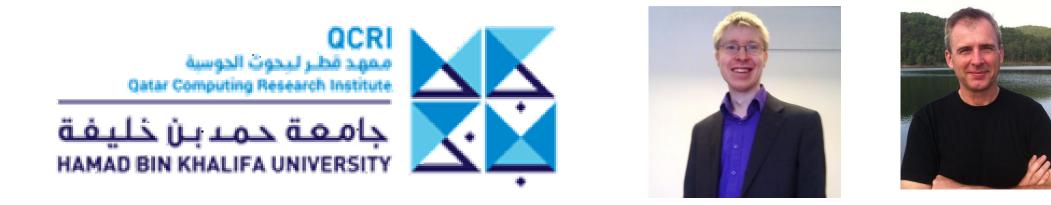
Use Cases and Outlooks for Automatic Analytics



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Why Automate?

- Save time from manual analysis
- Observe changes humans would miss
- Enable instant taking of action

Current challenges:

Guidelines

- Specific
- Measurable



- Automated Customer Insights ("Your Core Audience's Preferences have Changed...)
- eCommerce ("Sales increased /

- Choosing information to present out of hundreds of KPIs and metrics
- Explaining *why* changes occur, preferably in natural language
- Appropriate
- Realistic
- Timely

decreased...")

- **Triggers** ("Your campaign profitability dropped to negative")
- Etc. (100s of use cases!)

Automatic Analytics Tools and Tricks

A lot of numbers...

30	Aj*	success 🛓 👤	~28/02/2017	facebook	7554 / 7555	1/03/2017 9:32:20	1/03/2017 15:03:56
29	AJE	success 🔝 🔝	-28/02/2017	facebook	1647 / 1647	1/03/2017 9:32:15	2/03/2017 10:29:07
28	AJ+ arabic	success 🛃 🔝	~28/02/2017	facebook	2760 / 2760	1/03/2017 9:32:08	1/03/2017 11:58:48
27	QF	success 🛃 📘	-28/02/2017	facebook	158 / 158	1/03/2017 9:32:04	1/03/2017 10:06:52
26	Aj=	success 🛃 🔝	~28/02/2017	youtube	4729 / 4729	1/03/2017 9:31:55	7/03/2017 20:27:36
25	AJE	success 🛃 👤	01/01/2016~26/02/2017	youtube	9156/9156	1/03/2017 9:31:45	12/03/2017 22:48:46
24	AJ+ arabic	success 🛃 🔝	~28/02/2017	youtube	2443/2443	1/03/2017 9:31:41	2/03/2017 2:51:22
23	QF	success 🛃 👤	~28/02/2017	youtube	113 / 113	1/03/2017 9:31:34	1/03/2017 10:43:45
22	QF	success 🛃 🔝	~31/01/2017	youtube	109 / 109	1/02/2017 9:49:09	1/02/2017 10:48:37
21	AJ+ arabic	success 🛃 🔝	~31/01/2017	youtube	2187 / 2248	1/02/2017 9:49:06	5/02/2017 10:35:26
20	AJE	success 🛃 🔝	01/01/2016~31/01/2017	youtube	8501 / 8501	1/02/2017 9:49:02	13/02/2017 10:24:04
19	Aj=	success 🛓 👤	~31/01/2017	youtube	4719 / 4719	1/02/2017 9:48:59	6/02/2017 19:04:27
18	Aj+	success 🔝 🔝	~31/01/2017	facebook	7186 / 7187	1/02/2017 3:10:02	20/02/2017 16:48:59
17	QF	success 🛓 💄	~31/01/2017	facebook	149 / 149	1/02/2017 3:10:02	20/02/2017 16:34:07
16	AJE	success 🛓 📘	~31/01/2017	facebook	1507 / 1507	1/02/2017	20/02/2017

