



New insights, better decisions:

How research, business and politics use anonymized transaction data
for their research questions

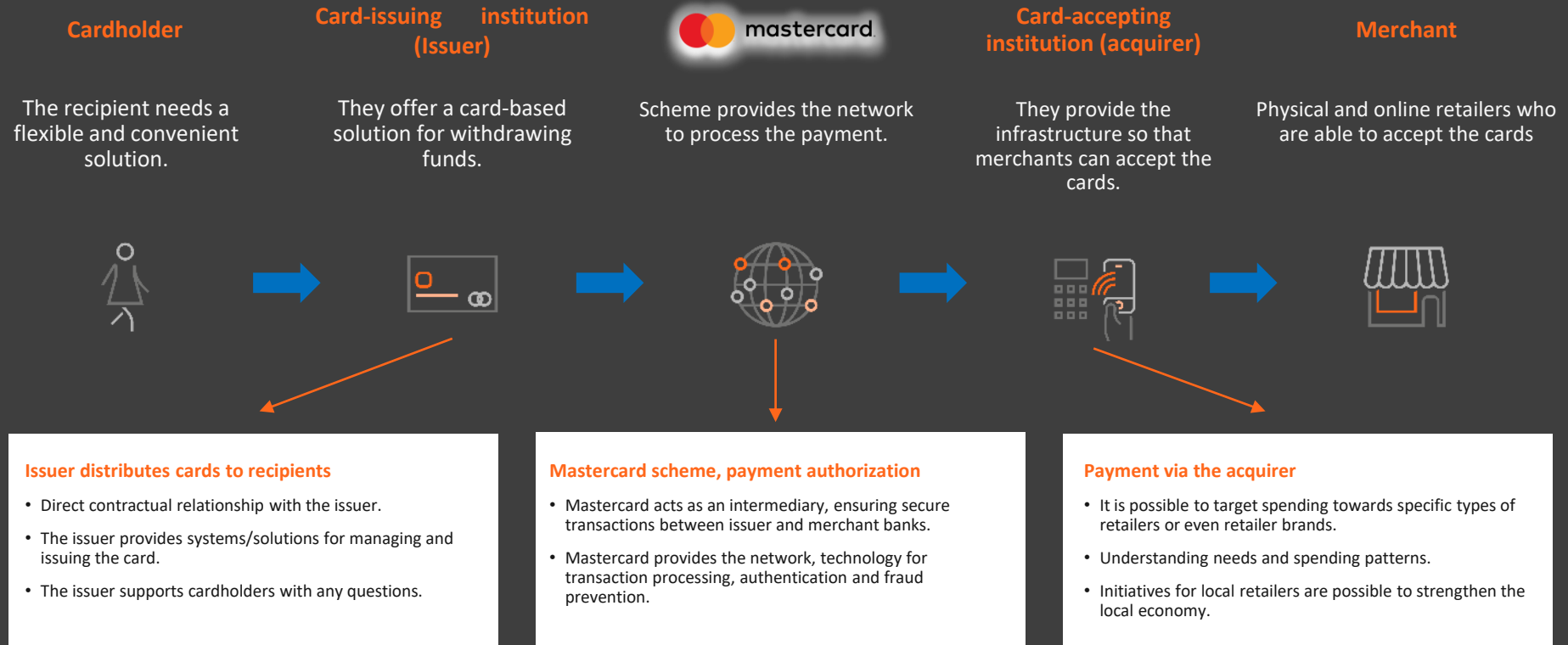
Oliver Gabriel | Mastercard Services

Novel Financial Data for Research: Access and Applications

Munich, November 06, 2025



Linked parties in the payment ecosystem



Mastercard Advisors & Data Insights – from payment provider to data-driven technology partner

Mastercard is active in the field of **data insights**

- because **data** plays a **central role in the modern economy**
- and Mastercard **has enormous amounts of transaction data** that provide valuable insights.
- The focus is on data protection – all data is anonymized, aggregated and used **in compliance with the GDPR**.

