women shop proclaims Wharton research on shopping habits are they actually different across genders? For a unisex product such as phone is it necessary to market the differently.. All this and much more can be understood from our research.

In today's technology driven society smartphones have become an inevitable part of our lives. Even though smartphones are considered to be the successors of the telephone, they have effectively replaced various other gadgets like the camera, music player, alarm clock, the flash light, handheld gaming devices, books and even the computer to some extent. They are becoming more and more feature rich day by day and have virtually unlimited number of uses for different people. The number of smartphone users in the world today is estimated to be around 3.2 billion, i.e. about 42% of the world population are smartphone users. And these numbers are growing at an increasing rate and is expected to reach 3.8 billion by 2021. At this growth rate, developing countries such as India, with a population of more than 1.3 billion and smartphone penetration rate of about 29%, offer huge potential for smartphone companies. (Data from <http://www.statista.com>)

As we know, in order for marketing to be effective for any product, marketers have to consider the various differences among their target audience. And the most basic, surface level difference between the audiences for any smartphone company is the gender. Smartphones are unisex products. Does gender have an effect on their usage habits and buying behavior? Answering these questions by conducting a proper market research will help us come up with better marketing strategies to target men and women differently. And this is exactly what we aim to do in this project.

Smartphones being a universal product, we require high levels of external validity in order to generalize and extrapolate the results to the rest of the population. So, we choose to follow the survey approach for the market research. As it is virtually impossible to survey the whole population we are planning to follow the quota sampling method by floating the survey online through mailing lists and social media. By completing this project, we aim to come up with some useful suggestions for smartphone manufacturers in order to effectively market their products differently to men and women.

Problem Definition

Which smartphone feature should be marketed to men?

Which smartphone feature should be marketed to women?

Gender and Marketing

One of the major goals of marketing is to segment consumers and to try to target the phones to their specific needs. Gender has a long history in marketing, as an important segmentation variable. It meets all the criteria: it is easily identifiable, information is accessible and the segments are large enough to generate more profit.

Gender in this study is operationalized as a binary construct – male/female. We want to figure out how different does a man perceive a smartphone in comparison to a woman.

Sampling Used: Quota Sampling

Gender	Age Group	Percentage
Male	Above 40	25%
Male	Below 40	25%
Female	Above 40	25%
Female	Below 40	25%

Literature Review

From a Marketer's perspective, it's always a challenge to know how to market a product to different genders. It becomes all the more difficult when the product happens to be a unisex one. Cellphones are something that almost each and every individual has access to these days. For all players in this market, he is posed with a plethora of questions like which segment am I to target, do I price it high or low, niche or mass market, what features to put in, do I impart a casual usage or a business usage, which age group would bring me the most revenues and so on.

In their study of consumer buying preferences towards established and emerging mobile brands, Garima and Abhinav show how different features in a phone influence the buying behavior. They also point out that manufacturers need to go on the intrinsic details of their products to grab customer's attention. Different features bring out different responses in men and women.

In another article by Omvir Gautam, V.K. Singh, and Pooja Agrawal, they observed that while buying cellphones consumers are confused as to what they want in their dream phone. This happens primarily due to the abundance of information available to them. The consumers who exhibit high involvement level have shown to take expert's opinion but even then they stumble

while making purchase decisions. This is a region where Marketer/ Sale professional could exploit.

Another study by Yugandhar and Naga Parameswari , the single most important factor that influences consumer minds is what is currently trending in the market. In the survey conducted across various demographics, taking different features and promotional activities of cellphones: price and features turned out to be the biggest trendsetters. So marketing teams know where to focus on.

Across numerous other articles what's missing is how men and women buy phones and does age play an important role in purchasing decisions of consumers. This is what we want to demonstrate through our Marketing Research.

****Reference in the end**

Qualitative Research: Depth Interviews

Personal phone interview was done for the group.

Customer Groups

- 5 men above the age of 40
- 5 men below the age of 40
- 5 women above the age of 40
- 5 women below the age of 40.

