SBD

Global Parking Lot Data Accuracy Assessment:

ParkMe vs. Parkopedia

January 19, 2016

ParkMe™

Parkopedia™

Executive Summary

- Through meticulous field research, the following report showcases an in-depth effort to collect, analyze and measure parking lot data accuracy across five urban regions globally and compare data feeds from INRIX's ParkMe data with other supplier Parkopedia
- SBD's ground-truth assessment looked at 488 randomized parking lots in November 2015 across Berlin, Munich, and Stuttgart in Germany, as well as Boston and San Francisco in the United States, compiling more than 7,200 data points and collecting 2,000 photos. SBD sent trained data collectors to actual parking locations in all five regions, collected on-site attribute data lot by lot (backed by photographic evidence), and the field data collected was compared against published attribute information of the respective ParkMe and Parkopedia Webpages immediately after collection
- ParkMe scored 12% more accurate overall than Parkopedia across the leading attributes leading automakers deem essential for customer satisfaction - most important, ParkMe was 23% more accurate in providing the precise entrance location compared to Parkopedia. ParkMe was also the clear winner across all other core attributes including pricing information accuracy at 91% versus 81%, as well as correct parking lot operating hours at 87% versus 83% (ParkMe vs. Parkopedia, respectively)

San Francisco
Boston
United States
Mexico
Gulf of Mexico
Cuba
Puerto Rico

Norway
Denmark
Berlin
Poland
Belarus
Ukraine
Austria
France
Romania
Stuttgart
Italy
Greece
Turkey
Munich
Morocco
Algeria
Libya
Egypt
Western Sahara

Report Overview

- Since 1995, SBD has been the world-leading knowledge partner to the global automotive industry, providing actionable insights and strategic support in the development of more connected, secure and safe vehicles. SBD works with more than 90% of the world's global vehicle manufacturers and the majority of their partners to help them select the right technologies, suppliers and strategies

- In October 2015, INRIX commissioned SBD to conduct an independent and objective benchmarking comparison to gauge parking data accuracy in five cities across the United States and Germany

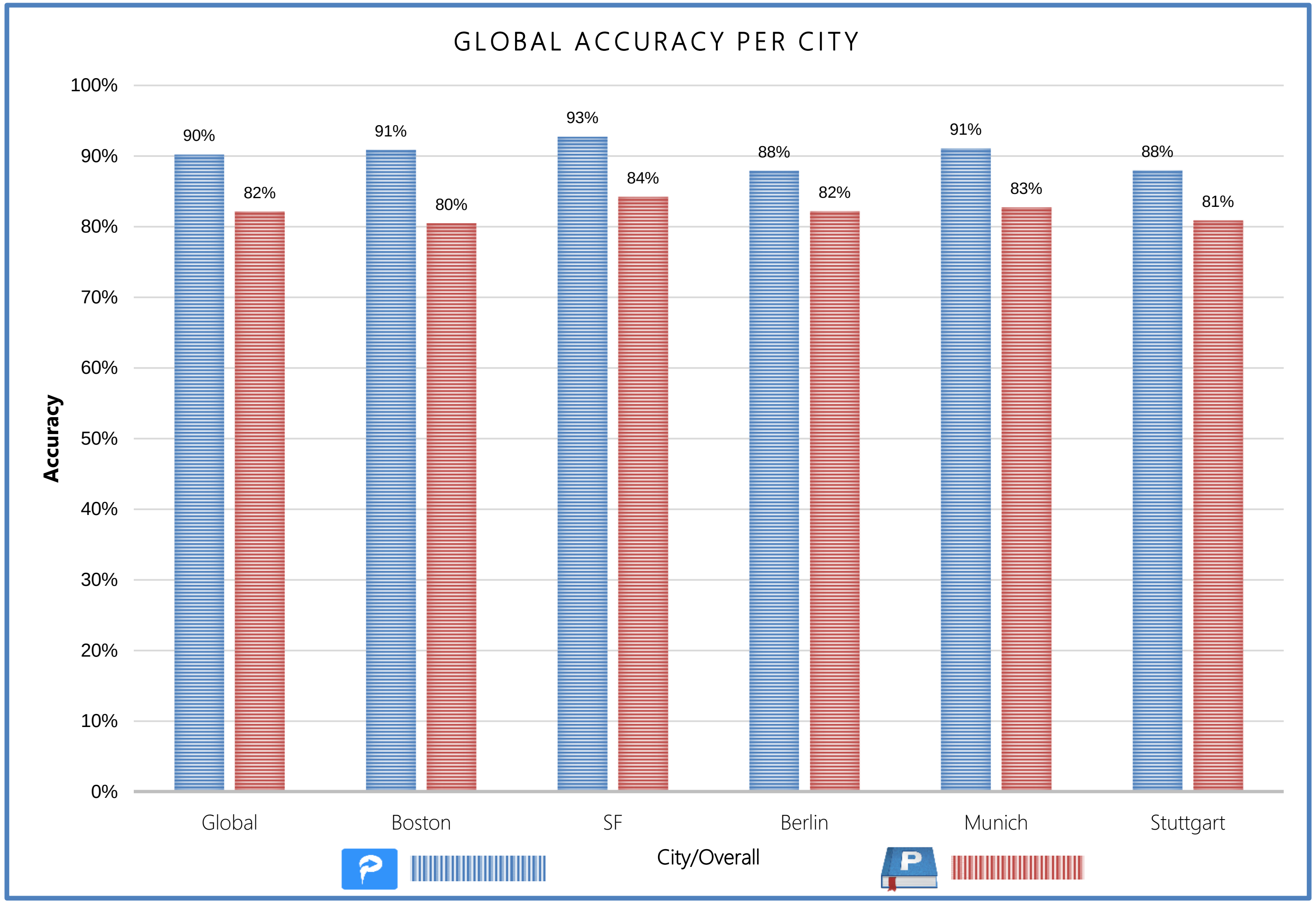
- The study compared accuracy rates of ParkMe (wholly-owned INRIX subsidiary) vs. Parkopedia vs. the ground truth recorded by in-person specialists trained by SBD to collect on-site data in each city

