How Research Related to Revitalizing Our Downtowns Can Be Improved: A Conversation with Michael Stumpf and N. David Milder

The ADRR's Series of Discussions with Authors of ADRR Articles: No. 3, October 22, 2020

Shortly after publishing the Fall 2020 issue the third in a series of E-Conversations was held on The ADRR's LinkedIn page to discuss the articles (and the principles within them) titled "Enhanced Decision-Making With Mobile Device Tracking Data" and "Toward Developing a New Approach to Designing and Executing Downtown Market Research Projects: Part Two" by authors Michael Stumpf and N. David Milder, respectively. What ensued was a dynamic conversation along with active networking and researching on principles and ideas on downtown market research.

The following is a direct transcription from the event with only minor formatting done to represent the most accurate conversation flow since this was a live conversation.

Participants: N. David Milder (DM), Michael Stumpf (MS), Ellen Morosoff Pemrick (EP), David Carlson (DC), Michael Berne (MB), John Carter Owens (JO), Mark Waterhouse (MW), Andrew Dane (AD), and Bill Ryan (BR).

Organized and Transcribed by Mike Frederick

Intro by DM: *Thanks so much for joining this third conversation with authors of articles published in The ADRR. These conversations are an experiment to provide a viable platform for readers to comment on and question the authors about what they have written, and for the authors to expand upon or clarify their analyses.*

For some years now, Mike Stumpf and I have been sharing our deep concerns about the data and analytical tools researchers are using in projects related to downtown revitalization, as well as our ideas about how they can be improved. In the latest issue of The ADRR (https://theadrr.com/), we both published related articles: Mike's "Enhanced Decision-Making With Mobile Device Tracking Data," and my "Toward Developing a New Approach to Designing and Executing Downtown Market Research Projects: Part Two."

DM: Michael Stumpf Can you expand upon your thoughts about the value of gap.leakage analyses

MS: Most analyses that rely on canned market reports use sales leakage, which I think is a very poor measure, as it is simply a comparison of estimated sales in the trade area to the trade area potential. More often, we want to understand how a particular district is performing. A leakage report that includes the sales of one or more other districts doesn't help us to do

this. What we really want to know is the market share – how much of the potential are we capturing in our study area? Aside from a measure of overall performance, it helps us to understand the role of the district within the marketplace, and suggests possibilities for new business development. The statistic is simply a ratio of the sales from businesses in the district compared to the market potential in the trade area. Of course, the important thing to consider along with market share is competition. As far as the value of a gap analysis to a business, it is negligible. I don't know any good business that thinks it will only capture the gap. They ask whether they are stronger than the competition. In the end, any new business is capturing sales from somewhere, whether that is across the street, in the next town, or with the internet, even on a different continent.

EP: There are so many caveats that need to be provided with a sales leakage analysis. The leakage may have more to do with how the trade area is defined, and doesn't necessarily represent a business opportunity.

MS: Ellen Morosoff Pemrick Exactly. Draw the line on one side of the street, when there is a Walmart Supercenter on the other side of the street, and you will have a very different result than if that line were just a few hundred feet further out.

DM: Michael Stumpf The whole leakage analysis is filled with data and conceptual issues that have not been thought through. Immaculate Retailing, the idea that a new entrant will somehow only get sales dollars that were being leaked is attractive politically because downtown leaders can then claim that the new retailers will not hurt the old ones. Hmmm: downtown retailers could not win the leaked dollars, but the new one will? More importantly, the focus is mainly on the sizes of the leaks by sector, while the real questions are how much of those sales new or reinvigorated downtown merchants can probably win back. The answers to such questions are almost always weakly and poorly argued, and probably wrong. Finally, the leaked sales are usually just the tip of the iceberg when it comes to expenditure dollars that are really up for grabs. To get a good sense about them one needs to know about the expenditures of the unbonded, up for grabs shoppers.

DC: I agree with Michael. My issue is figuring out how to pay for such data. $6,000 is a lot of money for me to spend as administrator of a small (4k pop) city

DM: A probably cheaper approach that I have found reliable in terms of accurately identifying the component parts of a trade area, but that lacks the rich other uses of the cellphone data, is to do a large intercept survey that asks only one question: the person's zip code. This helps getting high response rates and many responses fairly cheaply. Then you match up the zip code data you are interested in with the respondents. Students or volunteers can be used as interceptors, matching the zip data with the respondents requires some good computer and analytical skills.

