Qlik

VISUALIZE YOUR WORLD

Scopri le opportunità generate dai dati – Milano, 5 ottobre 2016

Qlik & Advanced Analytics

Making Advanced Analytics more Approachable

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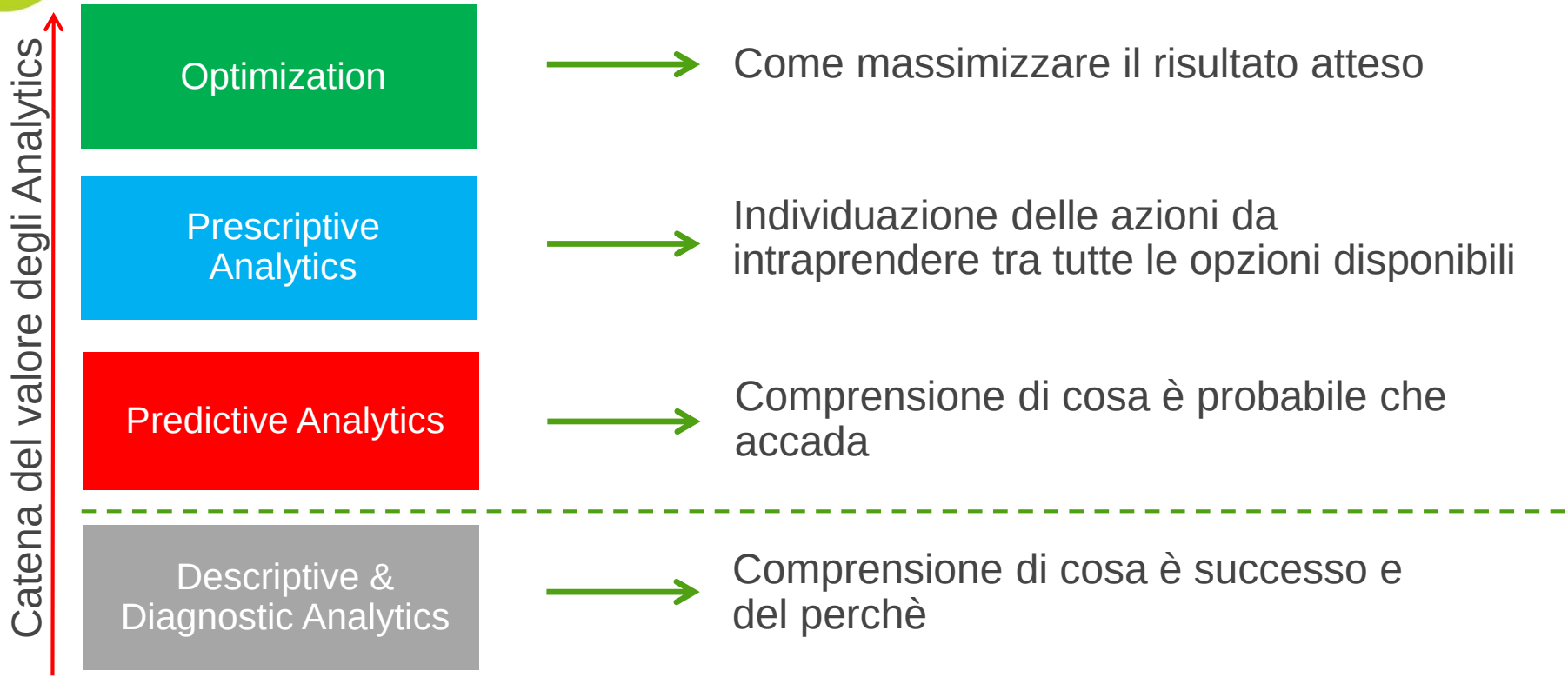
Perchè tutto questo interesse negli Analytics?

- "***Information*** is the oil of the 21st century; ***analytics*** is the combustion engine" Peter Sondergarrd, Gartner Research

- "Organizations have access to a ***wealth of information***, but they can't get value out of it" Tom Davenport, Deloitte

- "The US could be facing a ***shortage*** of 190,000 people with analytical skills by 2018" McKinsey Global Institute

Cosa sono gli Analytics?