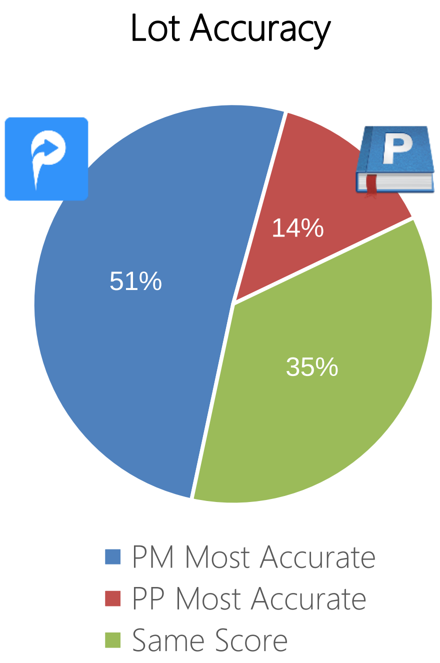
- Dates of data collection commenced on November 2, 2015 (Germany) and November 9, 2015 (USA) and concluded by end of November 2015

- 488 randomized parking lots were visited; field results across 8 attributes were uploaded daily to validate data integrity, and compared to the public Websites published by ParkMe and Parkopedia using an industry standard confidence level of 95% resulting in a statistical margin of error of +/- 3.2%

- Ground truth results were further judged accurate using objective standards (outlined in the methodology section) general "consumer's point of view" as best possible