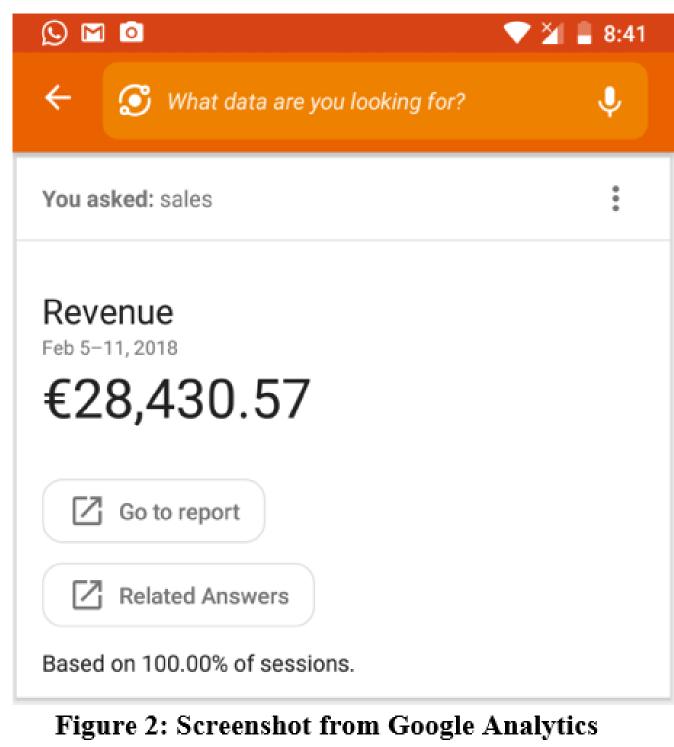
Persona Profile		0	Most Viewed Videos	0
0	Name : Austin Gender : Male Ade: 38			UNUMERS IS The South Racist? We Asked South Carolinians
1	Country : United States		2015-06-30 18:39:50	Related personas Comments
				Ut allow Did These Swedish Cops School The NYPD1
About Persona		0	2015-04-24-01:16:25	(Related personal) Commerce
kustin is a 38 year old male living in the United eld. He likes to read about Racism, US-affairs, bout 1.4 minutes of video.	States and vorks in the Food Preparat and US-politics on his Mobile. He usu	ion and Services ally valiches		Americans Show Why USA is The #1 Country in The World
Topics of Interest		0		Uspaines 'Donald Trump! In Mexico: We
Are Interested Topics			Sec.	Asked Mexicans What They Thought About Trump
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Entertainment		Related personals	2016-06-25 20:00:00	Related persones Commerce
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2004 No server connerts				Resistance
		_		Resistance

	nyslahjat AN. 29 - FEB. 04, 2018
	Ad Cost E798 from last week
	pressions 31K from last week
Pag	jes/Session

Ilmoitukset	Näyttökerrat	Klikkaukset"
40	1139	21
Ei muutosta	71 % enemmän	110 % enemmän
**	ilmoituksen tiedoissa olevie ät sähköpostiviestit ja Näyt	
OIMENPITEITÄ KAIPAA	AT ILMOITUKSET	



"Personas give faces to data." -Dr. Jim Jansen



Android App, Showing the Functionality of Asking Questions from the Analytics System. +3% from last week

Traffic Declines, Far Less Than 12-Month Weekly Average

Relative to the previous week, sessions fell to 13,795 sessions (a 3% drop) last week. This is less than your 12-month 18,364-session average. Traffic declined, fueled by paid search dropping 9% to 5,402 sessions. Sessions took a hit for ten of your strongest ad groups last week, as well.

Figure 1: Quill Engage. The Tool Automatically **Generates Fluent Reports from Google Analytics Data, And Provides Numerical Comparisons Based on Outliers and Trends.**

Raise bid for lahjat miehelle from 0,39 € o 0,45 €	1 click may have been lost
AHJA MIEHELLE > miehelle_PHR_fi	

Figure 5: An example of Bing Ads Recommending to Increase Keyword Bid.

Yhteydenotot Klikkaukset	0 4	Yhteydenotot Klikkaukset	0
Yhteydenotot	0		
			0
Näyttökerrat	104	Näyttökerrat	176
Vauhtihullun	1910	Bodyboarding	
		Vauhtihullun elamykset	Vauhtihullun Bodyboarding

Figure 4: Tori's Marketplace Insights Automatically Delivered to Inbox.

Hi Joni,		
Your account Quality S	Score has decrease	ed!
Elämys	slahjat 338-359-8	129
Feb 06	Feb 07	Change
7.4/10	7.3/10	-0.1
When you added this a 2017, its Quality Score decreased by -0.1 point	was 7.4/10, today	
	CHECK IT OUT	

rigure 5: renscores, the Automatic Quanty score Monitoring Tool.

Literature on (Automatic) Analytics

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Y. Yang, Y. C. Yang, B. J. Jansen, and M. Lalmas, "Computational Advertising: A Paradigm Shift for Advertising and Marketing?," IEEE Intelligent Systems, vol. 32, no. 3, pp. 3–6, May 2017.

Risks of Automation

- Opportunistic recommendations (e.g., "Increase bids" by Google)
- Lack of deep (human) thinking (determining 'X', aka 'Why?')
- Spam problem
 - (recommendations become like

promotional offers)