This was done to understand the different attributes of interest in order to judge what are our independent and dependent variables.

As people from different age groups have varied inclinations to features in a cell phone as per their requirements, so the data collected from the depth interviews can cast a light upon the relationship of purchase pattern vs the features of a cell phone. This allowed an in-depth probing of the participants allowing them to share their opinions without any interpersonal influence.

Focus group discussion and laddering technique cannot be applicable in this scenario because of unavailability of the people from these diverse age groups concomitantly and inability of rejection of a particular brand or product which is not desired as per requirement.

Results of the Depth Interviews

Male (Lesser than 40 years)

Preferred features

1. CAMERA
2. PERFORMANCE

3. DISPLAY
4. PROMOTION

Male (Greater than 40 years)

Preferred features

1. STORAGE
2. CAMERA

Female (Greater than 40 years)

Preferred features

1. CAMERA
2. DESIGN

Female (less than 40 years)

Preferred features

1. CAMERA
2. STORAGE
3. PROMOTION

Dependent and Independent Variables Scales

Dependent Variable

1. CUSTOMER SATISFACTION

Description: To check the customer satisfaction towards business practice and marketing we used Barksdale and Darden battery of items that assess consumer reaction to product. They were used to assess consumer satisfaction towards marketing and business. Each item was operationalized using a Likert 5 point response format (Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree)

1. My phone meets all my expectations
2. I am satisfied with the phone I use
3. My phone lacks some important features (Reverse score)
4. I am considering switching to a different smartphone brand (Reverse Score)
5. I often face problems while using my phone (Reverse Score)
6. I made the right choice selecting my phone
7. The manufacturer has put an effort to design the phone to my needs
8. My phone acts as a status symbol for me
9. Life without my phone would be very difficult

Cronbach Alpha Male: 0.694

Cronbach Alpha Female: 0.725

Independent Marketing Variable (Likert Scale of 5)

1. CAMERA

Camera is now becoming a very important feature in phones some even call it a ‘camera phone’. Different brands try to use camera as their unique selling position and its attributes vary from pixel count, night mode, panorama, zoom, video stabilisation and cameras with beauty mode.

QUESTIONS

1. I like that my phone has multiple cameras
2. I use my phone’s selfie camera a lot
3. My phone’s camera takes really good photos
4. My phone’s camera takes high quality videos

Cronbach alpha Female : 0.801

Cronbach alpha Male: 0.801

2. PERFORMANCE

The youth loves gaming hence phone performance has now become a very important aspect to check. Features range from High End CPU, dedicated GPU and RAM starting from 6 GB.

QUESTIONS

1. Having a higher capacity RAM improves my smartphone experience
2. I play a lot of games on my phone
3. I do a lot of multitasking on my phone
4. I only use my phone for basic activities (Call, messaging, social media etc.) (Reverse Score)

Cronbach alpha Female: 0.612

Cronbach alpha Male: 0.6

3. STORAGE

Some phones offer in-built storage while others have moved to the cloud like Google Drive, iCloud etc. We have all passed through a time wave where we had to delete videos/messages/photos from our phones to free up space. Now with cloud, most storage don't matter or does it? This research answers the above question.

QUESTION

1. I store a lot of photos and videos on my phone
2. I use cloud storage (Google Drive, DropBox, iCloud etc.) over phone storage
3. I am willing to pay a higher price for a higher storage capacity
4. I often delete my apps/videos/photos to free up storage space on my phone
5. Expandable storage is a very important feature in my phone

Cronbach Alpha Female 0.63

Cronbach Alpha Male 0.62

4. BRAND EQUITY

Some people use their phone as a means of showing their financial position and gives them a sense of power status in the society. We have researched on how relevant is it to have a relevant brand of our phone.

