Benchmarking online KPIs with Webanalytics on TourMIS

TourMIS
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Introduction

- One of the main travel information sources on the internet are Destination Management Organization (DMO)'s websites such as www.vienna.info, visitdenmark.com,…etc.
- Google Analytics shows website user statistics such as time spent on the page, number of visitors to the page, and number of page views.

Benchmarking tourism websites

Allow insight into:

- Who is using your website?
- What are your visitors looking for?
- Where are users coming from and going to before and after visiting your website?
- When and how long has the website been accessed?

Most commonly used tools:

- Google Analytics, Matomo (javascript tagging of pages in real-time)

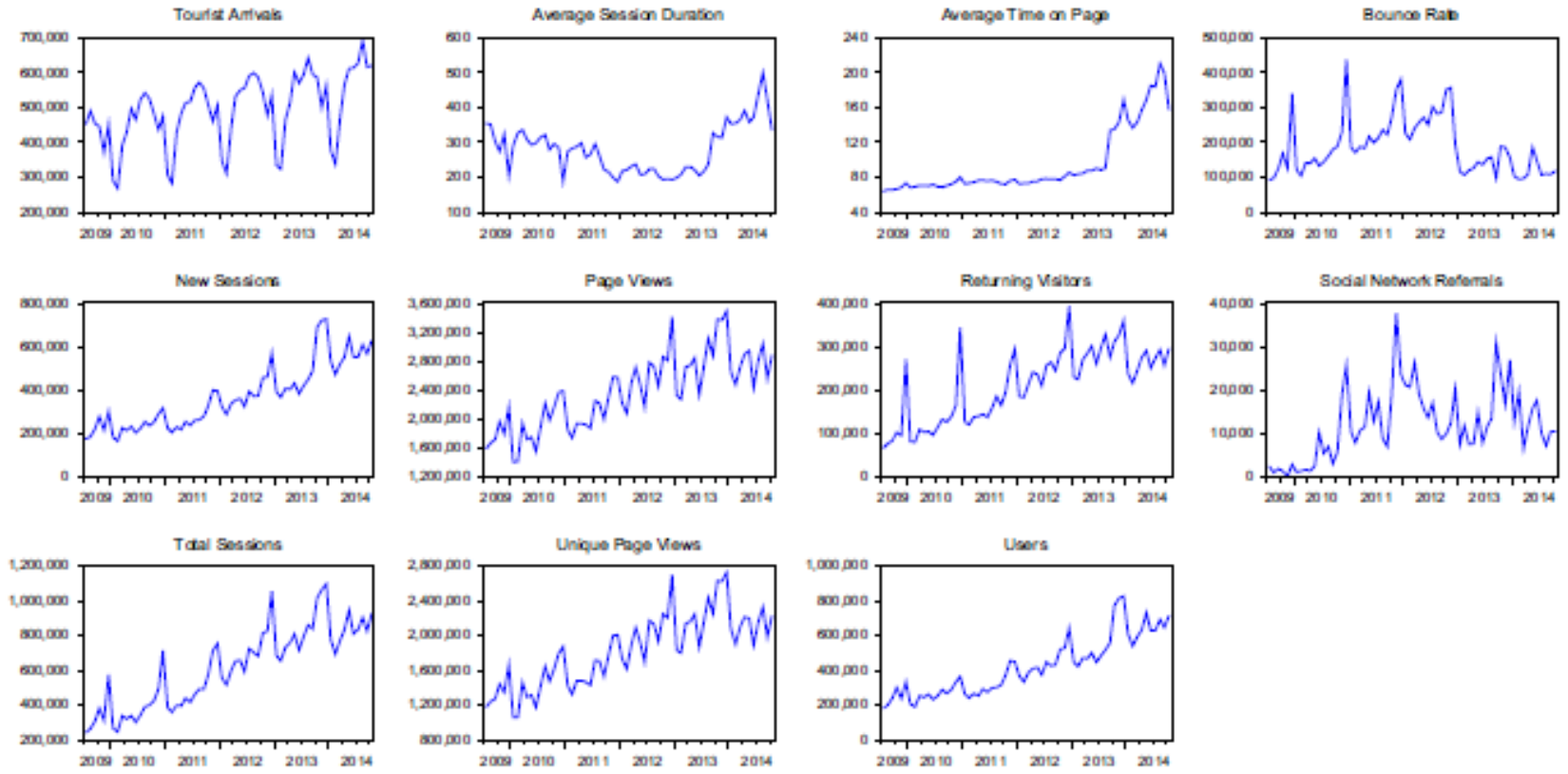
Which KPIs matter for benchmarking: A case study