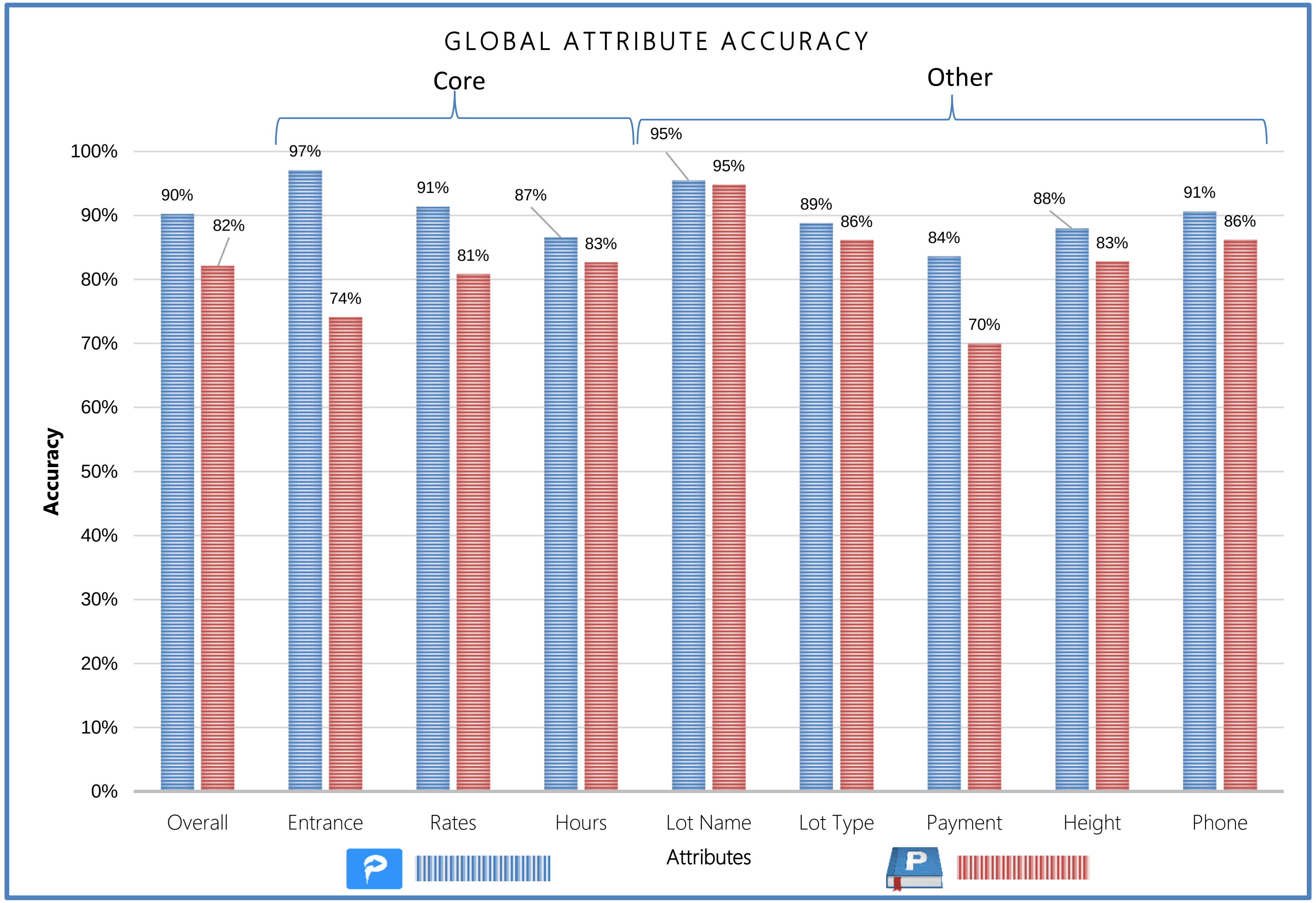
Global Results Per City

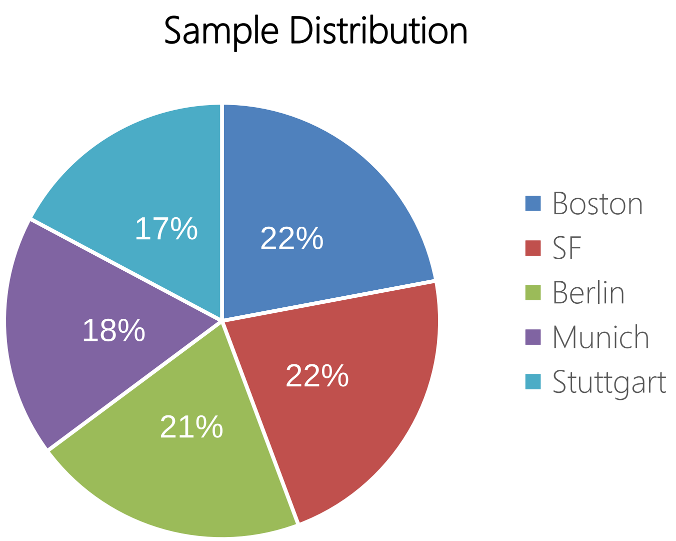

GLOBAL ACCURACY PER CITY


Lot Accuracy

- ✓ From an accuracy standpoint, ParkMe outscored Parkopedia 90% to 82% across all parking lots overall
- ✓ ParkMe scored higher on each attribute measured