QUESTION

1. I chose my phone only because of the brand
2. I would recommend my phone brand to others
3. I will never buy a phone from this brand again (Reverse Score)
4. I never considered lesser known smartphone brands when I purchased
5. Logo of my smartphone brand helps me feel more self-confident

Cronbach Alpha Female: 0.664

Cronbach Alpha Male: 0.607

Covariates

We have taken age as a covariate as young (below 40 years) and old (above 40 years) as categorical data to check if the age changes the preference in terms of features of the phone for male and female. We have assumed that it shouldn't and taken it as an external influencer.

Hypothesis

1. Men are satisfied with phones from good brands and high performance.
2. Women are satisfied with phones having good cameras.

Scales of Independent Variables

We are using Likert Scale for all the Independent Variables. Likert Scales have the advantage that they do not expect a simple yes / no answer from the respondent, but rather allow for degrees of opinion, and even no opinion at all. Therefore quantitative data is obtained, which means that the data can be analyzed with relative ease. 5 point likert scale seemed optimum cause most people did the survey on their phones which needed scrolling and avoiding options when chosen 7 point scale.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Survey

Sample: A sample of 275 adults in different cities Bangalore, Dehradun, St. Louis (USA), Bhusbhaneswar, Cuttack, Kerala, Cambodia, Mysore, Jamshedpur, London, Himachal and many more

