

Report on MHRD Innovation Cell Organized Webinar Session by Dr. Preet Deep Singh, AVP, Invest India As Live You Tube Session on 20th May, 2020

MHRD Innovation Cell organized a webinar as a live You Tube session on 20th May, 2020 from 3 PM to 4 PM. The Leadership Talk was delivered by Dr. Preet Deep Singh, AVP, Invest India on the topic: “Use of Market Data and Application of Marketing Research Tools and Methodology - Increasing Chances of Survivability of Innovation and Venture - Advance Level”. Faculty members and Students of Manav Rachna University attended the session. The session was very informative, practical-oriented and beneficial for those young students who aspire to be an entrepreneurs and startup founders in future.

In this webinar session Dr. Singh did a quick revision of topics which he covered in his previous session at foundation level on “Market Research” and then covered the key issues in new enterprise launching, Then with the help of B2B and B2C case studies he explained how to apply data and market research for survival of startup. Dr. Singh said market research is not a one time job that the startup will do before building a prototype, it should be done all the time in a continuous manner since inception to product launch and in future also as the product being sold in the market with new release and upgrades etc. It is important as people change, customer preferences change and market competitors change. So the entrepreneur needs to do a realistic estimate of target market size by applying the STP technique of Segmentation (dividing population into parts) Target (Deciding which part is relevant for product/service offering) Positioning (what the product should convey) . In this exercise entrepreneurs need to consider following factors in creating the pyramid applying the various filters : total Population, those who can pay, those who can afford, those you can reach and other factors like loyalty, trend, law.

Next he explained Drake’s equation and used it in an example of estimating number of intelligent civilizations in the universe, considering number of stars, number of planets orbiting the stars, out of those the number of planets with conducive environment to have life, out of which how many planets can have intelligent life, out of which how many can communicate etc. Then he formulated Drake’s equation for estimating market size as the multiplication of following parameters : total population, proportion of population who can pay, proportion of population whom you can reach, proportion of population who are interested to buy the product/service offering, proportion of population with other factors like loyalty, trend, law. He then picked up the case study of estimating market size for a baby trolley product. Entrepreneur will need to go through following steps iteratively : getting clarity on the product, developing a plan, identifying resources for business, loop back. Next step is deciding on the price for the product and it is a B2C business. He showed if the price of product is kept high then applying market research, market segmentation technique, critical thinking and Drake’s equation, a smaller serviceable market size of 18000 customers will be addressed based on customers’ affordability and geographic spread vis a vis reach of business to customers. So here one is addressing very high income group of people who can afford the stroller. With the pricing of Rs. 25000 per stroller the revenue earned will be Rs. 45 crore. Whereas if the pricing is brought down by 60% so that it is affordable to a larger customer base with the product price as 2% of their monthly income as opposed to 5% of monthly income in the earlier case. With this change in assumption serviceable market size comes out as 6.15 lakh and revenue goes up to Rs. 600 crore approximately.. For a product to be high priced the brand becomes more important than innovation. Also reliability, durability, convenience and flexibility should also be higher. However these expectations will not be high in case of medium priced or low priced products.

Dr. Singh referred to following set of resources for market research : R, SPSS, Python, Tableau

Google Analytics, Data website, Site Profiler, Survey Monkey, MailChimp. These are for primary, secondary and visualization data. Helpful skills for market research are : desk research, web crawling, logical thinking, critical thinking and guesstimates.

Recap ○○
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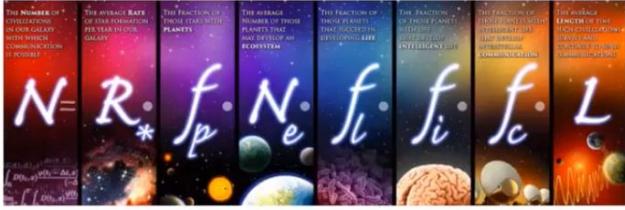
Drake's Equation ●○

Doing a Live Case: Baby Product, Stroller ○○
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Way Forward

Estimating the Number of Intelligent Civilizations in the Universe

Revisiting Drake's Equation



The figure shows a visual representation of Drake's equation, $N = R_* \cdot f_p \cdot N_e \cdot f_l \cdot f_i \cdot f_c \cdot L$. Each variable is displayed in a stylized font against a background of space imagery. Above each variable is a small text box explaining its meaning: N (The number of civilizations in our galaxy with which communication might be possible), R_* (The average rate of star formation in our galaxy), f_p (The fraction of those stars that have planets), N_e (The average number of planets that can support life per star that has planets), f_l (The fraction of those planets that actually develop life), f_i (The fraction of those planets that develop intelligent life), f_c (The fraction of those planets that develop advanced civilizations), and L (The average length of time such civilizations release detectable signals into space).

Figure: Visual representation of Drake's equation to calculate the probability of coming across Extra-Terrestrial Life from SETI Institute.

Dr. Preet Deep Singh
Market Research for Startups