Credit for “sight” terms: Kirk Borne, Booz Allen Hamilton

Utilizzi più frequenti negli ultimi anni

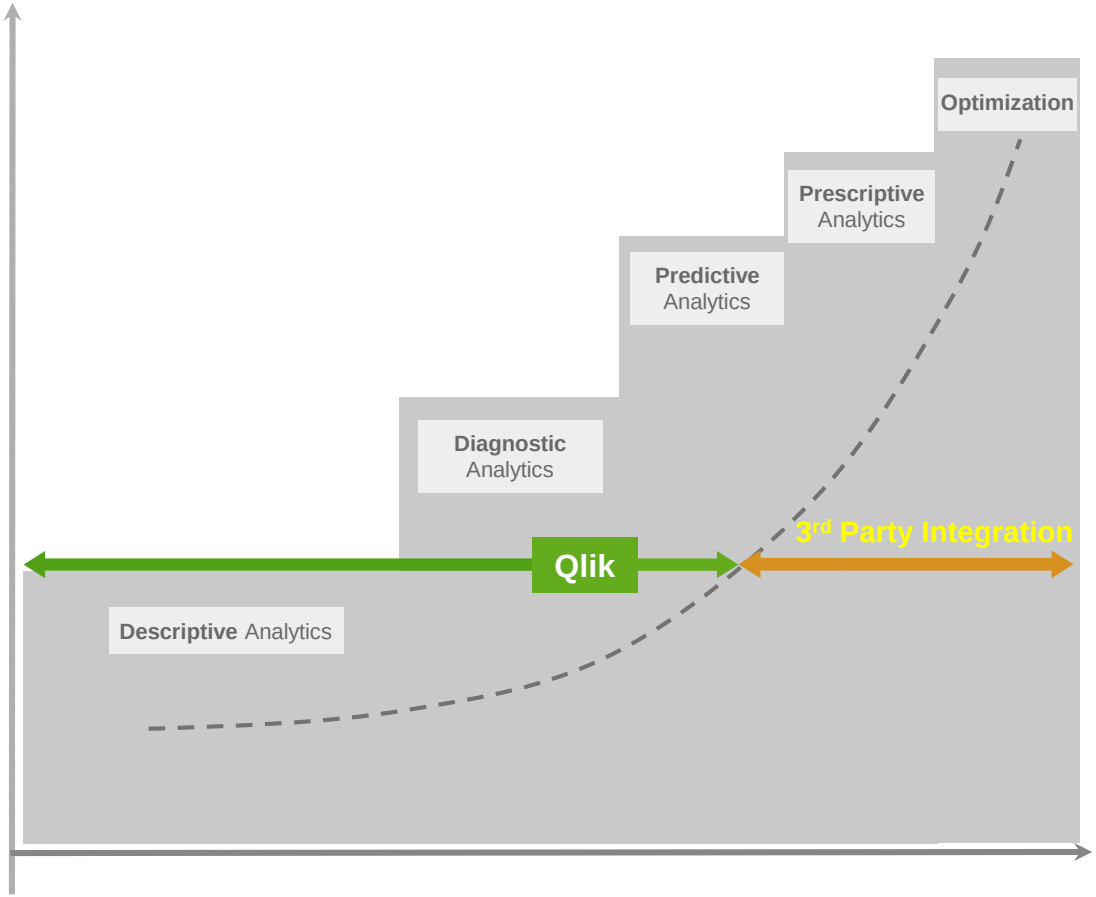
- Customer sentiment
- Cross-sell/up-sell
- Cluster/segmentation
- Churn/retention
- Forecasting
- Optimization

- Fraud
- Market basket analysis
- Credit scoring
- Campaign management
- Customer intelligence

GOAL	5 yrs ago	2 yrs ago
Improving understanding of customers	33%	45%
Retaining customers	30%	36%
Improving customer experiences	22%	36%
Market research / survey analysis	29%	36%
Selling products / services to existing customers	23%	33%
Acquiring customers	23%	32%
Improving direct marketing programs	22%	27%
Sales forecasting	19%	27%
Risk management / credit scoring	22%	26%
Fraud detection or prevention	21%	23%
Price optimization	14%	22%

Source: Rexer Analytics Data Miner Survey

e Qlik?


Optimization
Prescriptive Analytics
Predictive Analytics
Diagnostic Analytics
Descriptive Analytics
Qlik
3rd Party Integration

Funzioni di Advanced Analytics native di Qlik

Esempio: **Funzioni statistiche di aggregazione**

AVG (expr)
STERR (expr)
STEYX (y-expr, x-expr)
CORREL (x-expr, y-expr)
MEDIAN (expr)
STDEV (expr)
SKEW (expr)
KURTOSIS (expr)
FRACTILE (expr, fractile)

LINEST_M (y-expr, x-expr[, y0 [, x0]])
LINEST_B (y-expr, x-expr [, y0 [, x0]])
LINEST_R2 (y-expr, x-expr [, y0 [, x0]])
LINEST_SEM (y-expr, x-expr [, y0 [, x0]])
LINEST_SEB (y-expr, x-expr [, y0 [, x0]])
LINEST_SEY (y-expr, x-expr [, y0 [, x0]])
LINEST_DF (y-expr, x-expr [, y0 [, x0]])
LINEST_F (y-expr, x-expr [, y0 [, x0]])
LINEST_SSREG (y-expr, x-expr [, y0 [, x0]])
LINEST_SSRESID (y-expr, x-expr [, y0 [, x0]])