Banks, traders and the public sector benefit from these insights, for example:

- Spend behavior by region or destination
- Industry trends
- Target group segmentation
- Impact of campaigns or political measures

Mastercard thus supports **better, data-driven decision-making** by its partners.

Examples of support for economic analyses :

- During the **Corona pandemic**, Mastercard helped to analyze consumer behavior and economic impacts using anonymized data to better understand trends in cities and countries.
- When measuring the effects of **major events** such as a European Football Championship, Formula 1 or a Taylor Swift concert in Vienna.



Annozmised & aggregated spend insights data to support better decision-making



Comprehensive coverage

Mastercard is a leading **global technology company** in the field of payment transactions:



Active Cards
3.3 billion/year (credit, debit, Maestro)



Countries
210+



Merchant locations
100+ million



Transactions
143+ billion/year



Unique insights

Our data provides **valuable information** about the **spending behavior of cardholders** on-site, such as...

- **Country of origin** (where do the consumers come from)
- **Share of total Spend** (what is the significance of the expenditure for the city)
- **Retailer category** (where consumers make their purchases)
- **Type of expenses** (private or business)



Credibility & Experience

We cooperate with economic institutes, national banks, and local **tourism/destination management organizations** to use our spend data .



Mastercard offers a range of analytics solutions based on exclusive proprietary data



SpendingPulse™ Destinations Platform

Insights into **tourist spending activities in a destination**, broken down by key countries of origin and retailer categories.



Geographic Insights

Granular insights for evaluating local consumer spending trends



Tailor-made Support

ad-hoc reports tailored to your needs, including **spend analyses, recommendations, traveler segmentation**, and much more.

SpendingPulse™ Destinations is a **SaaS platform** that helps tourism professionals **capture spending trends in travel destinations**:

1. **Where do my visitors come from?**
2. **Across which retailer categories are their expenditures distributed?**
3. **How does this destination differ from comparable destinations?**

SpendingPulse™ Destinations builds on Mastercard's established SpendingPulse™ methodology and provides insights into the absolute spending of international tourists **in key tourism categories**.

The platform displays economic activity **at the overall and sectoral levels** by combining spending from the Mastercard payment network with publicly available and survey-based estimates for other payment methods (including cash).

This data is adjusted for macroeconomic factors to **arrive at valid, monthly updated estimates of international tourism spending at the national to local level**.