68 Female below 40 years of age

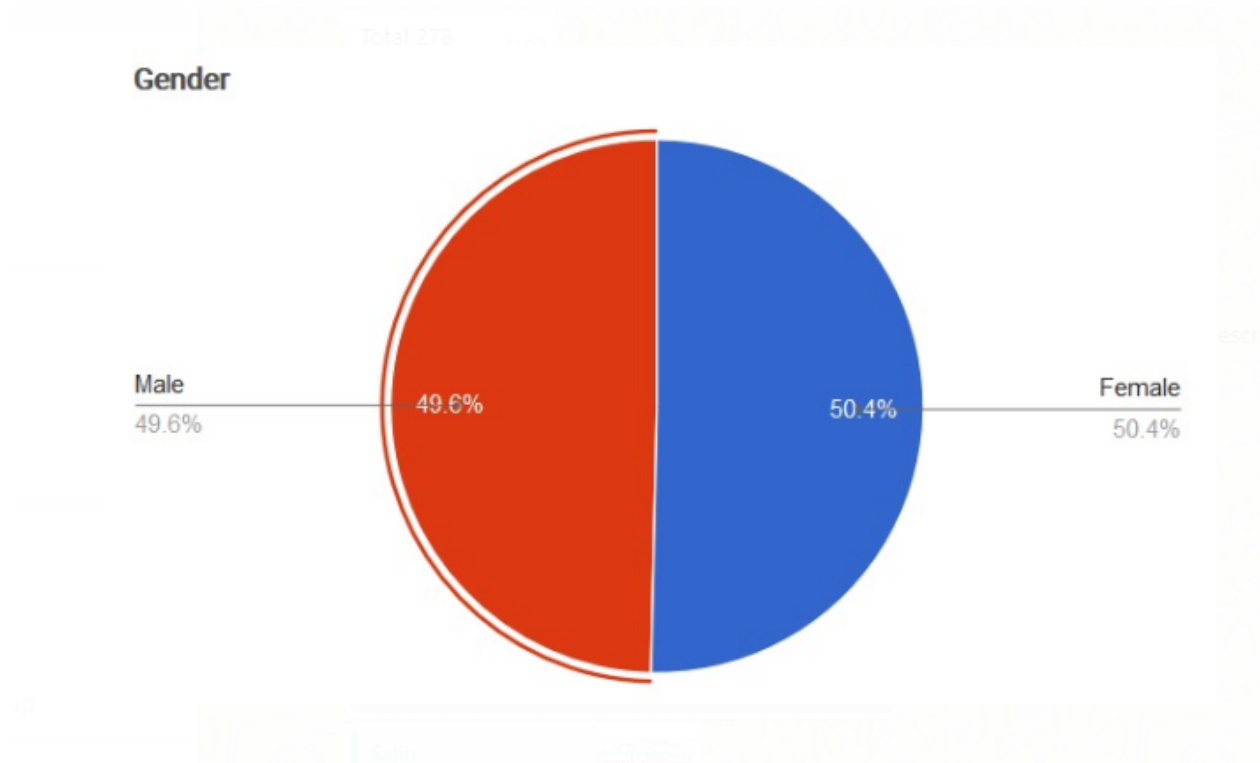
69 Female above 40 years of age

69 Male below 40 years of age

69 Male above 40 years of age

Development: We shared the form amongst family and friends. Tests of relationships with most individualistic characteristics revealed attitude were generally consistent across most consumer groups. There was no change in opinions across age groups.





After conducting a literature review and focus group discussion we have decided on our dependent and independent variables. We have also defined various attributes that can be used to measure the independent variables. Based on these a number of hypotheses have been formed. Our next major objective was the questionnaire design. Multiple questions need to be framed to measure the different constructs. After this was done an online survey will be created on google forms was done. The survey was shared with the respondents via mailing lists and social media. Once data collection was done, we first have to check the data for validity by finding the Cronbach's Alpha values we moved to Regression

Problem-Solving Research: We are using Problem solving research technique by demographic segmentation to know what features of a phone should we market to each segment.

Descriptive Statistics of Entire Dataset

Descriptive Statistics										
	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
							Statistic	Std. Error	Statistic	Std. Error
Gender	275	1	1	2	1.50	.501	-.007	.147	-2.015	.293
Age Group	275	1	1	2	1.29	.455	.926	.147	-1.151	.293
AvgSatisfaction	275	3.000000000	1.888888889	4.888888889	3.458585859	.5673741054	-.108	.147	-.297	.293
AvgCamera	275	4.00	1.00	5.00	3.3327	.80810	-.258	.147	-.082	.293
AvgPerformance	275	4.000000000	1.000000000	5.000000000	3.172121212	.7857591376	-.039	.147	.227	.293
AvgStorage	275	4.00	1.00	5.00	3.2371	.78730	-.480	.147	.391	.293
AvgBrand	275	3.8	1.2	5.0	3.215	.6377	.145	.147	.264	.293
Valid N (listwise)	275									

We realised few of our variables are partially correlated so decided to go ahead with the factor analysis

Multicollinearity Female

Correlations					
		Avgcam	AvgPer	AvgSto	AvgBr
Avgcam	Pearson Correlation	1	.494**	.423**	.422**
	Sig. (2-tailed)		.000	.000	.000
	N	140	140	140	140
AvgPer	Pearson Correlation	.494**	1	.415**	.271**
	Sig. (2-tailed)	.000		.000	.001
	N	140	140	140	140
AvgSto	Pearson Correlation	.423**	.415**	1	.236**
	Sig. (2-tailed)	.000	.000		.005
	N	140	140	141	140
AvgBr	Pearson Correlation	.422**	.271**	.236**	1
	Sig. (2-tailed)	.000	.001	.005	
	N	140	140	140	140

** . Correlation is significant at the 0.01 level (2-tailed).

Multicollinearity of Male

		Correlations			
		Avgcam	AvgPer	AvgSto	AvgBr
Avgcam	Pearson Correlation	1	.335**	.147	.216*
	Sig. (2-tailed)		.000	.086	.011
	N	138	138	138	138
AvgPer	Pearson Correlation	.335**	1	.123	.266**
	Sig. (2-tailed)	.000		.151	.002
	N	138	138	138	138
AvgSto	Pearson Correlation	.147	.123	1	.102
	Sig. (2-tailed)	.086	.151		.233
	N	138	138	138	138
AvgBr	Pearson Correlation	.216*	.266**	.102	1
	Sig. (2-tailed)	.011	.002	.233	
	N	138	138	138	138