Esempio: **Funzioni statistiche di test**

Chi² Test functions

T-Test functions

- Two independent samples t-tests: 8
- Two independent weighted samples t-tests
- One sample t-tests
- One weighted sample t-tests

Z-Test Functions

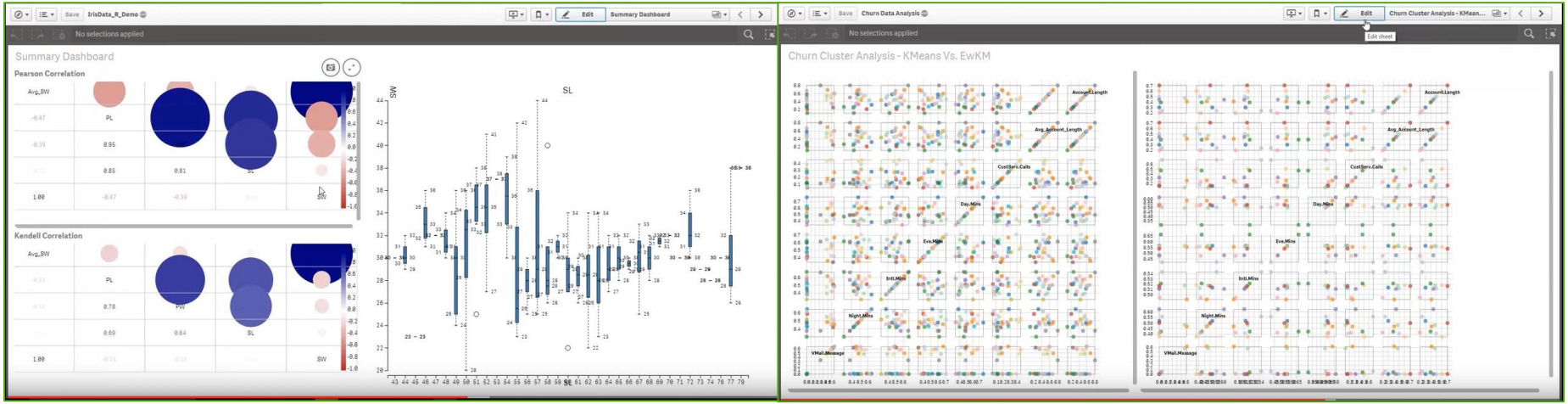
- One column format functions
- Weighted two-column format functions

Esempio: **Distribuzioni statistiche**

CHIIDIST
CHIINV
NORMDIST
NORMINV

TDIST
TINV
FDIST
FINV

- ✓ I dati selezionati in Qlik sono passati al sistema di Advanced Analytics...
- ✓ ...che crea il result set basato sull'algoritmo selezionato
- ✓ Il modello in-memory di Qlik è aggiornato con i risultati analitici
- ✓ Gli Utenti proseguono l'esperienza di Business Discovery in Qlik



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Integrazione con strumenti di Advanced Analytics

Qlik data set

Predictive results

Qlik

Advanced Analytics

Approachable Analytics

Cosa si attendono i clienti dagli Advanced Analytics?