- TourMIS: arrivals in all paid forms of accommodation in the greater city area data for Vienna (www.tourmis.info): monthly data.
- Web site traffic data: from Vienna Tourist Board's website (www.vienna.info): monthly data for:

  - Average session duration
  - Average time on page
  - Bounce rate
  - Number of mobile users
  - Page views
  - Percentage of new sessions
  - Returning visitors
  - Unique page views
  - Sessions
  - Number of users

- The study sample employed is 2008M08 – 2014M10.

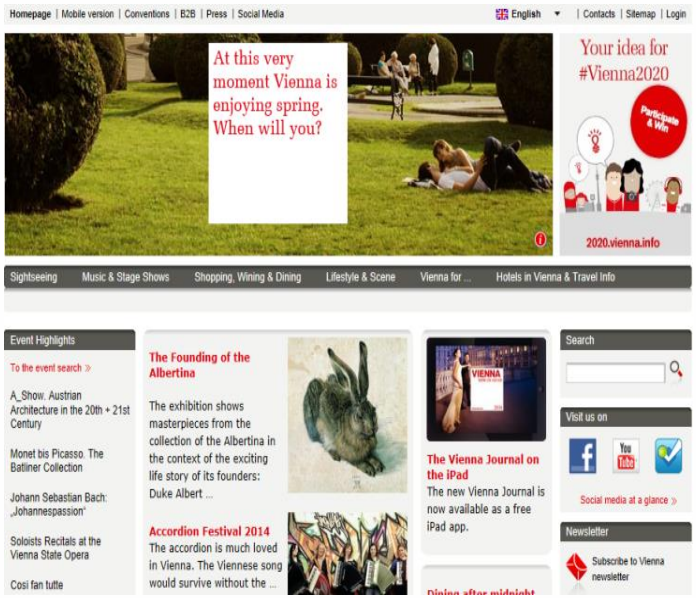
Arrivals vs. webanalytics KPIs

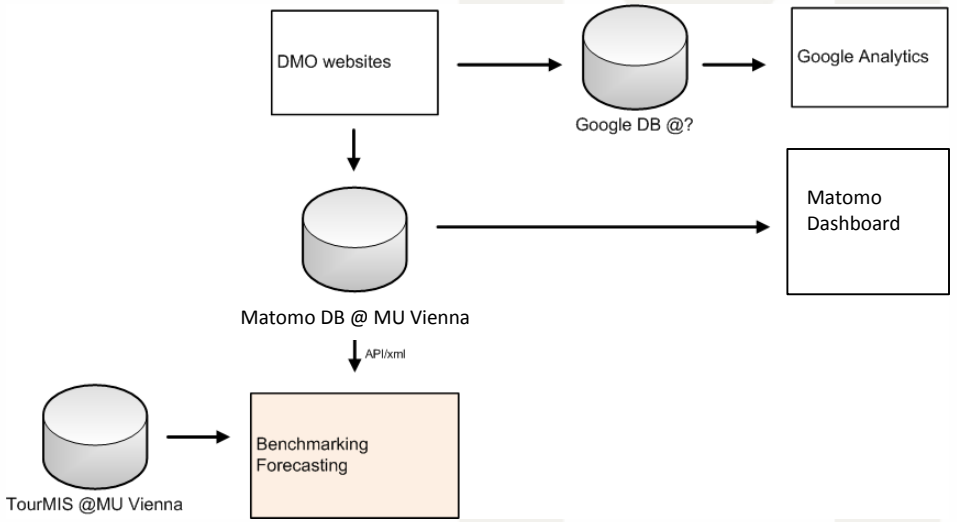


Which KPIs matter for benchmarking: A case study

- The study found that using webanalytics data such from Google Analytics for tourism demand forecasting is a valuable option, since the forecasting models were improved when webanalytics data was included in the models.