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Factor Analysis: Female

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
Cam1	.769	-.024	.129	.116	.042
Cam2	.503	.101	.206	.081	.233
Cam3	.801	.244	-.158	.145	-.167
Cam4	.696	.383	-.147	.126	.051
Per1	.566	.044	.258	.329	.181
Per2	.119	.041	.178	-.096	.740
Per3	.566	-.029	.326	.161	.321
Per4	.124	.015	-.143	.169	.751
Sto1	.513	.237	.517	.009	.071
Sto2	.112	.066	.683	.231	.236
Sto3	.588	-.030	.101	-.251	.221
Sto4	-.068	.082	.694	-.135	-.343
Sto5	.422	.040	.551	-.294	.137
Br1	.001	.825	.106	.063	.043
Br2	.432	.246	.194	.646	-.028
Br3	.048	.046	-.105	.840	.099
Br4	.152	.639	.075	.247	-.058
Br5	.129	.778	.038	-.091	.061

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Based on the high loading questions we came up with 5 different categories of women

Type	Camera Lovers	Brand Conscious	Storage Specific	Self Opinionated	Gamer
Phone Features	Camera	Brand	Storage	Brand	Performance
How to market?	Show them videos on the phone and allow them to use take a selfie to test the phone	Show well renowned brands to these customers	They are the high data driven customers make sure you talk about the external storage, phone storage and cloud storage while advertising	They will only buy a brand that they feel is right for their needs. They would also recommend it and act as an opinion leaders. Speak to the customer and get to know the brand they are looking for while marketing it	Yes women are obsessed with gaming too. If she likes gaming show her the phone has a high performance and will not get lag while playing

Results of Regression: Female

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.423	.397	.44055

a. Predictors: (Constant), AgeGroup, REGR factor score 4 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1, REGR factor score 5 for analysis 1, REGR factor score 3 for analysis 1

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.946	6	3.158	16.270	.000 ^b
	Residual	25.813	133	.194		
	Total	44.759	139			

a. Dependent Variable: Avgsat

b. Predictors: (Constant), AgeGroup, REGR factor score 4 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1, REGR factor score 5 for analysis 1, REGR factor score 3 for analysis 1

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.042	.307		9.924	.000
	Camera Lovers	.295	.038	.519	7.714	.000
	Brand Concious	.063	.038	.112	1.669	.097
	Storage Specific	-.049	.039	-.087	-1.261	.210
	Self Opinionated	.215	.038	.379	5.693	.000
	Gamer	-.010	.039	-.017	-.254	.800
	AgeGroup	.107	.093	.085	1.155	.250

a. Dependent Variable: Avgsat

Factor Analysis: Male

Component Matrix^a

	Component					
	1	2	3	4	5	6
Cam1	.691	-.175	-.295	-.184	.006	-.063
Cam2	.639	.106	-.203	-.194	-.067	.306
Cam3	.661	-.370	-.190	-.264	-.073	-.003
Cam4	.732	-.374	-.216	-.276	-.086	-.052
Per1	.555	-.007	.099	.456	-.126	.171
Per2	.279	.113	.360	.096	.497	.509
Per3	.602	-.029	.263	.449	-.012	.184
Per4	.264	-.027	-.048	-.042	.796	-.039
Sto1	.409	.373	-.358	.106	-.001	-.354
Sto2	.288	.031	-.328	.267	-.365	.318
Sto3	.175	.528	-.267	.395	.232	-.333
Sto4	-.048	.600	-.150	.092	-.156	.348
Sto5	.164	.581	-.433	.074	.082	-.127
Br1	.150	.552	.318	-.483	-.219	-.103
Br2	.575	.017	.480	.156	-.085	-.296
Br3	.358	-.245	.427	.234	-.032	-.376
Br4	.177	.422	.525	-.022	-.249	-.025
Br5	.386	.435	.255	-.534	.155	.063

Extraction Method: Principal Component Analysis.

a. 6 components extracted.