trade



accommodation



Restaurants



Experiences



Bars &
Nightlife



clothing



Transport &
Travel



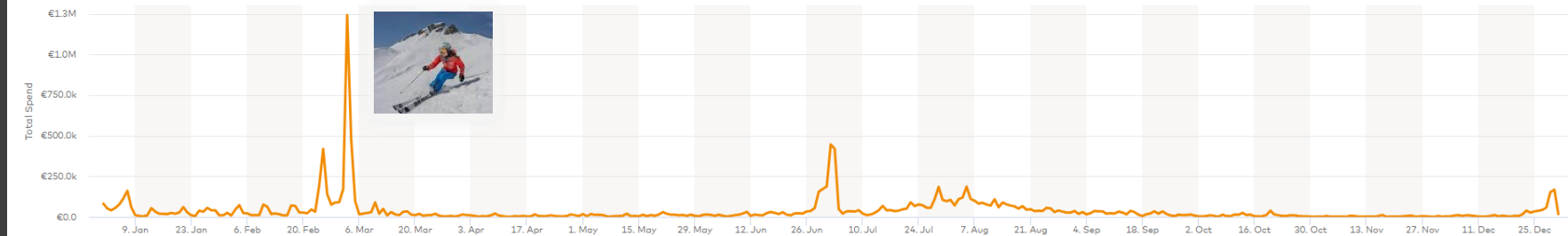
Luxury goods

Example – The importance of holiday periods and events

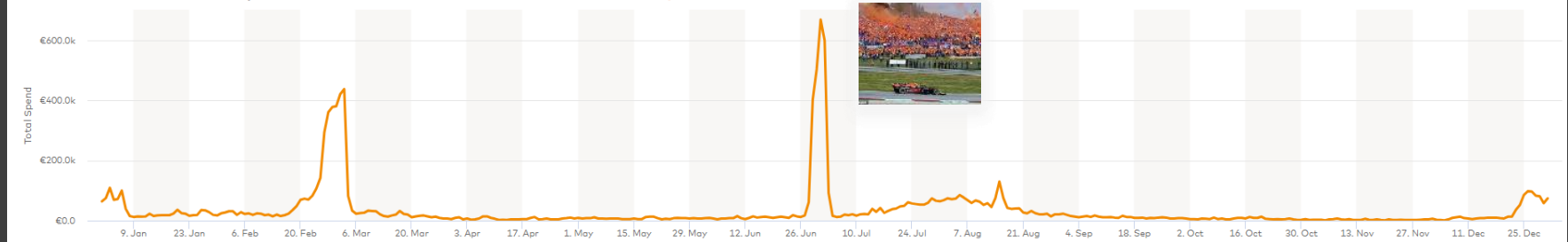
(analysis Austrian National Tourist Office)



Netherlands: Lodging, Total Spend | EUR (€)



Netherlands: Restaurants, Total Spend | EUR (€)



Source: Mastercard Spending Pulse Austria



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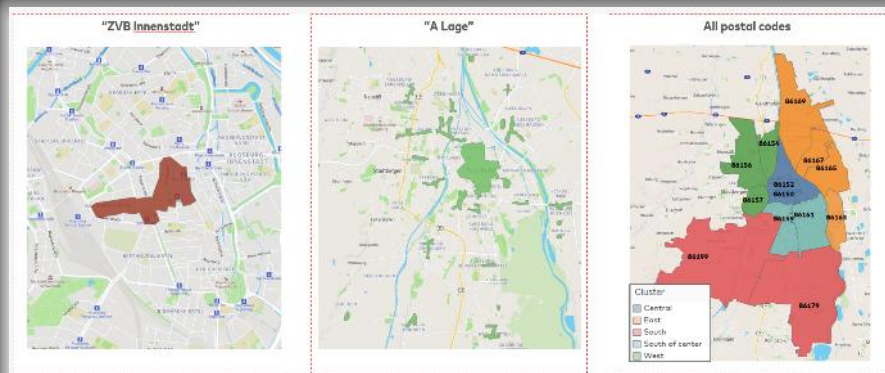
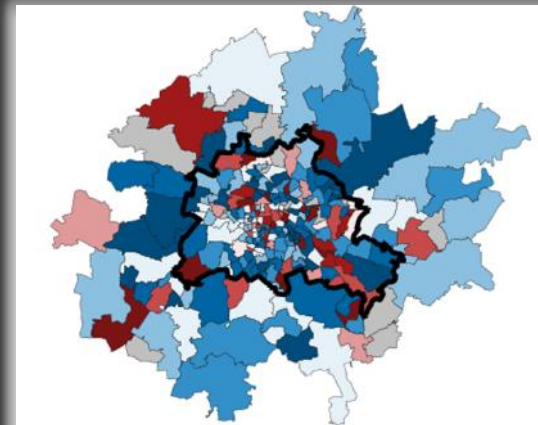
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Geo Insights uses MC aggregated transaction data to assess local spending trends

Application examples

Measuring the development of individual city districts through the effects of investments or "events", e.g.

- Sports & Cultural Event
- Redesign of shopping streets into pedestrian zones
- Construction sites (closed bridges, motorway exits, etc.)
- Natural disasters,...