- This type of forecasts were also useful for long term forecasting (6,12 months ahead).

How does webanalytics work? Vienna tourism website



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document.write(unescape("%3Cscript src='" + pkBaseURL + "piwik.js' type='text/javascript'%3E%3C/script%3E"));
< /script><script type="text/javascript">
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piwikTracker.trackPageView();
piwikTracker.enableLinkTracking();
} catch( err ) {}
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< !-- End Matomo Tracking Code -->
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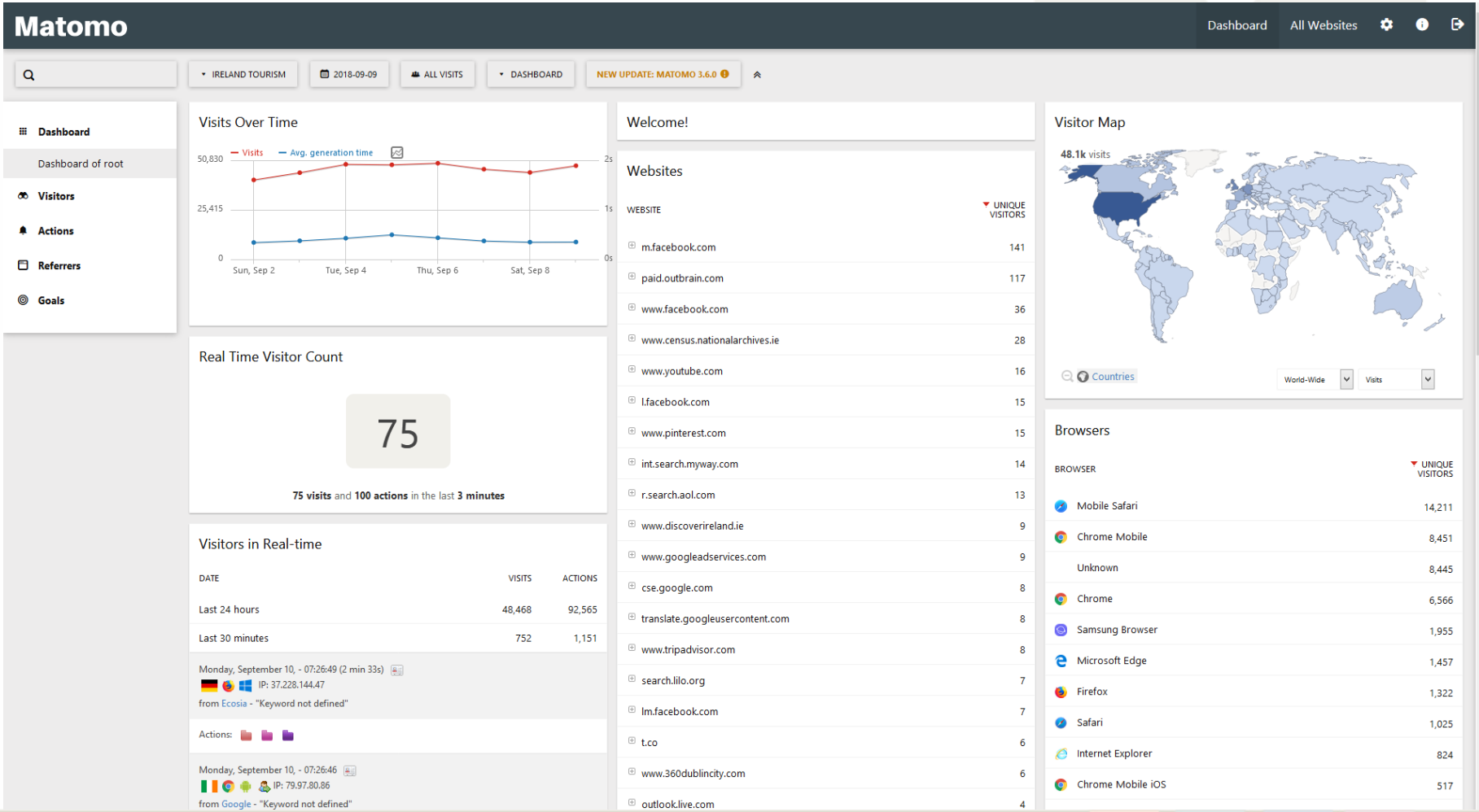
Matomo