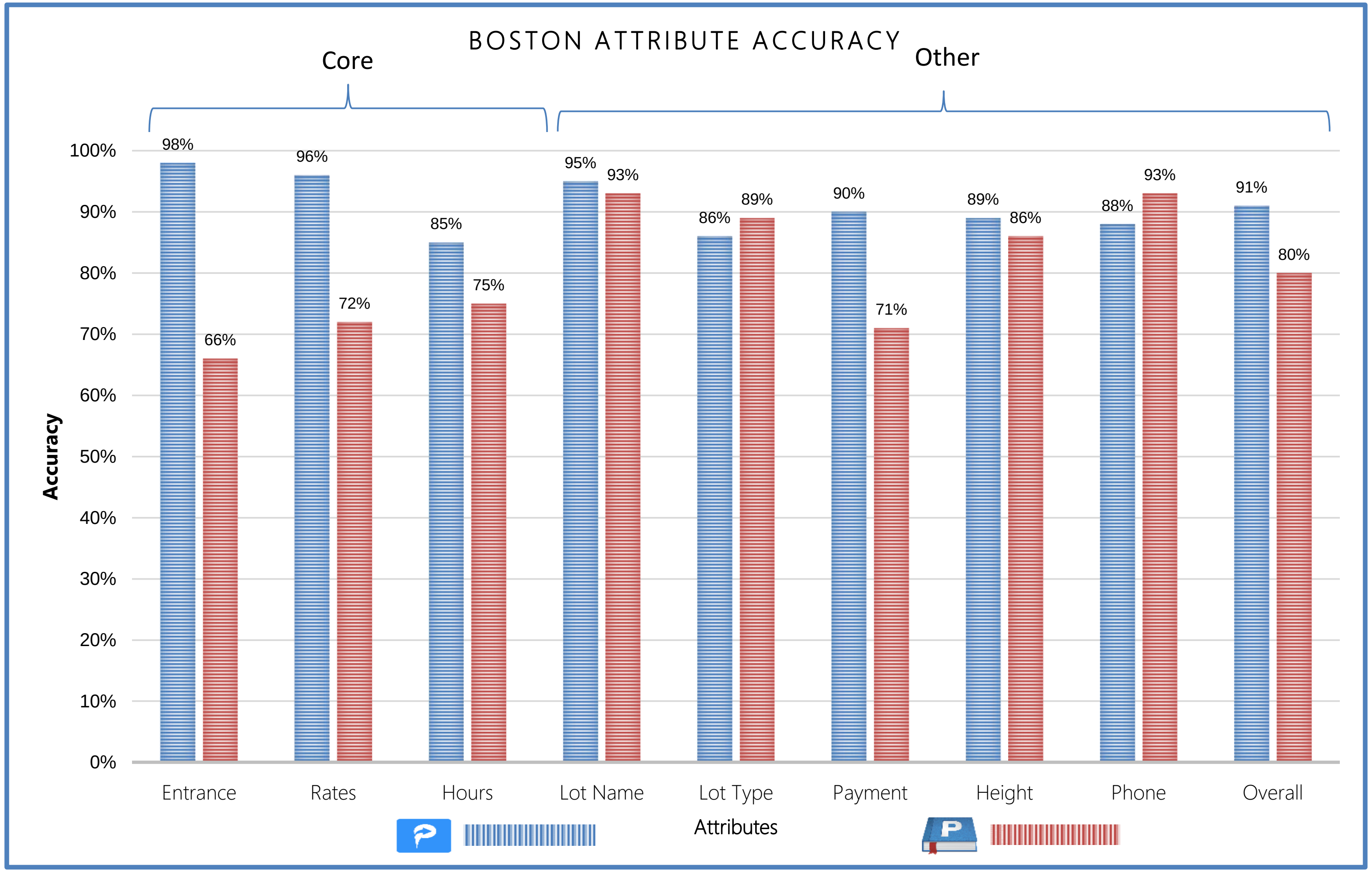
Global Results Per Attribute



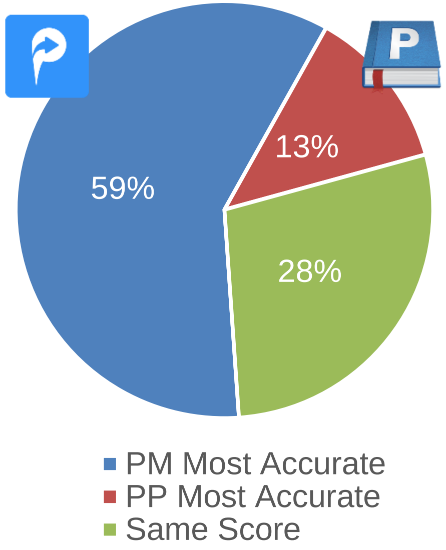


- ✓ Among *Core Attributes* (most important to consumers), ParkMe's accuracy exceeded Parkopedia by wider margins than *Other Attributes* considered as less influential