Analysis of local consumer behavior

- Smallest standard unit: 150x150m
- Geo-Shape Files (e.g., for mapping city centers, differentiating between commercial and residential areas, postal code areas)
- Spending trends in the relevant retail categories
- Breakdown of expenses by: Total, domestic, international
- Selectable time units: day, week, month



Example – Local consumption effects of the 2024 European Football Championship



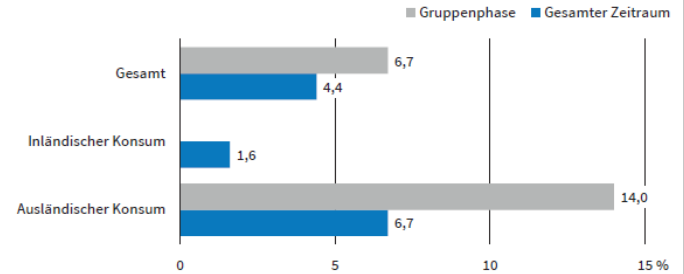
The 2024 European Football Championship had a noticeable impact on consumer behavior in the ten German cities.
The impact of the tournament on local consumer spending was examined using anonymized card payment data.

Key findings:

- **Consumer spending in host cities** rose by **4.4% in real terms during the tournament**.
- **Foreign visitors** were the main driver of the increase:
- Total increase in their spending: **+6.7%**
- In the group stage: **+14.0%**
- **Domestic spending** remained largely **stable** with only a moderate increase.
- **Significant effects** around match days as well as the days before and after
- **Industries that benefit significantly** from international guests:
 - Bars and restaurants
 - Jewelry and gift shops
- **Hotels** recorded **more international** payments, but this was accompanied by a **decline in domestic spending**.

Abb. 1

Anstieg der Konsumausgaben in den Austragungsstädten in Gruppenphase und gesamtem EM-Zeitraum^a

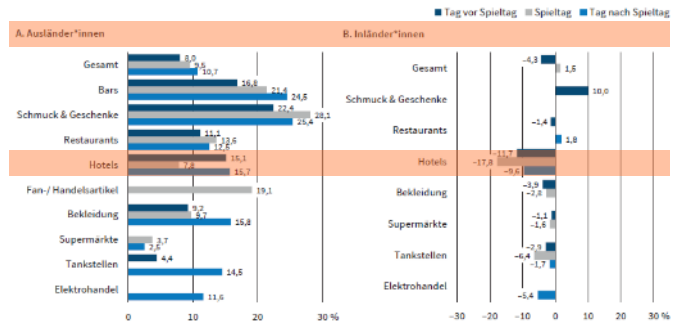


^a Es werden nur statistisch signifikante Effekte berücksichtigt.
Quelle: Mastercard; Berechnungen der Autor*innen.

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Abb. 5

Anstieg der internationalen und inländischen Konsumausgaben in den Austragungsstädten um Spieltage herum



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Tailor-made support for tourism:

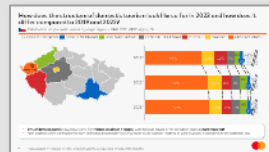
Mastercard is able to identify international and domestic tourists and provide **detailed analyses to complement travel insights.**

We use recurring location data patterns in the cardholder's transaction behavior to determine their region of residence within your country - those who are outside your home region are marked as domestic tourists.

While international tourists generally represent a greater value for the hospitality industry, recording domestic tourism is equally important for demand forecasting.

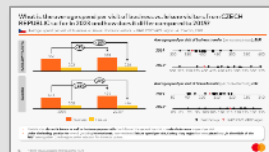
Examples of insights:

ABSTRACT



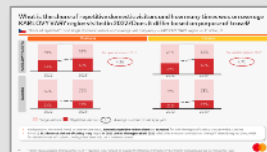
Structure of **international and domestic tourism** in the destinations by level of the region/municipality of origin, share of spending trends over time, comparison with residents, etc.

Share of **business and leisure expenses**



Insights by region of origin, average spending per visit, etc.

