

Responsive Design Concept

Business Intelligence & Advanced Data Discovery

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1 Introduction

Smarten is designed with an adaptive and responsive user interface that renders the UI elements based on the resolution of the target device.

The following three resolutions are taken into consideration:

- Desktop view—screen width of 980 px and above
- Tablet portrait view—screen width between 671px and 979px
- Smartphone view—screen width of 670 px and below

You do not need to design different dashboards or BI objects for different devices. "**Design once**, **Use anywhere**" concept in its true sense.

It offers a unique user experience with a 100% browser-based interface on any device, any resolution—Desktop, Laptop, Tablet, and Smartphone.

The following images explain rendering of same dashboard in different devices based on resolution of the target device.



DESKTOP VIEW



roductCategory	Variance	Gross Sales
coholic Drinks	146.20%	20,525,795
kery	201.30%	13,008,591
onfectionary	49.36%	1,835,602
ool Drinks	42.57%	1,085,087
uit Juices	137.93%	8,809,085
alth Drinks	83.70%	5,039,012
e Cream	98.13%	6,476,463
acks	67.86%	1,965,492
a	18.87%	1,003,353
Total	115.99%	59,748,480

Sales Perfor	mance By	Category		
			2012	
ProductCategory	Variance	Gross Sales	Target	Variance
Alcoholic Drinks	226.29%	16,446,691	16,442,911	100.02%
akery	39.12%	18,031,960	28,906,858	62.38%
Confectionary	59.27%	1,253,912	1,356,792	92.42%
Cool Drinks	87.81%	750,443	632,250	118.69%
ruit Juices	177.29%	7,738,767	7,052,346	109.73%
lealth Drinks	85.04%	4,101,010	4,238,606	96.75%
ce Cream	82.49%	5,590,568	5,517,944	101.32%

SMARTPHONE VIEW (PORTRAIT)





 Sales Overview

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SMARTPHONE VIEW (PORTRAIT)

SMARTPHONE VIEW (LANDSCAPE)

Sales Overv	iew	•••	-					
*	₹ -							
🖬 Sales Perfo	ormance	By Category						
			2011					
ProductCatego	yriance	Gross Sales						
Alcoholic Drinks	^{\$})0.02%	11,180,229	12,7!					
Bakery	32.38%	14,270,106	17,5:	_				
Confectionary	92.42%	785,583	9:	Sales Overvie	W			
Cool Drinks	18.69%	454,909	3.					
Fruit Juices)9.73%	5,486,443	5,41	* ≣ -	▼ -	···· -		
Health Drinks	96.75%	2,547,241	2,9:					
Ice Cream)1.32%	3,064,884	3,4:	🚮 Sales Perfor	mance By	Category		
Snacks	01.57%	878,012	1,0				Total	
Tea	31.84%	830,187	1,6-	ProductCategory	Variance	Gross Sales	Target	Variance
Total	81.95%	39.497.594	46.11	Alcoholic Drinks	87.35%	68,110,629	51,963,351	131.07%
			,	Bakery	81.28%	64,623,762	89,310,855	72.36%
				Confectionary	81.95%	5,569,411	8,845,414	62.96 %
				Cool Drinks	121.18%	3,410,534	4,874,656	69.96%
				Fruit Juices	101.50%	29,494,222	22,835,104	129.16%
				health Drinks	87.13%	17,403,467	19,916,724	87.38%
					89.23%	21,275,671	23,064,951	92.24%
SMAR		IFW (PORTRAIT)			SMARTI	PHONE VIEW (L	ANDSCAPE)	

2 **Responsive Design based on Grid**

The Smarten responsive user interface is developed based on a 120-column grid system. The whole screen width is divided into 120 columns (also called screen units), and the pixel size of each screen unit will be based on the resolution of the target screen. This mechanism will provide relative sizing and positioning of the object on the Smarten page container.

Below are some examples to understand the relationship between % width and screen units:

1.	1. 100% width = 120 screen units																																				
1.										30	31.								So	creen 60	Uni 61	ts						. 9	0 91								120
	Object 1 (120 Screen units)																																				
	object i (izo screen units)																																				
		_		_	_				_			_		_			_	_			_	_		_	_		_	_	_			_	_		_		
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	Fullscreen with																																				
	OBJECT WITH 120 SCREEN UNITS																																				

2. 50% width = 60 screen units



3. 25% width = 30 screen units



3 Screen Unit size (in pixels) based on resolution

The pixel size of each screen unit will be based on the resolution of the target screen, which will provide high-quality image and object rendering within the Smarten container.

