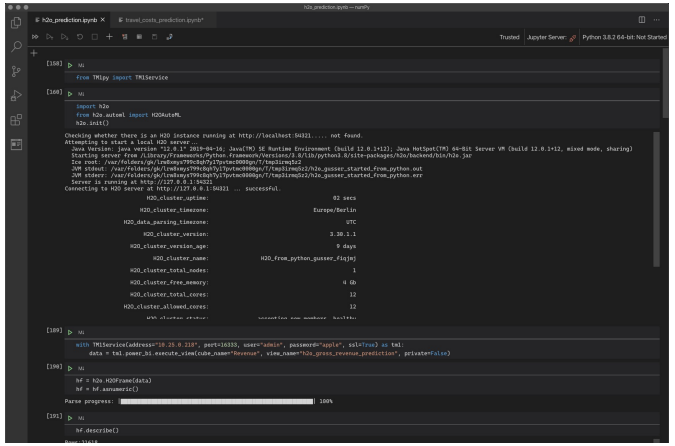
Machine Learning in IBM Planning Analytics

mit Python, Jupyter Notebooks & H2O.ai

03.09.2020,
Johannes Droste, Alexander Gusser

Agenda

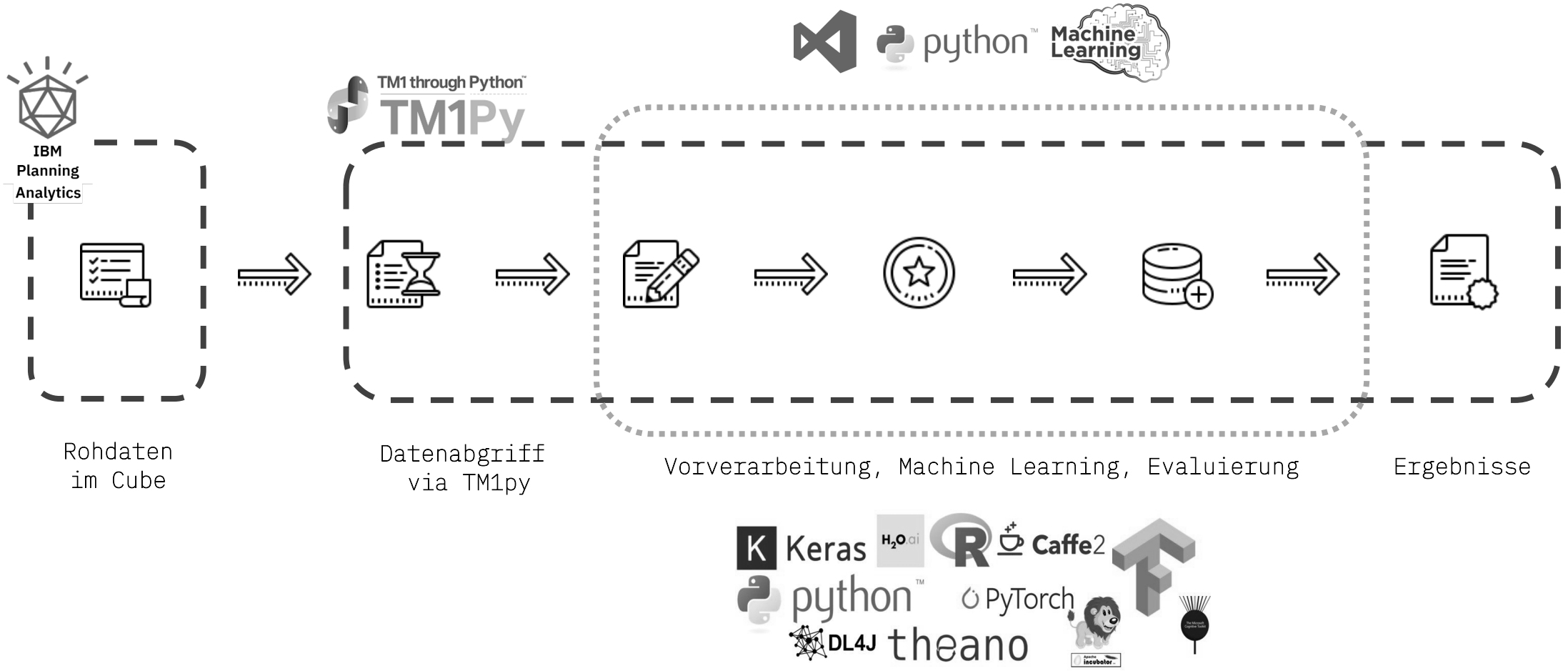
Prozesskette & TM1



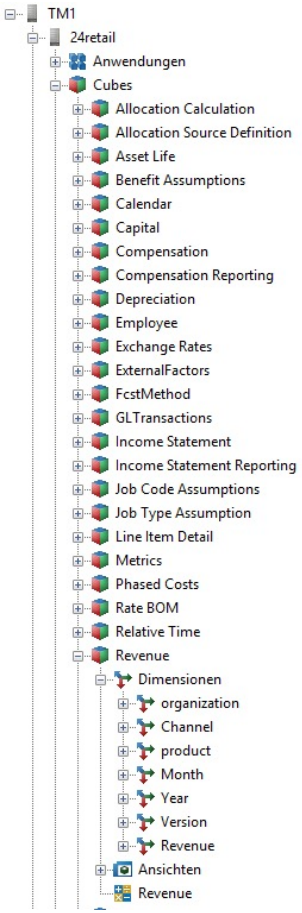
Jupyter & H20.ai

Take-Away & Lessons Learned

Prozesskette



TM1



Actual

					Revenue		
product	Channel	organization	Year	Month	Unit Net Sales Price	Volume - Units	Unit Direct Cost
		Massachusetts	Y1	Jan	70,00	272	47,04
				Feb	70,00	272	47,04
				Mar	70,00	272	47,04
				Apr	70,00	272	47,04
				May	70,00	272	47,04
				Jun	70,00	263	47,04
				Jul	70,00	200	47,04
				Aug	70,00	190	47,04
				Sep	70,00	181	47,04
				Oct	70,00	173	47,04
				Nov	70,00	163	47,04
				Dec	70,00	154	47,04
			Y2	Jan	67,90	250	47,04
				Feb	66,54	243	47,04
				Mar	65,21	236	47,04
				Apr	63,91	158	47,04
				May	62,63	154	47,04
				Jun	61,38	149	47,04
				Jul	60,15	144	47,04
				Aug	58,95	104	47,04
				Sep	47,14	98	47,04
				Oct	48,12	63	47,04
				Nov	47,16	61	47,04
				Dec	46,21	73	47,04
				Jan	63,00	226	47,04
				Feb	62,00	219	47,04
				Mar	62,00	211	47,04
				Apr	61,00	126	47,04
				May	60,00	145	47,04

Jupyter & H20.ai

DEMO