Percentage of **returning visitors** for a specific year or longer period



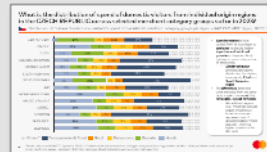
Insights based on the number of repeat visits, correlation between business and leisure, etc.

Proportion of **one-day** visits and overnight stays



Insights by region of origin, business and leisure travel, etc.

Spending structure **by industry**

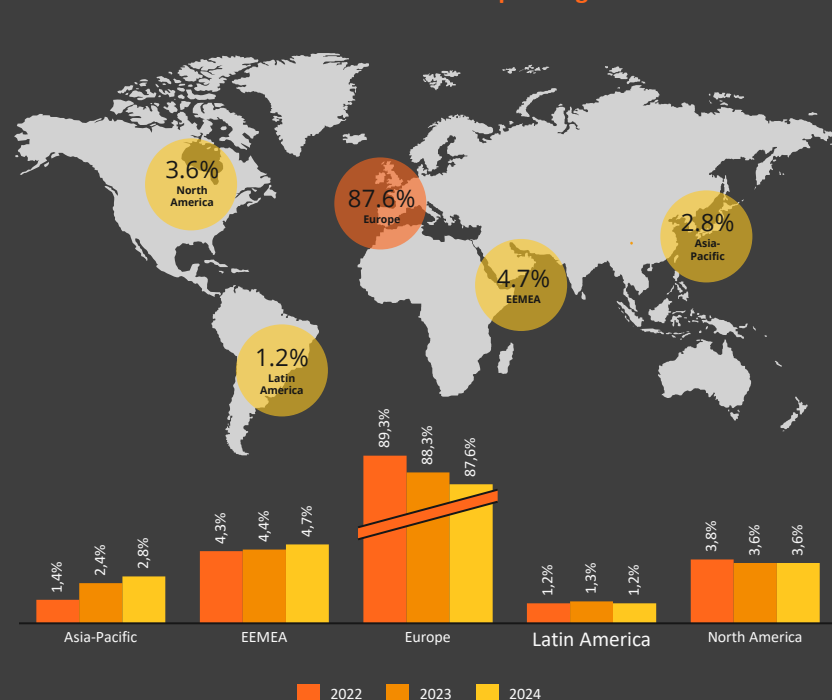


Breakdown by region of origin, comparison with international tourists, etc.

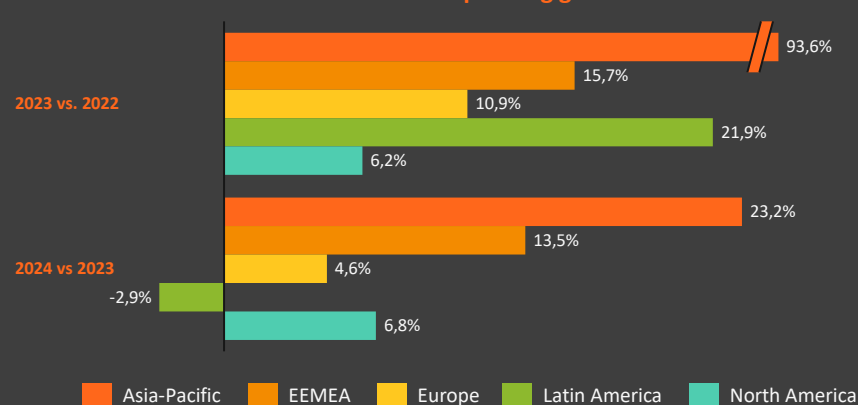
Example - Trends in spending by German cardholders abroad in 2024