Screen Resolution (width x height in pixels)	Pixels per screen unit (width / 120)
960 x 800	8 (960/120)
1200 x 800	10 (1200/120)
1320 x 900	11 (1320/120)
1680 x 1024	14 (1680 / 120)

4 Screen Units based Object rendering

Graphs, KPI, and dashboard objects are rendered based on screen units defined by the user, with "center" alignment.



GRAPH WITH 120 X 60 SCREEN UNITS



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GRAPH WITH 90 X 60 SCREEN UNITS

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GRAPH (90 X 60 SCREEN UNITS) WITH LEGEND (15 X 60 SCREEN UNITS)

Analysis and reports are grid-based layouts, and full-screen resolution width (e.g., 120 screen units) is allocated by the system. Analysis is displayed with "left" alignment, and reports are displayed with "center" alignment.

Advanced Data Discovery					
Sales Analysis					
State	🔅 Em	nployeeName	÷		
	2011	2012	2013	2014	SUMMARY
PRODUCTCATEGORY	GROSSSALES	GROSSSALES	GROSSSALES	GROSSSALES	GROSSSALES
ALCOHOLIC DRINKS	11,180,229	16,446,691	20,525,795	19,957,914	68,110,629
BAKERY	14,270,106	18,031,960	13,008,591	19,313,105	64,623,762
CONFECTIONARY	785,583	1,253,912	1,835,602	1,694,315	5,569,411
COOL DRINKS	454,909	750,443	1,085,087	1,120,095	3,410,534
FRUIT JUICES	5,486,443	7,738,767	8,809,085	7,459,928	29,494,222
HEALTH DRINKS	2,547,241	4,101,010	5,039,012	5,716,204	17,403,467
ICE CREAM	3,064,884	5,590,568	6,476,463	6,143,756	21,275,671
SNACKS	878,012	1,223,219	1,965,492	1,540,273	5,606,997
TEA	830,187	1,005,284	1,003,353	944,823	3,783,646
SUMMARY	39,497,594	56,141,853	59,748,480	63,890,413	219,278,340

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ANALYSIS DISPLAYED WITH "LEFT" ALIGNMENT

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New Report									C	8	E+	3	围	D,	Y	0
(/ Page 1												Cube Is	et rebui	t on Oct	ober 29	2014 12 2
C Page 1 01146 2 22				12	0 screen u	inits						Podebe in	arroud	i on ou	2001 20,1	1014122
	Month	State	City	ProductCategory	ProductName	SalaeOty	SalaeDrica	GroceSalae								
	àn	Arizona	Phoenix	Alcoholic Drinks	Wipe	156.0	289.21	45116 75000000000								
	àn	Valuation	Seattle	Alcoholic Drinks	Beer	237.0	321.91	76292 6700000001								
	Jun	Arkansas	Springdale	Cool Drinks	Cola	123.0	64.05	7878.15								
	-to-	Arkansas	Conway	Bakery	Cookies	195.0	352.56	68749.2								
	-Jun	Arkansas	Conway	Bakery	Cake	364.0	135.59	49354.76								
	Jun	Washington	Redmond	Ice Cream	Vanilla	152.0	122.09	18557.68								
	Jun	Washington	Redmond	Cool Drinks	Cola	363.0	65.63	23823.69								
	Jun	Ohio	Dayton	Confectionary	Mints	159.0	91.54	14554.86								
	Jun	Arkansas	Conway	Cool Drinks	Soda	320.0	73.04	23372.80000000003								
	Jun	Arkansas	Springdale	Bakery	Cookies	133.0	359.94	47872.02								
	Jun	Florida	Orlando	Alcoholic Drinks	Whisky	327.0	341.85	111784.95000000001								
	Jun	Florida	Orlando	Fruit Juices	Apple	354.0	140.63	49783.02								
	Jun	Washington	Seattle	Fruit Juices	Apple	263.0	131.11	34481.93								
	Jun	Washington	Redmond	Confectionary	Mints	390.0	102.82	40099.799999999999								
	Jun	Florida	Lakeland	Tea	Ginger Tea	73.2	145.25	10632.300000000001								
	Jun	Arizona	Scottsdale	Tea	Green Tea	23.6	86.12	2032.4320000000002								
	Jun	Arizona	Scottsdale	Tea	Ginger Tea	72.60000000000001	157.92	11464.992								
	Jun	Florida	Lakeland	Confectionary	Toffees	169.0	55.7	9413.300000000001								
	Jun	Florida	Orlando	Health Drinks	Chocolate	297.75	150.41600000000003	44786 3640000001								
	Jun	Arizona	Scottsdale	Fruit Juices	Mango	235.0	153.26	36016.1								
	Jun	Arizona	Scottsdale	Health Drinks	Chocolate	308.25	333.32000000000005	51290.95200000005								
	Jun	Arizona	Scottsdale	Ice Cream	Pineapple	239.0	98.7	23589.3								
	Jun	Arizona	Scottsdale	Bakery	Cake	117.0	122.92	14381.64								
	Jun	Arkansas	Springdale	Fruit Juices	Orange	183.0	151.61	27744.63								
	Jun	Arkansas	Springdale	Alcoholic Drinks	Beer	241.0	376.26	90678.66								
	Jun	Arkansas	Conway	Health Drinks	Strawberry	203.25	81.13600000000001	16490.89200000003								
	Jun	Weshington	Seattle	Ice Cream	Pineapple	102.0	114.96	11725.92								
	Jun	Washington	Redmond	Cool Drinks	Cola	253.0	61.81	15637.93								
	Jun	Washington	Seattle	Ice Cream	Vanilla	104.0	149.12	15508.48								
	Jun	Florida	Lakeland	Bakery	Cookies	394.0	307.73	121245.6200000001								
	Jun	Florida	Lakeland	Tea	Ginger Tea	27.0	155.87	4208.49								
	Jun	Washington	Redmond	Snacks	Noodles	186.0	87.71	16314.06								
	Jun	Washington	Redmond	Fruit Juices	Apple	327.0	131.3	42935.10000000006								
	Jun	Arkansas	Conway	Tea	Ginger Tea	34.4	129.0	4437.599999999999								
	Jun	Washington	Seattle	Tea	Green Tea	30.40000000000002	106.51	3237.9040000000005								
	Jun	Washington	Redmond	Cool Drinks	Soda	245.0	72.47	17755.15								
	Jun	Ohio	Dayton	Fruit Juices	Apple	156.0	117.13	18272.28								
	Jun	Arkansas	Conway	Bakery	Cake	135.0	132.05	17826.75								
	Jun	Arkansas	Springdale	Ice Cream	Vanilla	153.0	115.87	17728.11								
	Jun	Arkansas	Conway	Ice Cream	Pineapple	148.0	99.59	14739.32								
		Elosida	1 at stand	And the Area and the second	Make	100.0	01.44									