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TourMIS

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www.tourmis.info

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- **Logout**

Cities >> Webanalytics

per month

Benchmark

Comparative analysis

Website and tourism demand

Destination	Bruges
Benchmark	☐ Bruges ☑ Brussels ☑ Ghent ☑ Helsinki ☑ Maribor ☑ Salzburg (city) ☑ Tallinn ☑ Turku ☑ Vienna ☑ Vilnius
Type of visitor	All visitors
KPI	Number of Visits (30 min of inactivity considered a new visit)
Market	All markets
Period	2017 January - 2018 August

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Type of Visitors

- All visitors
- Non-bouncing visitors (>1 page)
- Standard visitors (>2 pages, > 90 seconds)
- Highly engaged visitors (>3pages, >150 seconds)

Key Performance Indicators

- Number of visits
- Number of unique visitors
- Number of actions (page views, outlinks, downloads)
- Total time spent on site (in seconds)
- Average time spent on site (in seconds)
- Number of visits that bounced (viewed one page)
- Maximum number of actions in a visit
- Ratio of visitors leaving the website after landing on the page
- Number of actions per visit

TourMIS Example: Benchmarking

Cities >> Webanalytics

per month

- Benchmark
- Comparative analysis
- Website and tourism demand

Destination	Salzburg (city)
Benchmark	☑ Bruges ☑ Brussels ☑ Ghent ☑ Helsinki ☑ Maribor ☐ Salzburg (city) ☑ Tallinn ☑ Turku ☑ Vienna ☑ Vilnius
Type of visitor	Non-bouncing visitors (>1 page)
KPI	Maximum number of actions in a visit
Market	All markets
Period	2018 January - 2018 August

Cities - Webanalytics
Benchmark

Destination: Salzburg (city)
Type of visitor: Non-bouncing visitors (>1 page)
KPI: Maximum number of actions in a visit
Market: All markets
Period: Jan 2018 - Aug 2018

	Salzburg (city)		Benchmark (1)			
Period	KPI	Index	KPI Ø	Index	Number (2)	KPI +/-
Jan 2018	613	100.0	1002	100.0	7	-389
Feb 2018	518	84.5	510	50.9	7	7
Mar 2018	492	80.3	858	85.6	8	-366
Apr 2018	1064	173.6	665	66.4	7	398
May 2018	322	52.5	835	83.4	8	-513
Jun 2018	391	63.8	825	82.3	7	-434
Jul 2018	653	106.5	446	44.5	8	206
Aug 2018			2648	264.3	3	

(1) = Bruges, Brussels, Ghent, Helsinki, Maribor, Tallinn, Turku, Vienna, Vilnius.
(2) = Number of benchmark destinations.