Regional overview

Shares of international spending 2024



Annual spending growth

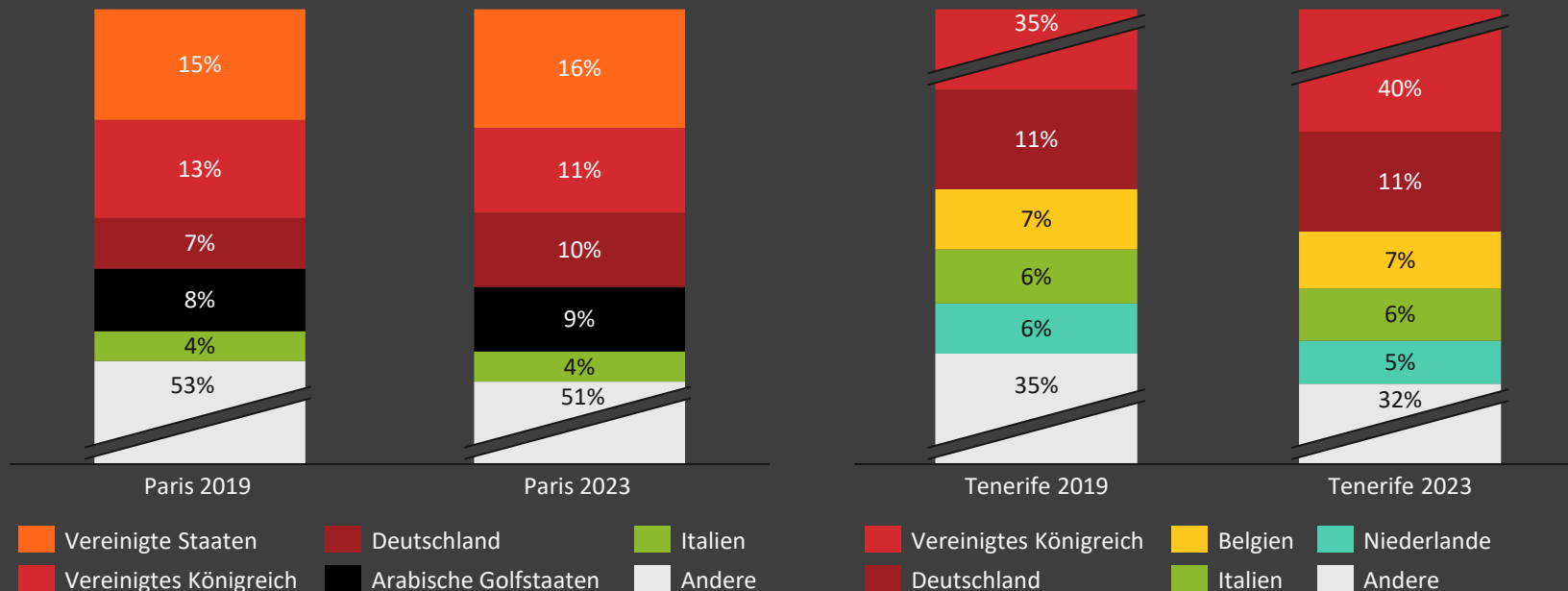


- the **EEMEA region** is the **second largest region** for international spending by German cardholders, followed by North America.
- growth in **2024 will slow** compared to 2023. This is partly due to the weakening of the economic recovery following the COVID-19 pandemic.
- the **highest growth** in international spending between 2022 and 2024, while **Latin America**, after a **strong increase in 2023**, experiences a **decline in 2024**.

Example Paris & Tenerife:

Development of the share of source markets by total spending after Corona

Share of spending from the top 5 source markets in total international spending in Paris and Tenerife, %