MS: We realized that the cost to value ratio, when buying data, was not very good for many communities when we invested in the technology. Consulting firms like ours may

pay more for access to more robust data products, but have the ability

MB: Thanks for your article on this subject, Michael. I find that the data provided by mobile tracking can be many times more useful than what I am used to getting from ESRI. I especially like how the former generates data on the customers who we know are already in a given district or store (as opposed to the latter, which just tells us who is in a trade area and could possibly be drawn to a district or a store). You are right, though, that such data does not come cheap. I was really intrigued by the possibility of getting a subscription to Placer.ai but then learned at the end of the demo that I would be eligible for a significantly-discounted price of $7,500 per year, which is quite a lot for a small shop like mine. Now, if there is anyone out there who would be interested in going in with me... :)

MS: Michael Berne You got a better deal than me!

MB: Michael Stumpf Interested in going in on a subscription with me (and hopefully, others)?

MS: Messaged you

MS: Trade areas are used to understand the geography of where customers originate, their demographic make-up, and their spending potential. This is true whether you are looking at a resident, worker, or visitor market. You will see many people use a simple ring or drive time, which I have always argued is not a meaningful approach. In the past we would have drawn a polygon based on where we thought customers lived, using discussions with businesses, area demographics, competition, laborshed patterns, and any of a number of other pieces of information. Now we can use actual customer tracking data, which gives us a very different kind of trade area. (continued)

This is really well-illustrated in some of the more recent analyses we have done both in market analysis for commercial districts and in defining tourism markets. We can define customer locations as dots on a map, rather than a polygon. A ring or a drive time will total everyone living in that area, while we are finding that the pattern of where a district draws from is not so simple. It is more accurate to identify pockets of customers inside and out of those rings, and these will invariably have very different demographics than the ring. So what strategy to you follow with that information? Do you hunt out other pockets of people with demographics similar to those you are attracting? Or do you alter district and business strategies to better appeal to the nearby residents who are not yet patronizing the district?

DM: I think getting their definitions right is critical. If the TAs are wrong, then no matter how good the data about them is, the analysis is also bound to be wrong Many TAs defined by distance or travel time place the downtown at the center, while in reality they are at one end or another of the TA. Indeed, TAs are often shown as one geographic entity, while in reality the component zip codes or census tracs/blocks are often geographically independent or in smaller separated clusters. But ring and drivetime definitions and their associated data are cheap and easy to buy. But what's the value of what you buy? Mike what are the costs of the cellphone data you used?

And what other analytical uses can they be put to?

I wonder what other attendees in this session think about TA definitions?

MS: Prices for tracking data vary considerably, depending on what you buy. That is dictated by the questions you want to answer and how much detail you need. It is possible to purchase one-off reports that don't offer access to the underlying data. Basically, you get a map with dots on it, for a couple hundred dollars. Another alternative may be to acquire the raw data files, in which case you are working with millions of records and you need both the software and technical expertise to deal with it. In our work with smaller cities and rural counties, this will run $3,000 to $6,000. The high end is represented by platforms that offer many routines to manipulate, analyze, and (to some extent) download the data. These are subscription-based and are going to run in the tens of thousands, annually. We have developed models to use the raw or subscribed data with many other sources, including Census products, traffic counts, lodging market data, survey data, the consumer expenditure survey, etc.

This is an illustration of the difference between a ring and the trade area defined using tracking data. The areas shaded blue represent where customers originate, and demographically, they are younger couples and singles, solidly middle-income, and white. The 10-mile ring, where you might think the district would draw from, is older, more diverse, and higher income. Its dominant market segments (using ESRI's Tapestry segmentation) are very different from the segments visiting the downtown.

Aside from market analysis, we can apply the data to many questions. For instance, how much parking is in proximity to the areas with the highest foot traffic? How many additional people showed up in the district on the day (or hours) of an event? How has foot traffic changed year to year (a great measure of progress, or early warning system)? How much traffic is there at different times of the day, which might be useful to businesses in determining when to be open? What routes are people taking into the district? What are the “dead zones” that might be targeted for investment or redevelopment? When you start combining the data with other sources, such as traffic counts, survey research, lodging market data, sales tax data, etc., you can develop some very complex models to answer other questions.

JO: Can tracking data also give us information about frequency of visits by users?

MS: John Carter Owens, MUEP, MPP Absolutely. The above map illustrates one set of statistics, overall visits, unique visitors, and frequency of visits. It can be parsed even further, indexing frequency to things like home distance. We can also explore issues like length of stay. I find it interesting to compare with competing districts as a benchmarking and strategy tool.

JO: That's very interesting and could be very useful. Thanks!