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REPORT DISPLAYED WITH "CENTER" ALIGNMENT

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5 Object rendering flow—Left to Right

The grid system adjusts objects automatically on the page from left to right. If it does not find enough space, the object will automatically move down.

A typical flow is explained below.



FLOW CHART: DASHBOARD OBJECT RENDERING-LEFT TO RIGHT

Example:

There are 5 objects in a page, and object width in screen units is as shown below, and all objects have the same height.

Object 1—60 screen units Object 2—40 screen units Object 3—50 screen units Object 4—80 screen units Object 5—40 screen units

The system will start rendering objects from left to right in the first row. Object 1 will be rendered with 60 screen units in row 1, then object 2 with 40 screen units in the same row, but now row 1 has already occupied 100 screen units, and only 20 screen units are available in row 1. Object 3 has 50 screen units, which cannot be accommodated in row 1. So, in this case, object 3 will be moved to a new row, i.e., row 2.

In row 2, Object 3 occupies 50 screen units, and 70 screen units are available. Object 4 needs 80 screen units, so object 4 will be moved to a new row, i.e., row 3.

Object 5 needs 40 screen units, and row 3 has 40 screen units available, so object 5 will be rendered in row 3.



1	Scree 60		90 91	120						
Object 1 (60 Screen units)		Object 2 (40	Screen units)							
Object 3 (50 Screen units)										
Object 4 (80 Screen unit	ts)		Object 5 (40	Screen units)						
		+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$		+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$						
		+ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$ $+$								
Full screen width										

DASHBOARD OBJECT RENDERING-LEFT TO RIGHT

6 Object Grouping

Smarten

The object grouping mechanism will help maintain the same dashboard design/layout in different screen sizes.



FLOW CHART: DASHBOARD OBJECT GROUPING

Example:

There are 9 objects placed in the dashboard layout below. Steps shown will explain the grouping logic on this sample layout.



DASHBOARD OBJECT GROUPING: SAMPLE DESIGN LAYOUT

Process C round 1—after process A

As per above-mentioned grouping algorithm, process A will be performed as part of process C. After this process, groups below will be created based on objects' same top position and height.

