Prepared by Shyamala Venkatakrishnan, Heejae Roh Nikshita Ranganathan, Archit Barua Professor Venkata Duvvuri

May 11<sup>th</sup>, 2023

# 3DHEAL5® Modeling Proposal

Northeastern University

### 3DHEAL5®



Characteristic of Channel preference



History of Channel preference



Why it is important And Article

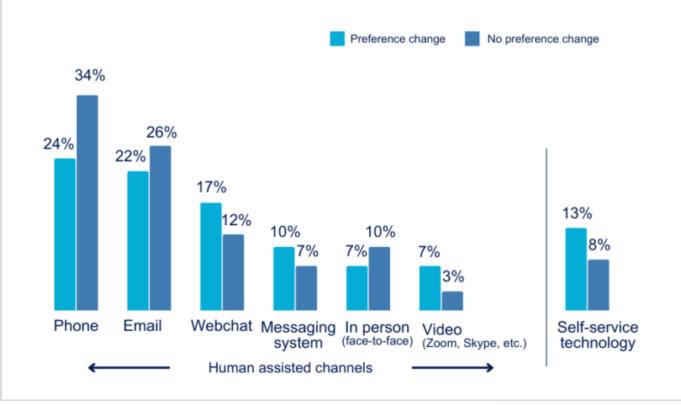


What's next

# Consumers' preferences for customer service channels are rapidly changing.

#### **Change in Channel Preference**

What is your preferred contact method?

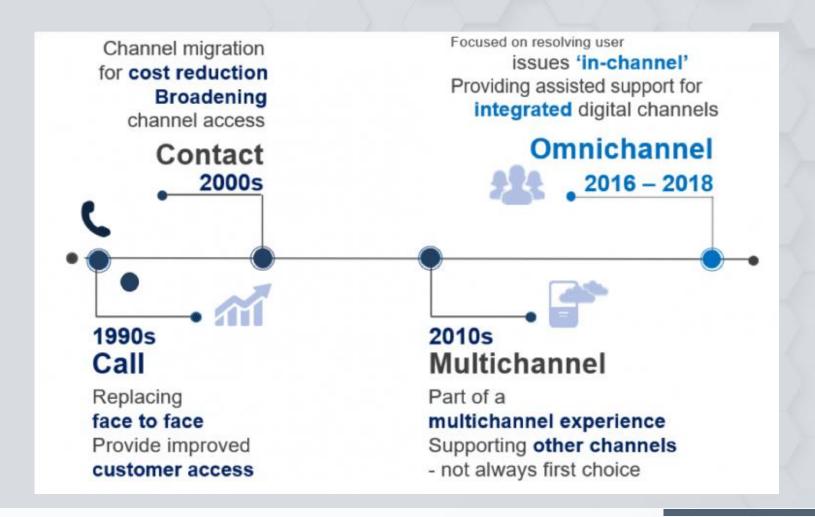


47%

of customers changed their preferred channel in recent years

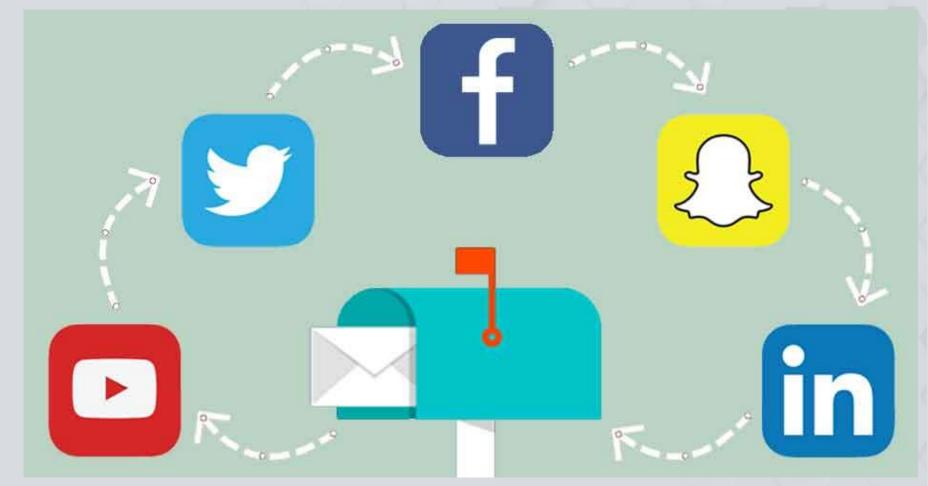
- · Shift from phone & email
- · Increase SST preference