Boston, USA Results



Head to Head Comparison

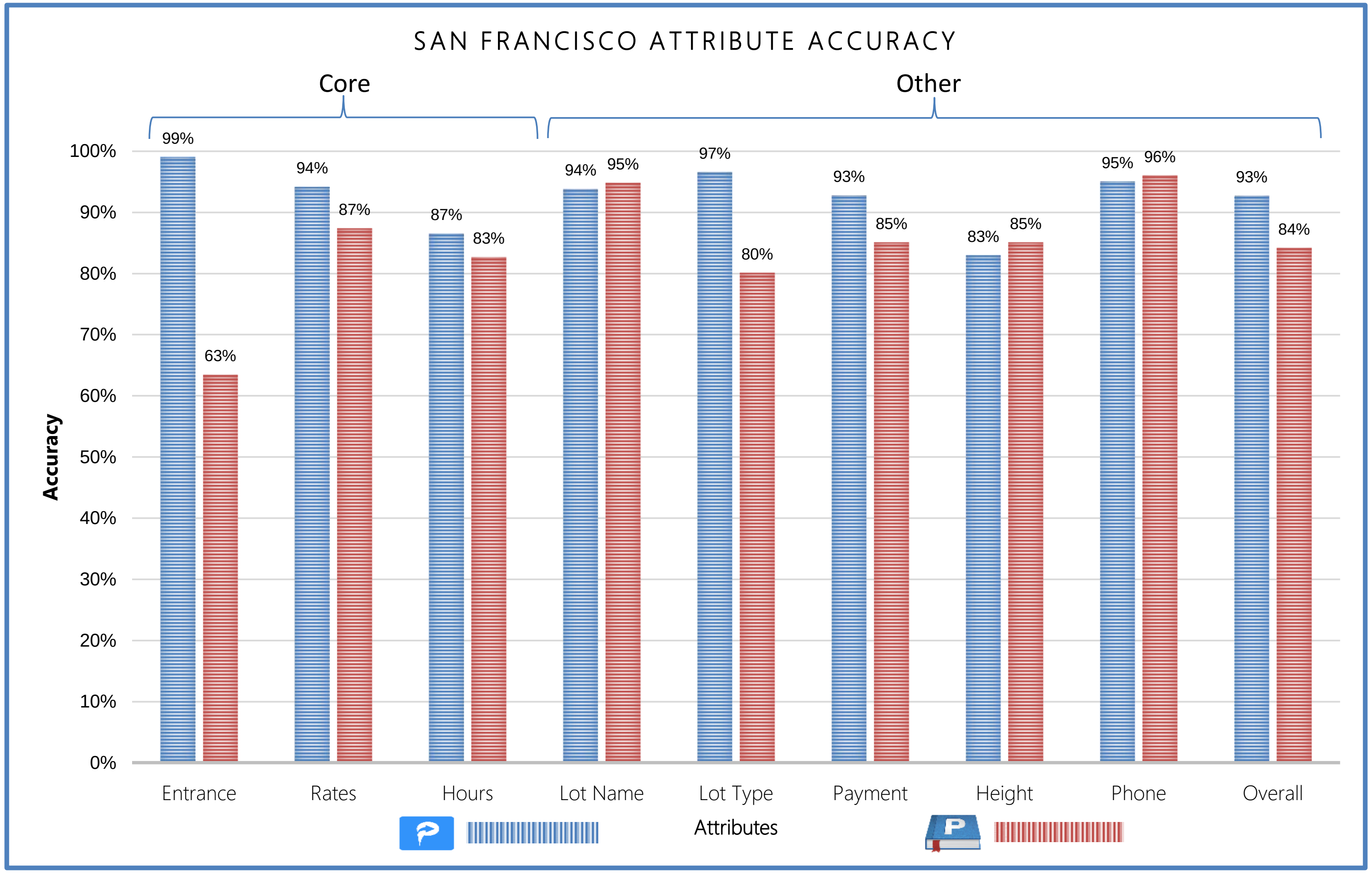


Average Per Lot Accuracy

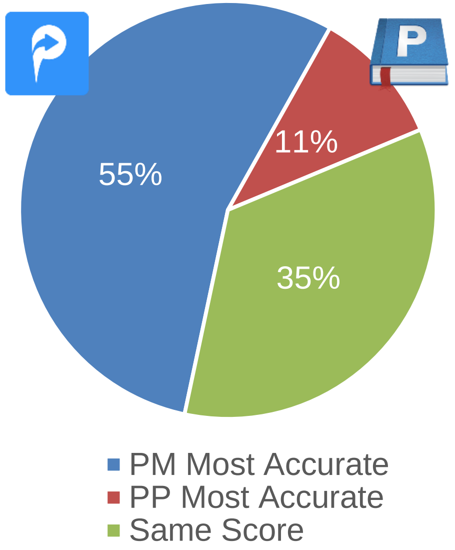
88%

80%

San Francisco, USA Results



Head to Head Comparison

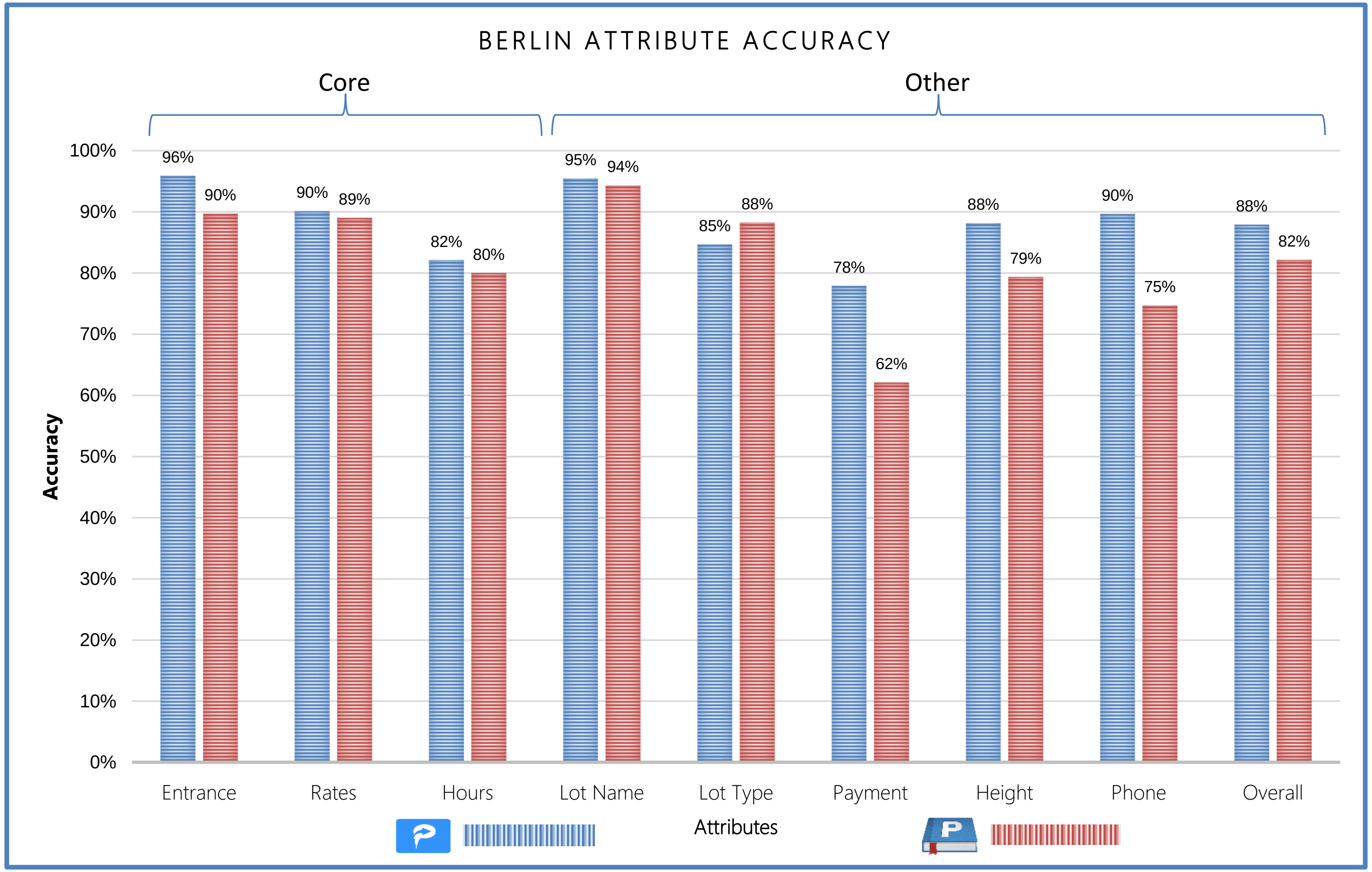


Average Per Lot Accuracy

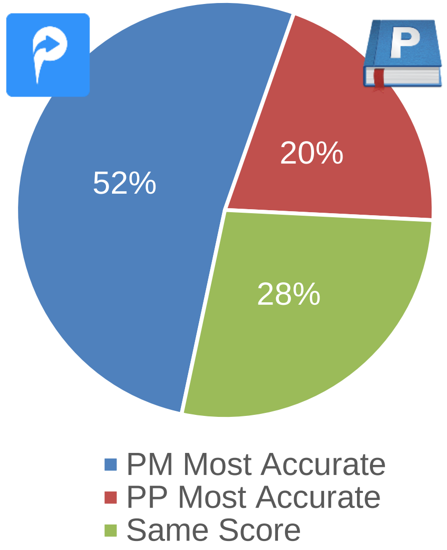
93%

84%

Berlin, Germany Results



Head to Head Comparison

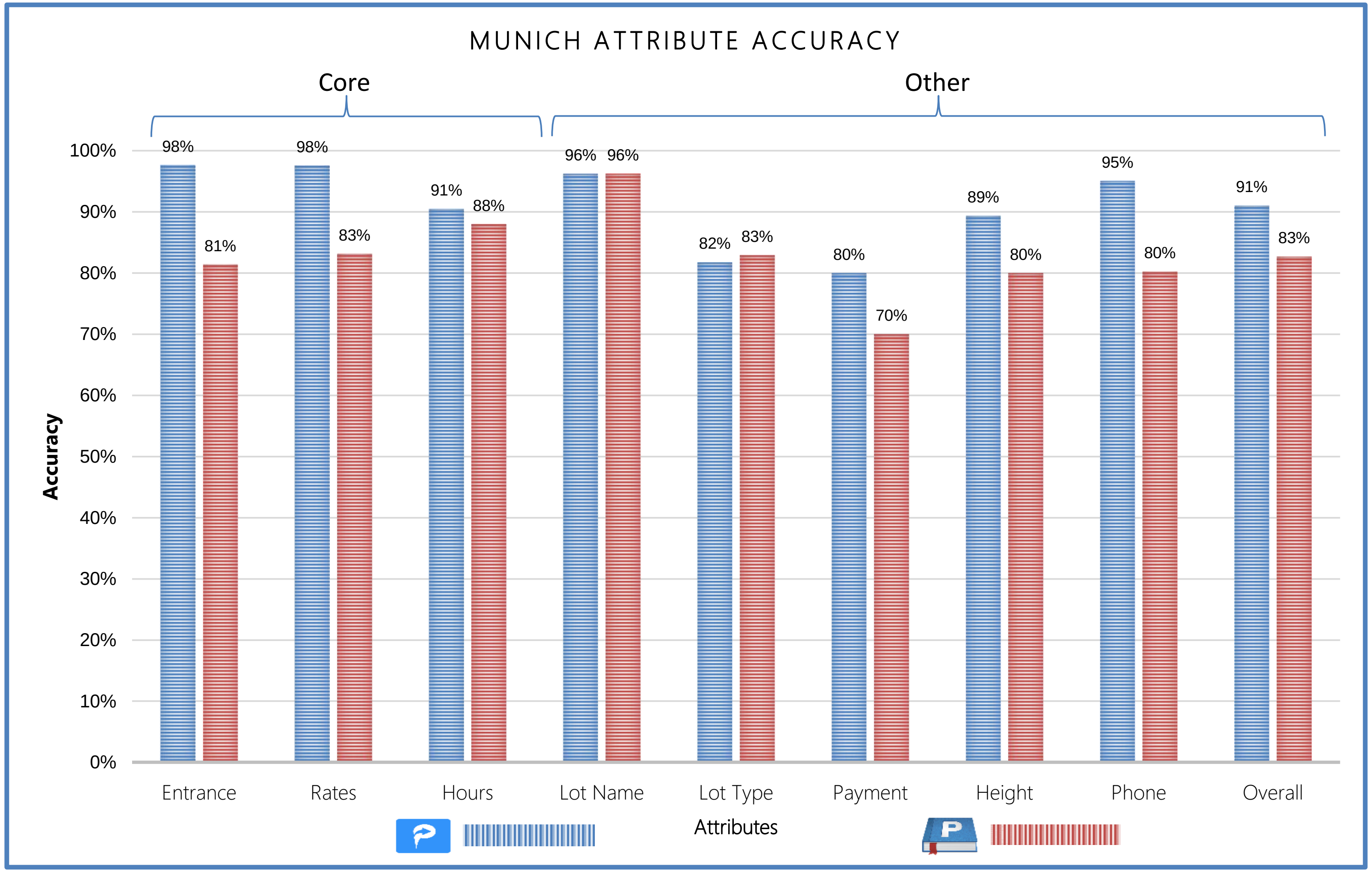


Average Per Lot Accuracy

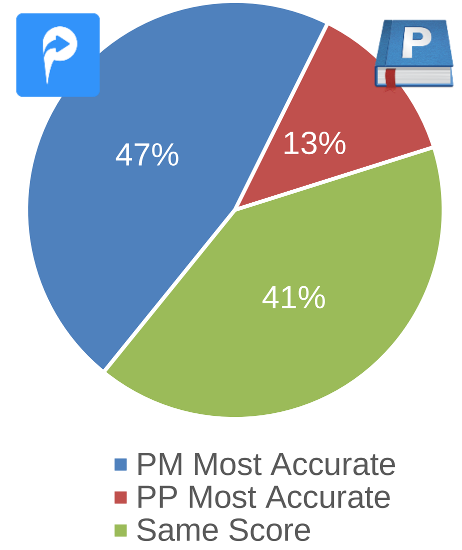
88%

82%

Munich, Germany Results



Head to Head Comparison

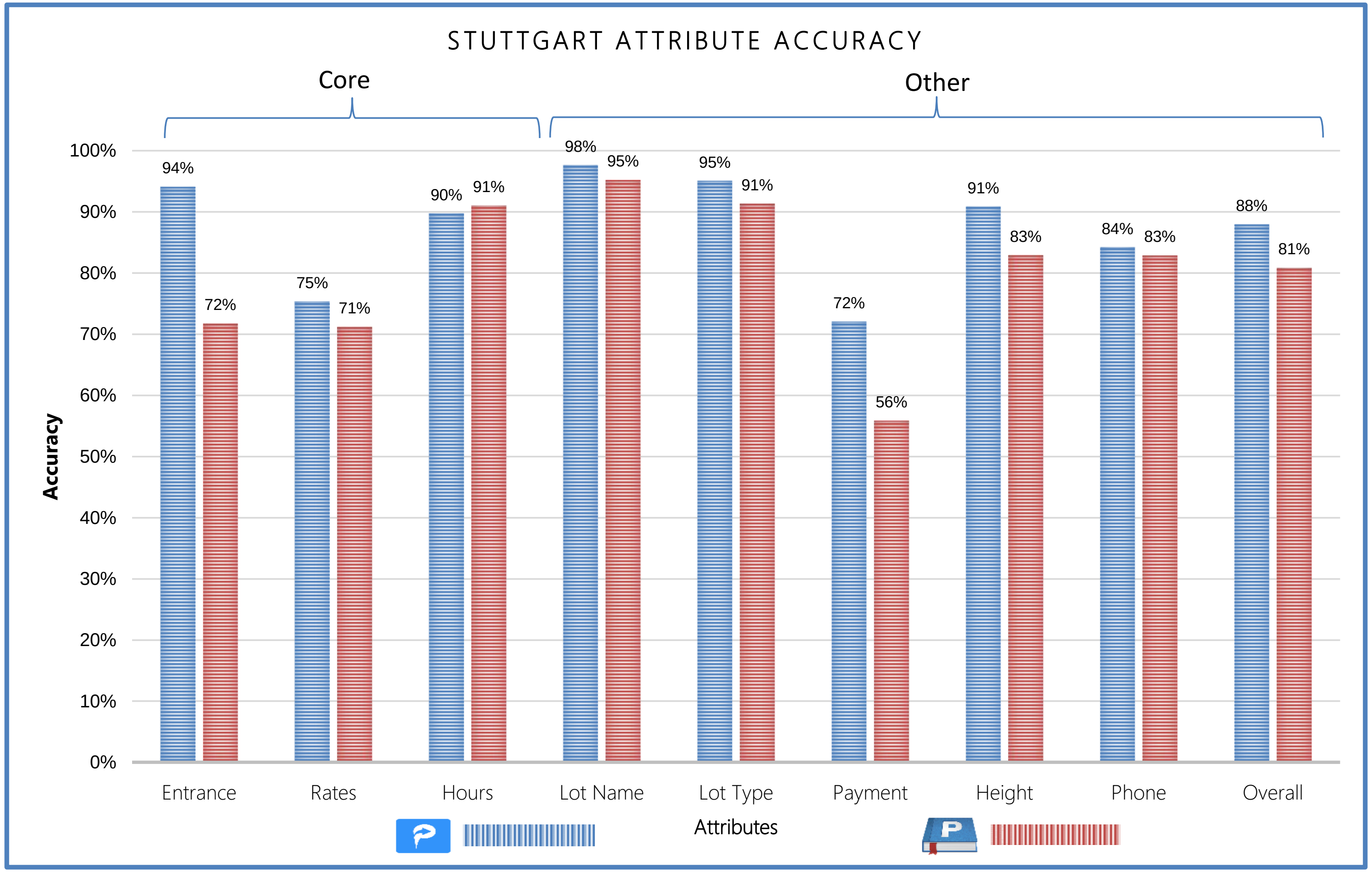


Average Per Lot Accuracy

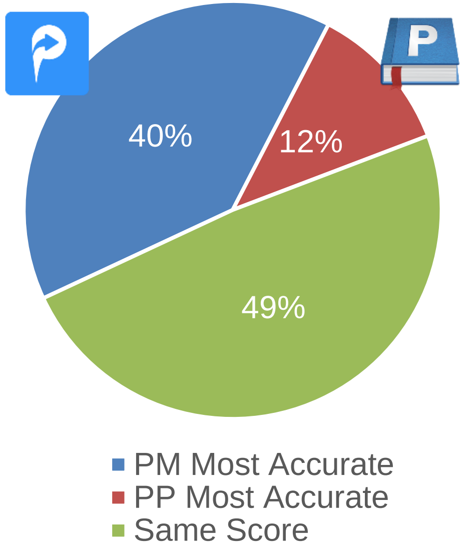
91%

P 83%

Stuttgart, Germany Results



Head to Head Comparison



Average Per Lot Accuracy

92%

84%

Scoring Methodology

Attribute	Description	Scoring Range
Entrance	All properties were recorded based on the street where the respective entrance was located and NOT the formal postal address (provided one existed).	1 (correct) / 0 (incorrect)