Group 1—Object 1 + Object 2 + Object 3 Group 2—Object 5 + Object 6 Group 3—Object 8 + Object 9

Objec	2t 1	Objec Gro	t 2 pup 1	Object 3					
Object 4		Object 5	Group 2	Object 6					
		Object 8	Group 3	Object 9					

DASHBOARD OBJECT GROUPING: PROCESS C ROUND 1-AFTER PROCESS A

Process C round 1—after process B

Now process B will be performed. It will check for the same left position and width for objects. The group shown below will be created after this process:

Group 4—Object 4 + Object 7

Objec	st 1	Objec Gro	t 2 pup 1	Object 3
Object 4		Object 5	Group 2	Object 6
		Object 8	Group 3	Object 9

DASHBOARD OBJECT GROUPING: PROCESS C ROUND 1-AFTER PROCESS B

Process C round 2—after process A (No change)

Next, round 2 of process C will be performed. After process A of this round, any new group will not be created because there are no objects/groups with the same top position and height.

Objec	et 1	Objec Gro	t 2 pup 1	Object 3					
Object 4		Object 5	Group 2	Object 6					
		Object 8	Group 3	Object 9					

DASHBOARD OBJECT GROUPING: PROCESS C ROUND 2-AFTER PROCESS A

Process C round 2—after process B

Now, process B will be performed in round 2. This will create the group below:

Group 5—Group 2 + Group 3

Objec	st 1	Objec Gro	t 2 pup 1	Object 3					
Object 4		Object 5	Group 2	Object 6					
Group 4 Object 7			Group	5					
		Object 8	Group 3	Object 9					

DASHBOARD OBJECT GROUPING: PROCESS C ROUND 2-AFTER PROCESS B

Process C round 3—after process A

Now, round 3 of process C will be performed. After process A in this round, the groups below will be created:

Group 6—Group 4 + Group 5

Group 1	Object 3
Group Grou Object 8 Group	p 5 Object 9 3
	Object 5 Group Group Object 8 Group Group

DASHBOARD OBJECT GROUPING: PROCESS C ROUND 3-AFTER PROCESS A

Process C round 3—after process B (Complete)

Process 3 for round 3 will be performed next. The group below will be created after this process:

Group 7—Group 1 + Group 6

Object 1	Object 2 Group 1	Object 3
Object 4	Group 7 up 2	
Object 7	Object 8 Group 3	Object 9

DASHBOARD OBJECT GROUPING: PROCESS C ROUND 3-AFTER PROCESS B

Process will be finished after this round, as there is no possibility to create a new group.

Note:

If vertical grouping option is enabled then Process C will be start with Process B first and then followed by Process A.

7 Dashboard preview mode—Section rendering behavior

Dashboard sections will be resized and rendered as per grid-based responsive mechanism in different screen resolutions. As explained in previous topics, Smarten object size is measured in screen units. There will be different pixels value per screen unit for different screen resolution. So, dashboard sections' size will be calculated as per formula below while rendering:

Section width (in pixels) = section screen unit width * pixels per screen unit for current resolution

Section height (in pixels) = section screen unit height * pixels per screen unit for current resolution

Section size (in screen units)	Screen Resolution (in pixels)	Pixels per screen units	Section size (in pixels)
	1200 x 800	10	300 x 300
30 x 30	1320 x 900	11	330 x 330
	1680 x 1024	14	420 x 420
	1200 x 800	10	800 x 400
80 x 40	1320 x 900	11	880 x 440
	1680 x 1024	14	1120 x 560

Example:



DASHBOARD DESIGN MODE

Screen Units

1	31			. :	120								
Object 1 (30 x 30 Screen units)													
(200 x 200 pixels)	Object 2 /90 x 40 Scroop units)												
(300 × 300 pixels)													
	Object 2 (ou x 40 Screen units)												
	(800 x 400 pixels)	_	_										
		_											
	l la	_	-										
		-			-								
			+		-								
					-								
					-								
					_								
					-								
	Full screen width												

DASHBOARD PREVIEW MODE-1200 X 800 SCREEN RESOLUTION



DASHBOARD PREVIEW MODE-1680 X 1024 SCREEN RESOLUTION

8 Dashboard Design Guidelines

a. Keep same alignment and size for adjacent objects

While designing the dashboard, try to keep the same top/left and width/height for adjacent objects. This will help to form proper groups as per grouping algorithm, and the layout will be rendered as it is seen in design mode for different screen resolutions.

Problem

The layout example below shows the actual problem when objects are not arranged properly in the dashboard. It shows how improper object arrangement renders objects in the preview mode.