#### History of preferable channel from customers





# Importance of understanding Not only response rate but also Loyalty





## Communication Channel Preferences: A Descriptive Audience Segmentation Evaluation

Table 2

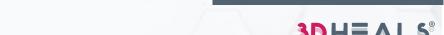
Communication Channel Preference Based on Demographic, or Audience Segmentation,
Characteristics – Informal meetings

Yes		No				
f	%	f	%	N	$\chi^2$	Φ
					8.20**	.05
1090	50.7%	1061	49.3%	2151		
549	56.2%	428	43.8%	977		
					61.36***	.14
46	67.6%	22	32.4%	68		
346	63.1%	202	36.9%	548		
378	53.7%	326	46.3%	704		
546	52.1%	502	47.9%	1048		
264	45.2%	320	54.8%	584		
25	29.8%	59	70.2%	84		
					27.18***	.09
262	55.9%	207	44.1%	469		
596	52.3%	543	47.7%	1139		
628	54.9%	515	45.1%	1143		
160	40.6%	234	59.4%	394		
					15.80*	.07
54	62.1%	33	37.9%	87		
33	66.0%	17	34.0%	50		
	1090 549 46 346 378 546 264 25 262 596 628 160	f     %       1090     50.7%       549     56.2%       46     67.6%       346     63.1%       378     53.7%       546     52.1%       264     45.2%       25     29.8%       262     55.9%       596     52.3%       628     54.9%       160     40.6%       54     62.1%	f         %         f           1090         50.7%         1061           549         56.2%         428           46         67.6%         22           346         63.1%         202           378         53.7%         326           546         52.1%         502           264         45.2%         320           25         29.8%         59           262         55.9%         207           596         52.3%         543           628         54.9%         515           160         40.6%         234           54         62.1%         33	f         %         f         %           1090         50.7%         1061         49.3%           549         56.2%         428         43.8%           46         67.6%         22         32.4%           346         63.1%         202         36.9%           378         53.7%         326         46.3%           546         52.1%         502         47.9%           264         45.2%         320         54.8%           25         29.8%         59         70.2%           262         55.9%         207         44.1%           596         52.3%         543         47.7%           628         54.9%         515         45.1%           160         40.6%         234         59.4%           54         62.1%         33         37.9%	f         %         f         %         N           1090         50.7%         1061         49.3%         2151           549         56.2%         428         43.8%         977           46         67.6%         22         32.4%         68           346         63.1%         202         36.9%         548           378         53.7%         326         46.3%         704           546         52.1%         502         47.9%         1048           264         45.2%         320         54.8%         584           25         29.8%         59         70.2%         84           262         55.9%         207         44.1%         469           596         52.3%         543         47.7%         1139           628         54.9%         515         45.1%         1143           160         40.6%         234         59.4%         394           54         62.1%         33         37.9%         87	f         %         f         %         N         χ²           1090         50.7%         1061         49.3%         2151           549         56.2%         428         43.8%         977           46         67.6%         22         32.4%         68           346         63.1%         202         36.9%         548           378         53.7%         326         46.3%         704           546         52.1%         502         47.9%         1048           264         45.2%         320         54.8%         584           25         29.8%         59         70.2%         84           262         55.9%         207         44.1%         469           596         52.3%         543         47.7%         1139           628         54.9%         515         45.1%         1143           160         40.6%         234         59.4%         394           54         62.1%         33         37.9%         87



## Communication Channel Preferences: A Descriptive Audience Segmentation Evaluation

Some college - no degree	119	49.4%	122	50.6%	241		
Associate/Community college degree	111	58.7%	78	41.3%	189		
Bachelor's degree	841	52.4%	763	47.6%	1604		
Master's degree	393	51.3%	373	48.7%	766		
Professional degree (e.g., JD, MD)		49.4%	45	50.6%	89		
Doctorate (e.g., PhD, EdD)	54	43.2%	71	56.8%	125		
Region						30.28***	.10
Western	388	44.6%	481	55.4%	869		
North Central		54.8%	532	45.2%	1178		
Southern		57.1%	310	42.9%	722		
	126	50.6%	133	49.4%	269		
Northeast	136	50.070					