Table: WEB-ECM4 (tab_w4)

Generated 2018-09-10 (08-52-34)
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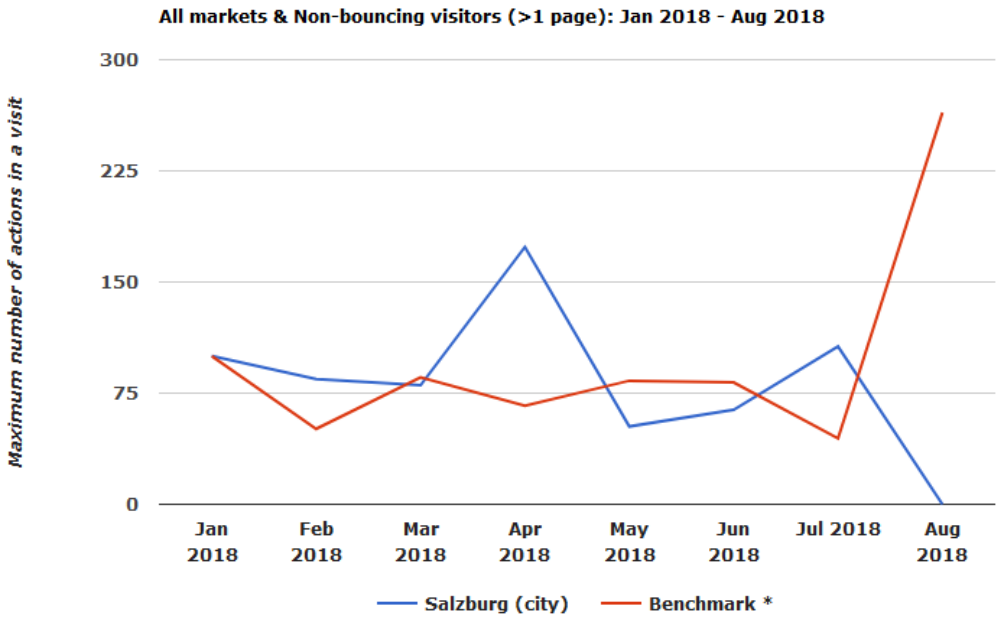

TourMIS Example: Comperative Analysis

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Cities >> Webanalytics

per month

Benchmark
Comparative analysis
Website and tourism demand

Benchmark: ☑ Bruges ☑ Brussels ☑ Ghent ☑ Helsinki ☑ Maribor ☑ Salzburg (city) ☑ Tallinn ☑ Turku ☑ Vienna ☑ Vilnius

Type of visitor: Non-bouncing visitors (>1 page)

KPI: Total time spent on website, in seconds

Market: All markets

Period: 2018 January - 2018 August

OK

1,000 % My TM

Cities - Webanalytics
Comparative analysis

Type of visitor: Non-bouncing visitors (>1 page)
KPI: Total time spent on website, in seconds
Market: All markets
Period: Jan 2018 - Aug 2018

Destination	KPI	in %
Bruges	201345709	15.0
Brussels	181395280	13.5
Ghent	49112650	3.6
Helsinki	8802549	0.7
Maribor	45885019	3.4
Salzburg (city)	486044640	36.1
Tallinn	219543441	16.3
Turku	8570758	0.6
Vienna	40670970	3.0
Vilnius	105012735	7.8
Total	1346383751	100.0

Table: WEB-ECM5 (tab_w5)