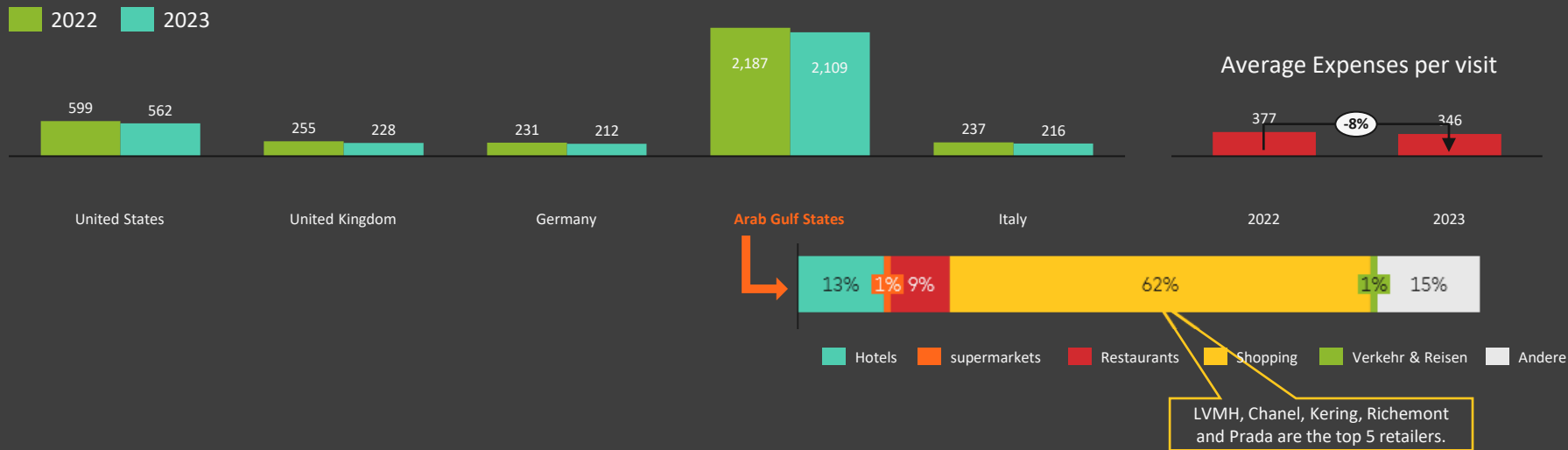
The composition and importance of the **source markets differs significantly** between the two destinations, **but have hardly changed within the destination over time**. In Paris, the top five resorts account for almost 50% of total spending, while in Tenerife, this figure was nearly 70% in 2023. Tenerife primarily attracts European visitors – many of them from the UK. For Paris, however, the USA, the Gulf States, and Asia are also important source markets.



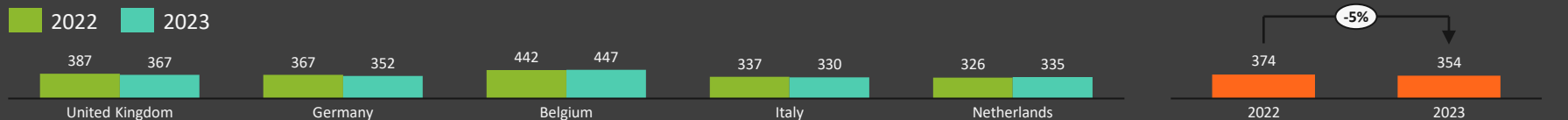
Example Paris & Tenerife:

Average traveler spending compared

Average spending per visit by source market – **Paris** , EUR



Average spending per visit by source market – **Tenerife** , EUR

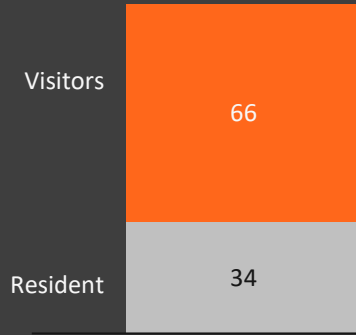


Average spending per visit: The internationally generated spending in a destination, recorded by maps of international visitors, divided by the total number of visits to the destination by the corresponding visitors in the specified year.

