Leveraging Data Analytics to Optimize Mobility Performance

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As the mobility industry becomes progressively more sophisticated through the use of digital infrastructure, the question of how to best use analytics to optimize programs has become one of the most common topics amongst thought leaders and industry insiders.

Successful analytics are contingent upon the orchestration and centralization of progressively disparate systems and stakeholders. Ensuring mobility ecosystems have been architected to best transmit, transform and synthesize data is paramount to accurate and useful analytics. Much like any system or application, if foundational design hasn’t been instituted, users will continue to glean the wrong insights or complete the wrong tasks, only faster. With this in mind, assuming foundational design and implementation has been complete allows for a deeper analysis of the trends and patterns in maturity and areas of analysis within mobility analytics.

As mobility seeks to cater to an increasingly complex, global workforce, top organizations are leveraging data analytics in increasingly sophisticated ways. The prevailing reality of mobility analytics is that most if not all organizations are truly only scratching the surface of data analytics. Analytics and reporting typically fall within one of three broad categories; Descriptive, Predictive and Prescriptive. These three categories serve as groupings across a scale of maturity (from left to right respectively). Descriptive analytics are typically qualified as those analytics which merely present the realities of a given dataset; program expenditures, exception counts, volume of assignments, etc. are examples of descriptive metrics one may receive from a relatively nascent analytics tool. As organizations mature in the practice and gradually move from descriptive to predictive analytics, inevitably, contributing stakeholders will begin to seek to contextualize analysis of performance insights. This progression leads to the development of analytics and key performance indicators incorporating qualifying criterion such as year over year performance, relative performance (comparisons of division, function, policy, etc.), performance vs. benchmarks and averages, etc. This progression is fundamental to the foundation of predictive and prescriptive analytics.

With a foundation in place, the conversation shifts to how to institute future looking analytics (predictive and prescriptive). Mobility leaders all over the globe are seeking to commoditize their data and derive program insights that not only inform present decisions, but anticipate future trends and performance. Most commonly, today’s conversation revolves around predictive modelling and visualizations. Mobility decision makers have aptly realized that in order to optimize their organization’s program, they need to understand what will occur, before it occurs. This transition requires statistical analysis and the ability to codify this analysis.
to derive an outcome or target of variable interest. Truly predictive analytics require the right internal (or contracted) skillsets to develop appropriate models. Furthermore, this development is contingent upon the right blend of subject matter expertise within mobility functions, and technical acumen to deliver truly accurate predictive modelling. It is critical to understand the methodology used to derive these tools to avoid what can be materially harmful decision making through the use of inaccurate or partially conceived models. The evolution then from predictive to prescriptive analytics delves into the use of sentiment analysis, unstructured data, and machine learning to deliver proactive insights into patterns and upcoming events. This final transition builds upon existing analytical tools in use and supplements them with additional tools and functions to reach advanced automated decision methods.

With this foundational understanding of the analytic maturity model established, we’re able to discuss trends in mobility topics, visual expressions of analytics and tooling to support these practices.

As mobility interweaves with a multitude of functional areas to meet the growing strategic emphasis of talent mobility, the need for increasing transparency and insight into the overall cost of mobility programs is paramount to the success of the program. Mobility leaders often seek to summarize total cost of the program; this will require a firm understanding of not only direct costs (employee expenses, fees, etc.), but also indirect costs (compensation adjustments, cost of living, etc.). Upon establishing this total cost baseline, analysis and tooling should follow. The goal of this analysis should be not only to express total cost as a static output, but to contextualize spend through the lens of trends and patterns. For example, by analyzing trends in cost patterns, resources should be able to represent anticipated costs to assist in budgeting. If a particular move profile most commonly incurs the bulk of spend in a particular period, for a particular purpose, mobility management may be capable of leveraging these patterns to extrapolate the cost of strategic group moves and when the majority of cost may hit to report back to financial stakeholders in support of project activity. In addition to fundamental cost, understanding employee exceptions can add an additional layer of insights into program cost.

After tackling the analysis of spend, the next logical area of review is the pool of resources itself. Here, the goal should be to understand patterns in mobility while qualifying the mix of move types. More commonly than not, organizations tend to support peak periods of relocations and assignments which parallel organizational behavior. Establishing this baseline allows stakeholders to determine where outliers occur, and how to standardize these patterns to develop supporting tools and reduce cost impact.

The outputs of analysis should be carefully crafted to avoid misinterpretation or misattribution of insights. The relative maturity of recipients of these outputs will undoubtedly vary and ensuring visualizations, key performance indicators and associated tooling are designed to
explicitly remove ambiguity is key to consistency in understanding to facilitate meaningful discourse in program optimization.

Successfully implementing mobility analytics programs is contingent upon not only understanding topics of analysis, but establishing the foundation of systems and data to be exposed through increasingly mature tools. As mobility leaders begin the journey of creating these analytics programs, establishing cross-functional subject matter experts to detail objectives will help to facilitate clearly defined scope, and approach to avoid fragmented effort or misunderstandings of what the organizations data is telling recipients of analytics. As the appetite for analytics within organizations increases at exponential rates, and mobility seeks to meet it, it is fundamental to ensure the strategic and tactical alignment while enforcing not only the development of tooling, but the education of contributing resources and stakeholders to best utilize the next wave of mobility insights.