#### What are attributes

4	A	F	G	H		L	M	N	
1	Email	Phone	Phone yes or not	Industry	Job Title	Linkedin Link Yes or No		Source Name	
2	subaksb899@gmail.com		No	Medical, Pharma, Biotech	Student			LinkedIn	
_	e.bolle@uq.edu.au			Medical, Pharma, Biotech	Post doctoral researcher			Website	
	Luluhnguyen@gmail.com	610872767		Medical, Pharma, Biotech	Production manager	No		LinkedIn	
	sultan@pegamedical.com		No	Medical, Pharma, Biotech	R&D Engineering Associate	No		Mailchimp	
	ecoltoff@wakehealth.edu			Education	Graduate Student			Mailchimp	
_	P-aibrahim@zewailcity.edu.eg		No	Education	Teaching assistant	No	0/1	Website	
8	P-aibrahim@zewailcity.edu.eg		No			No	Egypt		
	P-aibrahim@zewailcity.edu.eg		No				Egypt		
LO	fatihozefe@iyte.edu.tr		No	High Tech - Other	Research Assistant	No	Turkey	LinkedIn	
11	kyoutani@nikkolgroup.com	661253501		Other	CEO	No		Website	
12	Peirsmaan@hotmail.com		No	Education	PhD student	No	- U	Mailchimp	
L3	gozde.taslioglu@std.izmirekonomi.e	du.tr	No	Medical, Pharma, Biotech	student	No	Turkey	LinkedIn	
L4	da.ente@gmail.com		No	Aerospace & Defense	RND	No	United States	Website	
15	gosia@biegun.eu		No	Education	PhD	No	Germany		
16	jmatthews@armiusa.org	6033036042		High Tech - Other	Business Development	No		Mailchimp	
17	nadiakasmi@outlook.fr '	'+33651500475		Medical, Pharma, Biotech	Etudiante	No	France	LinkedIn	
18	f.galardo@hotmail.com		No	Medical, Pharma, Biotech	PhD student	No		LinkedIn	
19	kevin00e@gmail.com	991438906		Other	Estudiante	No	Ecuador	Website	
20	kdwadehanson@gmail.com	4147597445		Medical, Pharma, Biotech	President	No	United States		
21	didarul.bhuiyan@westpharma.com		No	Medical, Pharma, Biotech	Sr Biomedical Engineer	No	United States	Mailchimp	
22	morgan.dossantos@labskincreations.fr		No	Medical, Pharma, Biotech	сто	No	France	LinkedIn	
23	behbood_abedi@yahoo.com '	'+5521999818475		Education	postdoc	No	Brazil	Website	
24	S2000206@siswa.um.edu.my		No	Other	PhD Student	No		LinkedIn	
25	pongracz.e.judit@pte.hu	304357944		Education	professor	No	Hungary	Website	
	intermedx@gmail.com	6503921838		Manufacturing	Partner			Mailchimp	
	bagde.ashu@gmail.com		No	Education	Research Scientist	No	India	Website	
28	caiyanli@nus.edu.sg		No	Education	Research Engineer	No	Singapore	Mailchimp	
	massimiliano.papi@unicatt.it		No	Education	professor			LinkedIn	
	a01206231@itesm.mx		No	Medical, Pharma, Biotech	PhD Student			Mailchimp	
	delani4j@gmail.com		No	Education	Student			LinkedIn	
	palaash007@gmail.com	5214807186		Medical, Pharma, Biotech	Student	No		Website	
	s.guillaumin@fr.urgo.com	638049798		Medical, Pharma, Biotech	Research engineer in tissue regeneration	No		Website	
	starstuff3@gmail.com	6317072637		Other	Owner, modeler, operations			Website	
	katie.weimer@3dsystems.com	7206431001		Medical, Pharma, Biotech	VP Regenerative Meedicine			Website	