Rates	Parking rates were measured based on what was available in the field at the time of recording. Of which, hourly, evening, overnight, early bird, event, oversize and monthly rates were the predominant pricing attributes used in scoring.	1 (correct) / 0 (incorrect)
Hours of Operation	As noted from the field or attendant, daily hours (including 24/7 & day-to-day) were recorded and measured against published information.	1 (correct) / 0 (incorrect)
Lot Name	Lot names were closely compared to published information. Through field research, two naming conventions were encountered for parking lots: - A proper name given to the parking lot - The parking lot being named as its location or address The first of these two naming conventions takes priority. If a lot did not have a proper name, credit was given in certain cases where parking lots were named after their location or address.	1 (correct) / 0 (incorrect)

Scoring Methodology (cont.)

Attribute	Description	Scoring Range
Lot Type	The study notes that ParkMe and Parkopedia do not share common nomenclature when describing "Lot Type". As a result and to maintain a fair and balanced scoring approach the following were deemed as having the same/equal interpretation (PM = ParkMe; PP = Parkopedia) based on the general interpretation of the term. • Structure (PM) = Garage (PP) = Covered (PP) • Subterranean (PM) = Underground (PP) • Surface (PM) = Not Covered (PP) *Structure/ Garage* *Subterranean/ Underground* *Surface Lot*	1 (correct) / 0 (incorrect) / 0.5 (partial)
Accepted Payment	As noted from the field, payment types consisted of cash/coin, credit, check (rare) and mobile payment. Note: Cash/coin were considered synonymous.	1 (correct) / 0 (incorrect)

Scoring Methodology (cont.)

Attribute	Description	Scoring Range
Height Clearance	Through analysis it was discovered that select ParkMe/Parkopedia lots differed by exactly one inch in their reporting (1”). When using English/Metric units it was assumed that acceptable rounding decisions were made that led to this difference. As a result, all lots within a one inch difference of published heights were considered equal. Some lots were discovered to have two entrances at varying heights. *Varying Heights*	1 (correct) / 0 (incorrect) / 0.5 (Partial)
Phone Number	Field measurements were compared directly to respective vendor (PP/PM) provided phone numbers. The minimum requirement for a correct score was to match at least one correct phone number.	1 (correct) / 0 (incorrect)