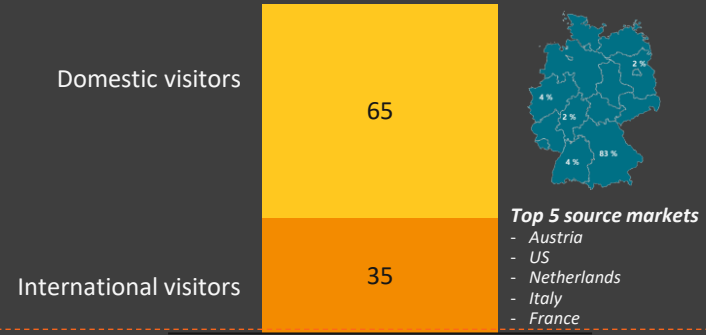


Example –Economic Importance of visitors in a destination

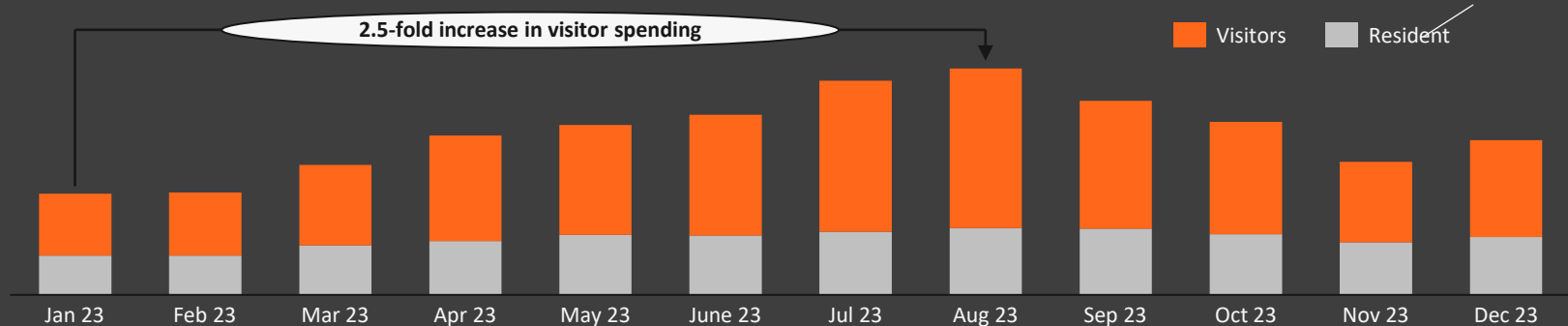
DISTRIBUTION OF EXPENSES BETWEEN
RESIDENTS AND VISITORS



DISTRIBUTION OF EXPENSES AFTER ORIGIN



Total spending by residents and visitors



Mastercard Insights are well suited to deliver valuable insights

1. High coverage of cashless payments:

Mastercard and Visa have roughly the same market share in Europe and cover the majority of all card payments – together usually over 80% of the payment volume. By using precise market share data from Mastercard for individual countries, transaction data can be reliably extrapolated to represent the broader market for card payments. This means that analyses based on this data reflect the majority of actual consumption.

2. Broad user base: Locals & visitors.

Cards are used by both residents and visitors – for example, when shopping, in restaurants, or for leisure activities. Regional analyses therefore show the actual consumption patterns of both groups.

3. Granular data with high spatial resolution:

Card providers not only register transaction amounts, but also time, location, industry, etc. This allows for targeted analyses to be created – aggregated, anonymized and GDPR-compliant – at the city level or even at the sub-level.

4. Timely & continuous insights:

The analyses are carried out regularly (daily/monthly or annually) and thus enable trend and seasonality analyses – ideal for tourism management, event planning or economic development.

5. Representative sample:

Since almost all population groups (different age groups, incomes, nationalities) use Mastercard cards, the data are statistically robust and not limited to specific customer segments.

Conclusion:

Mastercard has a massive share of cashless payments in Europe.

The transaction data is very granular, anonymized, and readily available.

Analyses thus provide a reliable reflection of consumer behavior and are ideally suited for municipal economic development and tourism management.



Let's begin.

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