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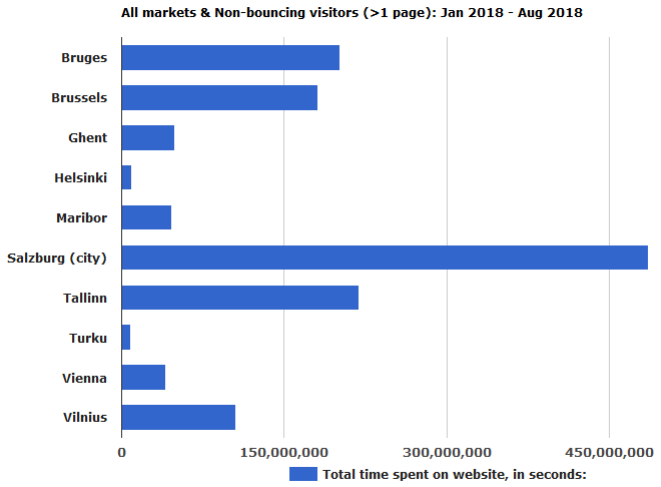

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Cities >> Webanalytics

per month

Benchmark
Comparative analysis
Website and tourism demand

Destination	Salzburg (city)
Information	○ Arrivals ◉ Bednights
Type of visitor	Non-bouncing visitors (>1 page)
KPI	Number of unique visitors
Market	All markets
Period	2018 January - 2018 August

OK

Cities - Webanalytics
Comparing website performance and tourism demand

Destination: Salzburg (city)
Type of visitor: Non-bouncing visitors (>1 page)
KPI: Number of unique visitors
Bednights: Bednights in all forms of paid accommodation in city area only (Preferred definition)
Market: Total foreign and domestic
Period: Jan 2018 - Aug 2018

	Observations				Forecast for Bednights (t=timelag)							
Period	KPI	Index	Bednights	Index	t=0	APE	t=-1	APE	t=-2	APE	t=-3	APE
Jan 2018	87455	100.0	**172894**	100.0	154663	10.5						
Feb 2018	90359	103.3	**156382**	90.4	160654	2.7	175079	12.0				
Mar 2018	126997	145.2	**201880**	116.8	236232	17.0	181145	10.3	213164	5.6		
Apr 2018	128183	146.6	**231379**	133.8	238678	3.2	257676	11.4	218988	5.4	255398	10.4
May 2018	148120	169.4	**284839**	164.7	279805	1.8	260153	8.7	292470	2.7	258915	9.1
Jun 2018	147591	168.8	**301375**	174.3	278714	7.5	301799	0.1	294849	2.2	303278	0.6
Jul 2018	165993	189.8			316674		300694		334835		304714	
Aug 2018							339132		333774		328855	
MAPE						**7.1**		**8.5**		**3.9**		**6.7**
Intercept					-25741.5		-7599.7		37763.5		149502.8	
Slope					2.063		2.089		2.006		1.211	
R^2					0.878		0.853		0.941		0.532	

Table: WEB-ECM3 (tab_w3)