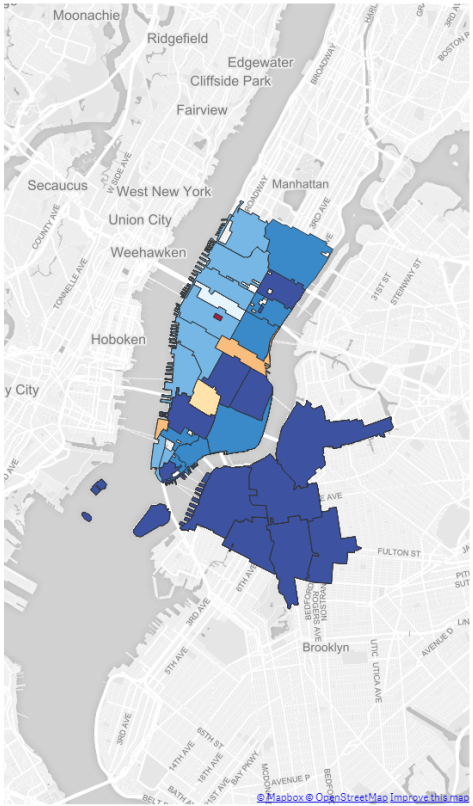
La realtà è ben diversa...

```
        default='Y',
        )
    global_scale_setting = FloatProperty(
            name="Scale",
            min=0.01, max=1000.0,
            default=1.0,
            )

def execute(self, context):

    # get the folder
    folder_path = (os.path.dirname(self.filepath))

    # get objects selected in the viewport
    viewport_selection = bpy.context.selected_objects

    # get export objects
    obj_export_list = viewport_selection
    if self.use_selection_setting == False:
        obj_export_list = [i for i in bpy.context.scene.objects]

    # deselect all objects
    bpy.ops.object.select_all(action='DESELECT')

    for item in obj_export_list:
        item.select = True
        if item.type == 'MESH':
            file_path = os.path.join(folder_path, "{}.obj".format(item.name))
            bpy.ops.export_scene.obj(filepath=file_path, use_selection=True,
                                     axis_forward=self.axis_forward_setting,
                                     axis_up=self.axis_up_setting,
                                     use_animation=self.use_animation_setting,
                                     use_mesh_modifiers=self.use_mesh_modifiers_setting,
                                     use_edges=self.use_edges_setting,
                                     use_smooth_groups=self.use_smooth_groups_setting,
                                     use_smooth_groups_bitflags=self.use_smooth_groups_bitflags_setting,
                                     use_normals=self.use_normals_setting,
                                     use_uvs=self.use_uvs_setting,
                                     use_materials_setting,
```

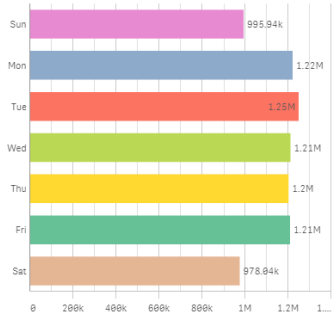
Il concetto di “Citizen Data Scientist”

When is the best time to ride a bike?

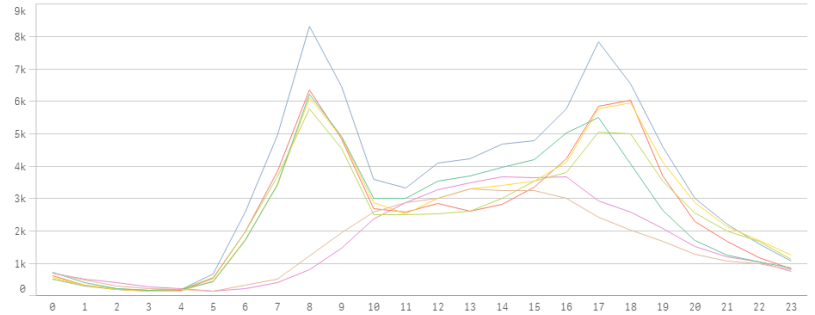
Total Rides



By day



By hour & day



Measures | Ride Weekday

Station Name	Total Rides							Avg Trip Duration (min)						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
7 Ave & Farragut St	15	91	101	68	89	81	12	12.31	12.16	10.65	10.10	11.79	10.65	10.86
Montague St & Clinton St	61	78	49	74	81	81	62	9.36	13.55	14.78	12.21	67.63	15.33	10.90
Church St & Leonard St	75	146	66	122	126	115	60	13.96	10.61	10.38	9.83	9.69	13.39	8.79
Railroad Ave & Kay Ave	81	150	157	153	167	101	34	17.02	14.49	15.60	15.72	18.99	14.35	18.04
W 13 St & 5 Ave	142	179	110	143	168	122	125	10.26	10.21	15.48	10.67	10.01	11.87	13.56
Sands St & Navy St	22	149	158	187	171	172	151	17.91	13.35	12.73	12.80	12.25	11.44	25.60
Sands St & Gold St	239	181	172	161	186	157	266	22.08	16.23	17.25	16.38	14.09	15.38	21.81
E 48 St & Madison Ave	85	354	349	286	321	320	66	11.48	10.68	9.61	15.08	13.86	9.90	12.85
Park Ave & St Edwards St	171	265	286	326	260	299	208	17.44	13.76	13.31	12.89	10.91	12.60	15.89
Hanover Pl & Livingston St	240	321	280	316	301	297	220	15.91	18.28	14.69	16.38	16.08	18.65	16.01
Monroe St & Classon Ave	361	256	287	294	316	335	346	15.81	15.86	14.33	13.32	14.77	15.49	17.52
Bedford Ave & S 9th St	453	372	266	272	261	282	398	22.03	19.30	18.05	26.41	19.90	18.90	21.32
E 33 St & 2 Ave	286	448	464	351	400	400	246	11.79	13.12	13.32	11.74	11.64	10.41	12.57

Demo

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Grazie