

CREDENTIALS PRESENTATION

Gold Microsoft Partner



A disruptive DECISION SCIENCE company



We have been recognized for our efforts





BEST START-UP SINGAPORE 2016



INNOVATION AWARD FINALISTS – TOP 30 GLOBAL INNOVATORS 2017









Artificial Intelligence

On a mission to Disrupt Market Research using Artificial Intelligence

How does Graphene Al work?

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Identifies 4 million anonymous HCPs and 100 million+ patients

Identifies sources of conversation

By country and by indication

Cleans the data

Identifies the 10% of data that is relevant

Understands native language

Discovery, processing, analysis in 55 languages

Grades insights on a Likert scale

Converts text to numbers

The Graphene Advantage



Graphene Al vs Current Way



Graphene AI is used in 30 countries with over 100+ projects delivered worldwide



Proven Use Cases in Pharma

Insights are delivered as a landscape assessment or regular track



Case Studies

Image: State S

Oncology Track

Business Challenge

The client had a large portfolio of drugs to track on a monthly basis, such that the brand team can identify and address any challenges that the brand faced with respect to competition.

What AI Discovered

The tracker that Graphene built for the client tracked:

- Month on month message cut through effectiveness and sentiment monitoring for doctors and patients
- Factors that impacted doctors' and patients' (prescription / usage) behavior, together with associated positive and negative words for each brand
- Pool of considered treatment options
- Acknowledged beliefs by indication and country

Insights for Action

The ongoing tracking effort helped the client to ensure that brand's performance is in line with KPIs and to take corrective measures quickly and effectively.



Huntington's Disease

Business Challenge

The client wanted to understand the pain points of Huntington patients and their caregivers and come up with recommendations for greater patient satisfaction

What AI Discovered

Leveraging the power of AI, we identified a wide range of challenges that patients/caregivers were experiencing ranging from emotional and treatment challenges to financial and family related issues, also covering issues with RoA, QoL, procurement & therapy needs

Insights for Action

Recommended a holistic drug supply model which caters to patient needs beyond drug delivery





Scale of Research: 2,000 HCPs, 2,600 Patients, 4,200 Caregivers

Chronic Spontaneous Urticaria

Business Challenge:

Our client had an in-trial drug for CSU and wanted to better target patients and HCPs. They wanted to find out if there was:

- Value in gender and age targeting
- How dermatologists and allergists perceive Biologics
- How dermatologists and allergists are managing CSU with Biologics

What AI Discovered:

- There was no value in gender and age targeting; the Al instead came back with a benefit matrix-based segment which showed distinctive patient segments which can be addressed.
- The AI identified bottlenecks that need to be addressed to encourage use of the drug

Insights for Action:

We provided recommendations to better target dermatologists, allergists and patients

ALLERGISTS

Insights: Even though they don't consider biologics as an upfront option, unlike dermatologists they are convinced about safety and efficacy of biologics

2.101 Allergists	Agree %	Disagree %	No Mention %
2, 10 1 7 1101 Broto	Agree /	Disugree //	no montion 70
Good option in intractable cases	58	32	10
Safety issues are overblown	41	43	16
Most chronic allergies need life time medications	59	21	20
Fhorough work up , including cardiac, hepatic workup needed before prescription	40	11	49
Patients try to self manage until the problem is acute	39	5	56

27% 26% 29% 18% Underside Use 29% 18% Undersided

Insights:	They are quite convinced about	t the data and feel	biologics the onl	y option in
	Reasons for using	Biologics in CSU		
567 Allergists	ricusene for along	Agree %	Disagree %	No Mention
No other medication w	orking	54	34	12
Peer/scientific recomm	endation	57	31	12
Trial/case data/published data is promising/very good		53	36	11
Severe affect on QOL	of patients with no hope/cure	53	27	20

	r					
		DERMATO	OLOGIS	STS		
Insight:		on when other treatments f ogics prescription.	ail and recom	mendation by	guidelines are	e drivers of
4,897 Dermatologists			Agree %	Disagi	ree % No l	Viention %
Latest guidelines for patients who fail to respond to h1- antihistamines even after graded increase)			45	5		50
Agree with EAACI / GALEN / EDF / WAO guideline recommends the use of omalizumab, especially for when oral corticosteroids fail		44	4		52	
No other treatment is working / no improvement in patients			42	8		50
H1- antihistamines help pruritus, not wheals			29	5		66
			17% Don't Want to Use	41% Undecided		
lr.	nsights:	This segment of dermatologists	s believe current t	reatment options	are sufficient.	
		Reasons for not wanting	to use Biologics i	n CSU		
832 Dem	matologists		Agree %	Disagree %	No Mention %	
Adequate control obtained with OCS / Histamines, they are safer		45	9	46		
Risk of a	inaphylaxis is h	gh	43	10	47	
Not sure	of long-term ef	ficacy	41	10	49	

PATIENT SEGMENTS IDENTIFIED

4 Benefit-Based Patient Segments Identified

Quick relief seekers 34%	Safety driven biologics optimist 26%
Active lifestyle seekers 19%	Efficacy driven biologics optimist 19%

Scale of Research: 5,000 Dermatologists, 2,100 Allergists, 16,600 Patients

Pediatric Vaccine

Business Challenge

The client launched a vaccine at 4 times the market price. Although the team spent heavily on HCP marketing, they saw no results, and were looking to refine their strategy.

What AI discovered

The AI engine identified 2 Patient segments who were influenced by HCPs and 2 Patient who were <u>NOT influenced</u> by HCPs.

Insights for Action

The insights allowed the client to get a deeper understanding of the need to shift their marketing spend from HCP to Patient. The 2 Patient segments who were NOT influenced by HCPS were the affluent segment who could afford the Vaccine.

> Scale of Research: 3,100 HCPs, 9,000 Patients



Conclusion: Wealthy parents are <u>NOT</u> influenced by experts.

SEGMENT PROFILING

Differentiator	Low Cost/No Pain + WOM	Low Pain/Fever + WOM	Low Pain + Expert Recommended	No Fever + Expert Recommended
Both Post grads	11	83	12	15
Frequent flyer membership (Indian)	15	83	14	9
High end maternity centre	6	79	12	10
Management degree	15	78	8	8
High end car (22L +)	5	78	7	15
Large housing loan (75 L +)	8	77	4	13
Active on FB/Twitter	4	77	4	13
Mutual fund SIP (large > 5L per year)	13	75	10	10
Foreign travel for work	12	74	12	15
Multiple high-end credit cards	11	74	16	13
Pregnancy classes	12	74	5	10
Fitness/aerobics/Zumba	7	71	10	5

Thank You