TM1

Predictivev2

					Revenue		
product	Channel	organization	Year	Month	Unit Price	Units Sold	Unit Cost
			Y1	Jan	70,00	233	47,00
				Feb	70,00	179	47,00
				Mar	70,00	179	47,00
				Apr	70,00	279	47,00
				May	70,00	303	47,00
				Jun	70,00	230	47,00
				Jul	70,00	274	47,00
				Aug	70,00	286	47,00
				Sep	70,00	283	47,00
				Oct	70,00	168	47,00
				Nov	70,00	161	47,00
				Dec	70,00	160	47,00
		Massachusetts	Y2	Jan	70,00	199	47,00
				Feb	69,00	173	47,00
				Mar	69,00	143	47,00
				Apr	68,00	249	47,00
				May	67,00	265	47,00
				Jun	67,00	215	47,00

TM1

Product Total	Channel Total	Total Company						
		Version	Revenue					
		Actual			Predictivev2			
Month	Year	Unit Price	Units Sold	Unit Cost	Unit Price	Units Sold	Unit Cost	
+ Year	2019	402,33	230.134	239,08	394,41	226.440	221,96	
	2020	345,47	213.062	209,82	345,48	213.261	185,13	
	2021	358,93	212.020	198,22	346,77	207.546	188,10	

Take-Away & Lessons Learned

- Aufbau und Umsetzung innerhalb einer Woche möglich!
- Vorkenntnisse in allen Technologien jedoch notwendig (ratsam ☺)
- Vorteile beider Welten nutzen und die Stärken von TM1 sowie ML ausreizen!
- Prozesskette ist beliebig einsetzbar! (Use Case)

Feedback oder Fragen?

Ihr gmc²-Team