More About SBD

Since 1995 we live, eat and breathe automotive

Our Mission

To be the world-leading knowledge partner for the automotive industry

Our Expertise

The largest team of in-car technology specialists recruited from over 10 OEMs & suppliers

Our Customers

90% of OEMs

65% of Tier-1s

60% of Service Providers

We enable data-driven decisions

Our Intelligence & Insight Services

- Model-level databases
- Technology forecasts
- Supplier intelligence
- Market regulations
- News analysis

Our Evaluation Services

- Expert UX testing
- Consumer UX testing
- Iterative prototype evaluation
- KPI setting
- Cyber security testing

Our Strategy Services

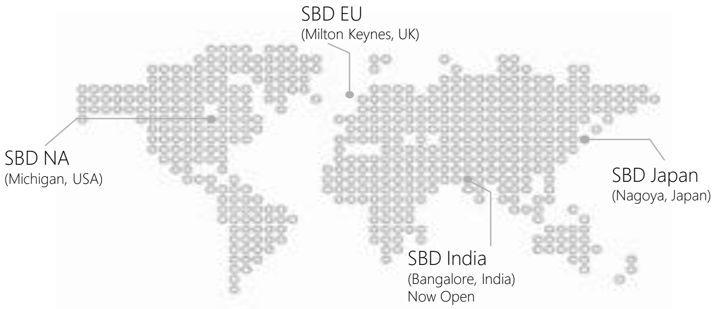
- New market entry support
- RFP/RFQ management
- M&A due diligence
- Strategic workshops
- Supplier positioning support

We are here to help!

Our Approach

We are committed to adapting to our client’s needs and always strive for the highest quality of service

Our Offices



Study Author

Mark St. Andrew

✉ MarkStAndrew@sbd-na.com

☎ +1 313 562 2451