**2021 Accomplishments**

**CORE SERVICES:**

* Keytruda Consumer Analytics support –
  + Marketing mix and Investment planning – Ran marketing mix models in collaboration with ZS to determine impact of digital promotions on Keytruda sales. Shared optimal investment scenarios for 2022.
  + Net Impact analysis – Worked with Crossix & INI to calculate revenue and cost efficiency across different channels/publishers/vendors. Suggested changes to Paid Search optimization based on granular campaign level analysis.
  + Precision marketing pilot – Designed a multiple test pilot to assess a) impact of increasing consumer promotion on high priority geographies b) impact of removing consumer promotion from low priority geographies
  + NWOW measurement – Analyzed Crossix NWOW pilot results to conclude the impact of NWOW media pilot on Keytruda consumer promotion performance. Presented results to leadership across Procurement, Media, Brand, and Analytics.
  + Adhoc analysis –
    - TV business case – Created and presented a business case to Keytruda leadership to secure TV funds for 2021 Q4
    - Impact of multi-cultural marketing – Analyzed Keytruda conversion rate differences by ethnicity
  + Collaborated with stakeholders (brand/media/INI/Crossix team/Finance) on a day-to-day basis to share analytics POV in decision making
  + [InProgress]
    - Collaborate with ZS on mid-year run of marketing mix
    - Help the team design a pilot for the TNBC SDoH (Social Determinants of Health) campaign

Total investment analyzed – $140M

* Gardasil Adolescent and Adult Consumer Analytics support –
  + HCP and HCC Marketing mix (Adult & Adolescent) – Ran marketing mix models at DMA and Zip level to determine the impact of consumer and HCP Digital promotions for both G9 Adult & Adolescent
  + Net Impact analysis (Adult and Adolescent) – Worked with Crossix & INI to calculate cost efficiency at indication, channel, and publisher level
  + Collaborated with stakeholders (brand/media/INI/Crossix team) on a day-to-day basis to share analytics POV in decision making
  + Adhoc analysis –
    - TV business case – Helped the Adult brand team to prepare a business case to retain TV for 2021. Analyzed contribution to public and private sales, and drive TV importance to grow G9 business during COVID

Total investment analyzed – $100M

* Pneumovax Consumer Analytics support
* Worked with INI, Crossix, media team, and brand team to provide investment recommendations for 2022 based on marketing mix and Crossix net impact analysis.
* Helped the DET team select test and control geographies for testing more targeted creatives created through a tool

Total Investment Analyzed - $12M

* Januvia LOE
  + Analyzed the revenue trend given LOE to determine optimal time to stop samples
  + Ran scenarios to determine LROP budget ask for the period 2023 – 2025 in the case Januvia doesn’t go LOE in Jan’2023
  + Collaborated with the team regularly to discuss evolving LOE scenarios

Total Investment Analyzed - $40M

* Adhoc/standalone projects –
  + Gathered Adherence data and worked with Finance to get the 2022 NPV values.
  + Conclude NWOW impact for Gardasil and Pneumovax. Synthesis YOY study to understand how NWOW changes affected performance for these brands.
  + Consulting on the build of the Marketing Mix data lake [In Progress]–
    - Assisted the team in developing a project plan (data flow, QC checks, system alerts), coordinated discussions on data sourcing (Big Query/APIs/Media agency), had knowledge transfer sessions on data manipulation for marketing mix
* Investment Prioritization framework
  + Completed IPF for Gardasil Adolescent, Adult, and consulted team on Januvia, Pneumovax. Held discussions with the individual brand teams to apprise them of the brand performance and suggested changes for 2021

Total promotional dollars impacted - $200M

**INNOVATION:**

* Consulting on build of Net Impact analysis capability in Health Map [In Progress]
  + Identified gaps in vendor net impact methodology. Collaborated internally to suggest an improved version of the patient test and control matching and

**COMPLIANCE:**

* Completed all the trainings assigned on the learning portal. Ensured that day to day activities are compliant with the data privacy, social media, and other compliance guidelines laid by Merck

**PROFESSIONAL DEVELOPMENT:**

* MIT Data Science Course – Enrolled in 3 month applied data science program with a focus on deep learning
* Training – Completed Python and DataIku trainings to familiarize with the latest tool and technologies
* Special Project – Picked up a project from the MBCAT initiative to increase understanding of the Managed Care space