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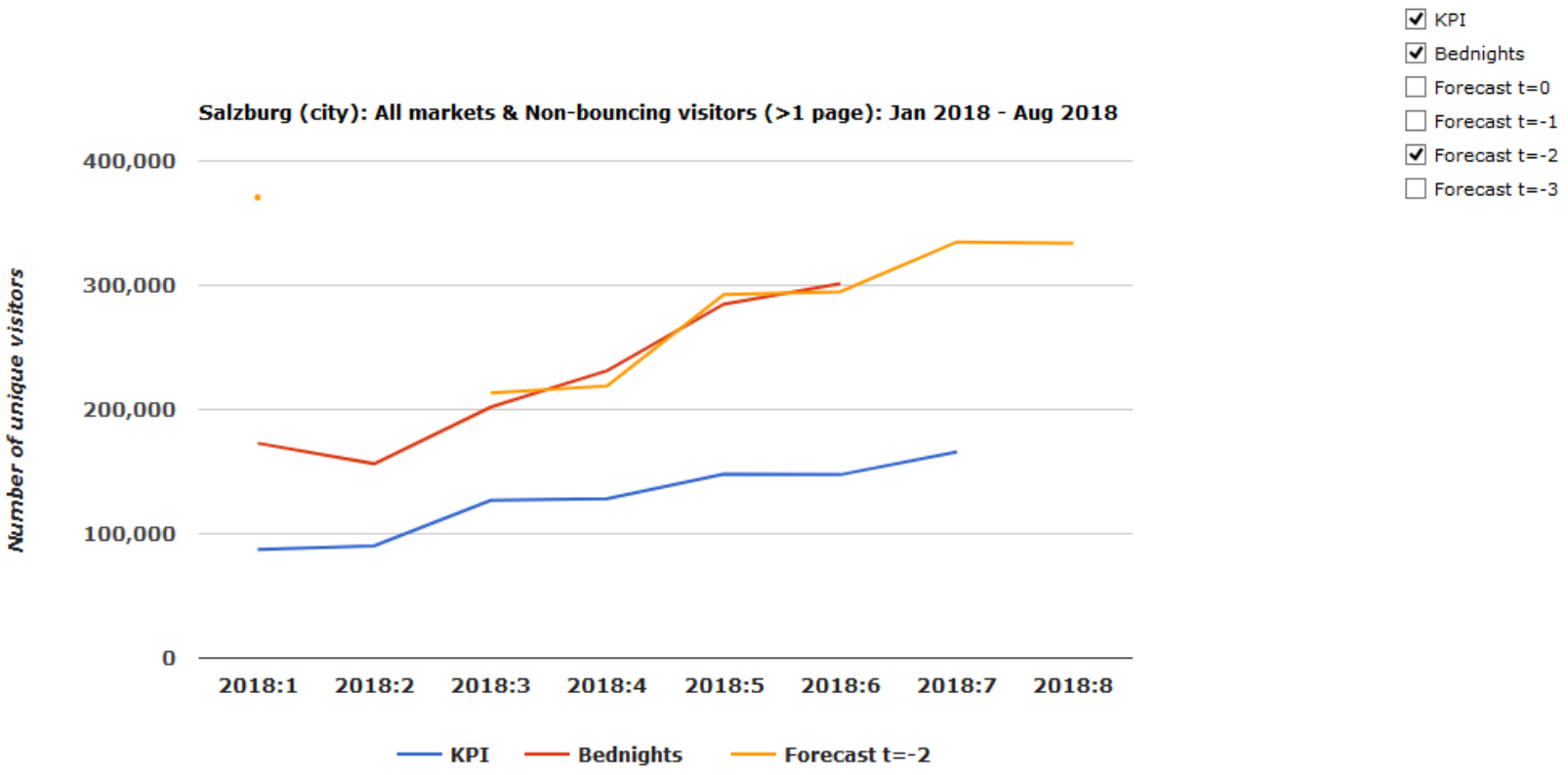
Forecasting (2 months ahead)



Participating cities and countries TourMIS

Cities:

- Bruges
- Brussels
- Ghent
- Helsinki
- Maribor
- Salzburg
- Tallinn
- Turku
- Vienna
- Vilnius

Countries:

- Czech Republic
- Denmark
- Estonia
- Finland
- Flemish region
- Ireland
- Luxembourg
- Norway
- Poland

A Look Into the Future

- Vision: 120 cities, 10 years
- More webanalytics indicators

(depending on your suggestions)

- Social media indicators such as

Facebook likes, comments…

Costs

- Due to the large volume of data we collect, we need space to store them (= 3,840GB)
- TourMIS webanalytics setup fee (snippet installation, database initialization, user rights) EUR 400,- (one time)
- Bandwidth contribution per year: EUR 400 (country) EUR 300 (city) ,- (starting on 1.1., initial months until 1.1. = free)

Get in Touch

If you are interested in this project, then get in touch with us.
Available for both cities and counties!

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ENTER conference:
Call for Destination Cases

ENTER2019 Destination Track Chairs

- Irem Önder – MODUL University Vienna (irem.onder@modul.ac.at)
- Holger Sicking – Austrian National Tourist Office, ETC (Holger.Sicking@austria.info)
- https://www.enter2019.org/

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Questions & Answers

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