Based on the high loading questions we came up with 6 different categories of men

Type	Socially Active	Business Man	Late Majority	Brand Conscious	Young People	Gamer
Feature	Camera, Performance and	Storage and Brand	Brand	Brand	Performance	Performance

	Brand					
How to market ?	With the tik tok generation and where we love uploading our lives on media these people should be shown the quality of the camera, the speed to upload pictures and the brand	Business men want to do many tasks on their phones, so they look for those with high storage. They have high incomes and will go for good brands	These are the people who would accept a brand only after seeing multiple opinions and options and is well known in the market	Show well renowned brands to these customers	The youth have very less patience and need a phone that runs fast, Men between 20-35 should be marketed showing high performance	Generation Z boys are immensely into pubg, clash of clans etd and to market these young boys it's best you talk about performance

Regression : Male

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.680 ^a	.462	.433	.42294

a. Predictors: (Constant), AgeGroup, REGR factor score 5 for analysis 2, REGR factor score 2 for analysis 2, REGR factor score 6 for analysis 2, REGR factor score 4 for analysis 2, REGR factor score 3 for analysis 2, REGR factor score 1 for analysis 2

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.994	7	2.856	15.967	.000 ^b
	Residual	23.255	130	.179		
	Total	43.248	137			

a. Dependent Variable: AvgSAT

b. Predictors: (Constant), AgeGroup, REGR factor score 5 for analysis 2, REGR factor score 2 for analysis 2, REGR factor score 6 for analysis 2, REGR factor score 4 for analysis 2, REGR factor score 3 for analysis 2, REGR factor score 1 for analysis 2

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.390	.117		28.848	.000
	Socially active	.320	.038	.569	8.499	.000
	Business man	-.116	.036	-.206	-3.202	.002
	Late majority	.117	.037	.208	3.165	.002
	Brand conscious	-.059	.037	-.106	-1.612	.109
	Young People	-.013	.036	-.024	-.366	.715
	Gamer	-.138	.036	-.245	-3.773	.000
	AgeGroup	.112	.087	.091	1.297	.197

a. Dependent Variable: AvgSAT

Result

We reject both of our Original Hypotheses. From our analysis, we conclude that :-

1. Women are satisfied with good camera and look for good brands
2. Men look for all aspects of a phone right from camera, performance, storage and brand

ADVICE: WOMAN

If you see a woman walking in the store first mention about the camera she might belong to the camera lover category, also these are young, opinionated women with independent way of living. Let them decide on which brand they want as that will make them feel more satisfied with the phone they buy.



Show advertisements to women of phones which have a good flash in low light. Give attention to all the camera attributes like the zoom feature and beauty modes to make the ladies feel they look great always. You can even advertise on the google lens feature of the camera. Also show the camera stabilisation on movement and automatic smile detector selfie. Enlighten them about wide angle selfies and photos. They can add slow motion selfies and other filters to make the picture fun and attractive.

Advice Men

Speak to the customer figure out if he likes uploading every moment of his life on social media. Talk to them about the performance of the phone, the camera and the brand. When you digitally market to men on social media make sure you highlight the above feature

If the customer comes in good clothes and seems of the higher income level or a business man then please show the phone which are ranked higher in terms of brand. They trust their phone and sometimes do their tasks on the phone instead of using their laptop hence talk about the storage to these people



Just by the looks of a person you can know if he is skeptical about new technologies arriving in the market. He is a late majority and will only switch his phone if there is no other option such people should only be shown renowned brands as they wouldn't want to experiment with a new brand

Young, smart, savvy these are the boys who take pride at which level they are in their games. They even discuss games with their friends. Such boys should be shown the performance of the phone. Also when you're advertising a phone on a gaming app make sure you show about the performance that will enable customer satisfaction.

Give more priority to Socially Active men and Late Majority men owing to their Positive Beta values. Focussing on these two categories will result in maximising your Customer Satisfaction.



Reference

1. "Trends in Consumer Buying Behaviour Towards Cell Phones" by V. Yugandhar & B. Naga Parameswari
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