MS: John Carter Owens, MUEP, MPP I'm finding it fascinating. We can finally get very surgical about strategy and marketing. That frequency data is built into the definition of customer origins, and the model lets us

specify if we want to define an area based on any percentage of overall traffic to the district (or business). Using the same three cities as above, you can compare their markets to see where there is overlap, where they dominate, and where there are gaps. This helps to inform any number of possible customer acquisition strategies for individual businesses or for the district.

MW: If you believe most TA definitions are flawed, how do you recommend they be determined?

MS: Mark Waterhouse, CEcD, FM, HLM
There is still merit to considering some of the data we have used in the past, depending on what we are trying to define. Now that we have tracking data we can define a new kind of trade area very accurately - the clusters from which our customers are originating. The more traditional approaches, using transportation networks, barriers to movement, demographics, laborsheds, competition, etc., may help us to define another kind of "untapped" trade area from which we might expect the potential to attract customers. Overlaying these areas produces something of a geographic gap analysis. Capturing those customers might call for strategies such as marketing, programming events to appeal to them, modifying the business mix and merchandise/services offered, etc.

DM: Mark Waterhouse, CEcD, FM, HLM A good place to start is what to avoid if at all possible and that's ring and drive time definitions. Merchant customer data and shopper intercept surveys are are likely to be much better and can be quite good, but all depends on their quality. The cellphone data Mike used intrigues me and seems the most promising, but I have no first hand experience with it. But Mike's article certainly shows its attractions. Cost, of course, is a concern. Bottom line: there's no easy answer

AD: David, I have a question for you. You argue strongly for including internet sales in any retail market analysis. How do you suggest it be done?

DM: Carefully and with humility. First, let's establish their importance. Prior to Covid, e-retailers had captured 45% of GAFO expenditures, and since the crisis online sales have penetrated into areas once largely thought to be very immune to them, like groceries. They are taking huge chunks of household retail expenditures so your estimates of the potentials B&M merchants can target need to reflect that fact, UNLESS they can compete via an omnichannel strategy. Theoretically, the best way of doing it is to survey TA residents, but there are two problems with this: 1) good representative surveys are hard to do, and 2) surveys that ask about household spending are more difficult to do. The gold standard are the surveys done by the BLS and they are very large and have a lot of respondents keeping diaries. So it's best to treat your local surveys as ballparkish in terms of accuracy and reliability, and adjust your conclusions accordingly. McKinsey and others have done national surveys that are very informative, but how to extrapolate from them to your local level remains challenging. Hence my admonition for care and humility

MS: We are going to be very challenged now and in the next couple years, as the environment has been so radically transformed by the virus. Suddenly we have

so many small shops getting into online retail while they may have ignored it in the past. Then we have the rapid growth of delivery and curbside pickup. Add to that the abrupt change in spending (equip a home office, buy different clothes and maybe no longer need the drycleaner, eat at home instead of restaurants, etc. The "normal" and survey data we have used has lost a lot of its reliability.

BR: as we continue through this COVID19 crisis, what specifically should we be learning from our market studies. Not gap analysis. Maybe business retention strategies?

> **MS:** Great question. One of the nice features of some of the most expensive platforms is that we can view foot traffic data that is only a few days old, offering almost real-time tracking of Covid impacts. In Florida we could see a sharp year-over year drop, partial recovery, and then slowing again as the virus surged. In one community in northern Michigan we saw a similar drop, but by mid-summer traffic had surged well ahead of prior years. Unwilling to fly, wanting to stay close to home, with other attractions closed, and seeking a safe place, people flocked to the area's outdoor attractions. The focus here might be on strategies to capture this increased traffic and leverage it for long-term destination development, whereas in other places the focus might be on alternative retail and dining models to sustain businesses through the pandemic.
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> One of the other interesting insights we have drawn from the data is linked to occasional versus repeat customers. In looking at the data for some individual businesses, we have found that their customers who visit infrequently - maybe one, two, or three times a year - have not really changed their patterns relative to that business. The loss in traffic has been among repeat customers who are not coming back. In some of those markets, they may be people who worked nearby and are now working from home (or not working). In other cases, they are people just staying away. That group might be influenced by marketing and strategies such as delivery or curbside pickup.

BR: Why are we interested in traditional retail categories that are not realistic in most downtowns? Looks like the data firms have large differences in their estimates anyway

MB: Great stuff, David. Still working through this incredibly dense piece, but have a question: what do you make of the "Non-Store Retailers" category in these sorts of estimates?