daSilva, Alex

Sr. Spclst, Data Science

Manager: Senthil Murugan

Evaluated by: Senthil Murugan

2021 Performance Review

Organization: Promotion Optimization (Senthil Murugan) (SUP53012191)

Location: USA - Pennsylvania - North Wales (Upper Gwynedd)

01/01/2021 - 12/31/2021

Overall

Rating:	Successful
Comment:	

General comments

Alex has impressed me in several different ways. He is hard-working, highly collaborative and has strong technical knowledge. His perseverance and focus on getting things done is admirable. Alex has a strong interest in knowing more about the data and business and is one of the quickest learners I have come across. These traits make him an invaluable contributor to the team. I am also impressed with how fast he jumped into client critical projects (G9 / CTAP) and provided immense values. Alex is a strong innovator and has great ideas and solutions for any project he gets into. Of particular mention is his creative thinking and solutions to tackle CTAP impact analysis. Alex is a great presenter – clear, concise and to the point. He is highly detail oriented. Sometimes I rely on him to educate me on some of the procedural nuances, technical methods, and business issues. Out of his own interest he engaged on a gig with MRL and his supervisor there was thrilled to have him and was happy that Alex was able to make key contributions in a very short time frame and present his work to the leadership team. MRL team leader also provided Inspire points to express his appreciation for Alex's contributions. Being relatively new to Merck, I see that continuing to explore data, getting more accustomed to business processes and issues and in general vaccine business will be helpful. I am highly confident that he will excel in meeting and exceeding the needs of his Vaccine brand clients.

Key 2021 projects and initiatives

- Vaccine Consumer Promotion Leader – Mkt Mix models
  - Learning quickly to lead the HCC promotion optimization for Vaccines portfolio.
  - Mid-year Mkt Mix Model for Gardasil Adolescents and Adults covering both HCC and HCP channels **[$72MM Spend]**
  - Quickly learned and developed high quality business relevant models and delivered the results to Gardasil Adolescent and Adult brand teams and support teams. This was very useful for the brand teams to verify if they have allocated promotional spends optimally for 2022 as well as to help tweak the investments where needed.
  - Ran the whole process end to end, starting with collecting data from the media agency, processing it, running statistics models, and creating decks for presentation to the brand team.
- Strategic Initiative – CTAP - Content Tagging Analysis
  - Collaborated closely with a parallel advanced analytics team and developed novel ML methods to understand the business impacts of CTAP initiative [Brand: Gardasil]
  - Results inform the click through rate improvement expectations from CTAP initiative
- Strategic Initiative – CHP - Content Hyper-Personalization
  - Evaluated some of the modeling work done by ZS and is currently guiding them to choose more relevant metrics to focus on.
- Training & Learnings
  - Quickly learned about the data and business issues and has jumped into business critical analyses with a highly collaborative approach.

Stakeholder feedbacks

Alex's key strengths are a) strong R background b) perseverance and c) open communication. One of the stakeholders says:

Even though being new to Merck, Alex is demonstrating Ways of Working mindset through "Knowing to Learning" and "Planning to experimentation" tenets. He comes from a strong technical background but has shown keen interest in learning methods specific to marketing mix models and, how these results would empower the business. He experimented with Shapley regression approach for marketing mix and continues to look for improvements in the current model setup.

Another stakeholder expressed that he has made key contributions to the content impact project by providing machine learning expertise and general guidance on the direction of the modeling work. He has provided creative solutions to some of the challenges that we've faced. This stakeholder identifies his strengths as: collaborative, creative, strong technical knowledge, willing to teach and share, motivated and enthusiastic.

I am very happy to have Alex as the promotion optimization team member. I am also happy that he chose to join Merck. I look forward to continuing to work with him in a challenging and always changing future.

Comment: At the time of writing this, I just completed my third month at Merck. During those 3 months I felt I have become successfully integrated into the team; and importantly, been able to make meaningful contributions to multiple projects.

Initially, there was an incredible amount to learn about the company/team in general and many nuances regarding data sources, data storage and modeling techniques. I felt like I made great progress in understanding all this new material by seeking out knowledge from internal team members, external collaborators (e.g., Crossix, Initiative) and external team members at Merck (eg., CTAP partners). As evidence to support that point, I'm currently wrapping up two involved projects (detailed later in the self-evaluation) that use very different data sources and involve almost entirely different stakeholders.

Overall, I feel like my first quarter with Merck has been productive and challenging, and I'm excited to continue learning and contributing to my team's and Merck's goals.

Priorities

High

Personal Development & Training: Marketing Mix Models - Learned about Merck Data Systems, data processing, promotions, and modeling procedures.
- Worked through a prior run of Marketing Mix to familiarize myself with data collection sources (e.g., INITIATIVE, Merck severs) for HCC (e.g., social, digital, search) and HCP (e.g., details, MMF) data sources and streams.
- Learned about modeling techniques commonly used in Marketing Mix analyses for ZIP, ZIP3, and DMA level models including mixed models, robust regression, ridge models, and demeaned models.
- Received instruction and training on the CROSSIX DIFA platform to learn about a test and control approach to channel measurement and how to utilize this information to calculate an investment return for a given channel.
- Attended regular meetings/presentations with digital and brand (G9 Adult/adolescent and P23) teams, and Crossix to learn about product lines and measurement strategies.
- Completed RWDEX training necessary to act as a citizen level data scientist and completed training for the DATAIKU platform

Due Date: 10/01/2021   **Status:** Completed   **Completion Date:**

Category: Development

Comments:

High

Core: Content Tagging Analysis
- Analyzed the effectiveness of content tags in terms of content engagement by examining what CTAP features explained engagement and what the most important CTAP features were for engagement.

Due Date: 11/30/2021   Status: In Progress   Completion Date:

Category: Business

Comments:

High

Core: G9 2021 2nd set of Marketing Mix Models - Analyzed impacts from G9 promotions.
- Pulled and aggregated HCC and HCP data for G9 Marketing Mix by communicating with INITIATIVE and querying CIRRUS database.
- Calculated ROIs on G9 Adult and Adolescent HCC and HCP channels and generated promotion response curves.

Informed roughly $72,000,000 of investment for G9 across adult and adolescent brands

Due Date: 12/31/2021   Status: In Progress   Completion Date:

Category: Business

Comments:

Medium

Core: Content Hyper Personalization
- Worked with CHP and ZS teams to understand, evaluate CHP machine learning models.

Due Date: 12/31/2021   Status: In Progress   Completion Date:

Category: Business

Comments:

Career

Job Interest: 56991946 - Sr. Spclst, Stat. Programming, 56153131 - Assoc. Dir., Quant. Sciences, 56980499 - Sr. Spclst, Data Science

Willing to Travel: Yes

Travel Amount: Up to 25%

Additional Information:

Long Term: Yes/No

Areas:

Short Term: Yes/No

Areas:

Additional Information:

Career Preferences: Cross Functional, Broaden

Career Interest: With the restructuring of teams, and the emphasis on creating various models internally, I'm always interested in opportunities to do advanced modeling/machine learning