IMPROPER OBJECT ARRANGEMENT-DESIGN MODE

itate		Graph-1										1			
Arizona															
Arkansas		25.000.000							-		Alcoholic Drinks				
Florida								3			Bakery				
Dhio		20,000,000				6					Comments of the local distance of the local				
Nashington		20,000,000		-		6	+				1				
							-								
		15,000,000													
		1													
		10,000,000													
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		5,000,000					1								
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				10000			217.2		UPO05.						
		Kpigroup-3													
		KPINAME		PERIOD	PREVIOL	IS VALUE	ACTUAL	TARGET	VARIANCE	VARIANCE %	1				
		Sales Revenu	e	Dec-2014	52,13,20	16	51,94,643	56,93,774	-4,99,131	-9	1				
		Profit Margin		Dec-2014	17.22.75	1	19.10.987		19.10.987	100					
		Profit Margin I		Dar. 2014	22		97	40	2						
		r toit wargin -		Dec-2014	33		31	40							
		0.000		Dec. 201 -				400							
		sales Perform	rance %	Dec-2014	69		31	100	-9	-9	-				
nalucio.0		-					_	lion in the	12						
anjus o		2014				2013		r*	0.00						+
rodust steam	Gross Sales	Target	Variance	Gross	Sales	Tarr	et Vari	ince		3.841	5.76M 3.84M	5.76M	3.84M 5.76M	3.84M 5.76M	
Venholic Drinks	19.957.914	13.650.911	146,209	N 20.5	25.795	9.070.7	61 226	29%			N				
lakery	19.313.105	9,593,968	201.309	13.0	08.591	33,253,3	69 39	12%	1				E 1 E		
onfectionary	1.694.315	3,432,801	49.365	1.8	35.602	3.097.1	85 59	27%	<			- A			
Cool Drinks	1,120,095	2,631,298	42.579	1,0	85,087	1,235,7	05 87	81%		9.61	M . 6.	89M	5.21M	5.194	
ruit Juices	7,459,928	5,408,522	137.939	8,8	09,085	4,968,7	78 177	29%		Sep-2	014 Ort	5.01m	Nov-2014	Dec-2014	
lealth Drinks	5,716,204	6,829,342	83.709	5,0	39,012	5,925,2	85 85	04%		Orth-1				2014	
ce Cream	6,143,756	6,260,601	98.139	6,4	76,463	7,851,6	27 82	49%							
Snacks	1,540,273	2,269,842	67.861	1,9	65,492	3,207,8	25 61	27%		•	Alert (0.00M - 3.84M)	Warning (3.)	84M - 5.76M) 🔎 Norm	al (5.76M - 9.61M)	
Tea	944,823	5,007,323	18.879	1,0	03,353	2,266,9	08 44	26%							
Total	63890412.68	55084607.95	115.997	59748	479,98	70877442	95	30%							-
															+

IMPROPER OBJECT ARRANGEMENT—PREVIEW MODE

Recommendation

The layout example below shows how objects should be arranged in the dashboard. It renders properly in the preview mode as seen in the design mode.



PROPER OBJECT ARRANGEMENT-DESIGN MODE

State	Analysis Title						Grapi	n-1									
Arizona			2014			2013											
Arkansas	ProductCategory	Gross Sales	Target	Variance	Gross Sales	Target	Va	25,000,000							Alco		
Florida	Alcoholic Brinks	19,957,914	13,650,911	146.20%	20,525,795	9,070,761	25				-					<u> </u>	
Ohio	Bakery	19,313,105	9,593,968	201.30%	13,008,591	33,253,369	:	20.000.000			1						
Washington	Confectionary	1,694,315	3,432,801	49.36%	1,835,602	3,097,185	£				(+				-		
	Cool Brinks	1,120,095	2,631,298	42.57%	1,085,087	1,235,705	- E	15 000 000			1					× .	
	Fruit Juices	7,459,928	5,408,522	137.93%	8,809,085	4,968,778	15	15,000,000									
	Health Drinks	5,716,204	6,829,342	83.78%	5,039,012	5,925,285	E.		and the second second						-	L.	
	lee Cream	6,143,756	6,260,601	98.13%	6,476,463	7,851,627	1	10,000,000								Δ.	
	Snacks	1,540,273	2,269,842	67.86%	1,985,492	3,207,825					1.0		× .				
	Tea	944,823	5,007,323	18.87%	1,003,353	2,266,908	L	5,000,000	and the second		1						
	Total	63898412.68	55084607.95	115.99%	59748479.98	70877442.95							0.0		(+)		
								0						<u> </u>			
									2011		2012		20	13	2014		
		-					-										
Sales Revenue						Kpigroup	3									_	_
						t											
3	04M 576M 3.04	5.76M	3.040 5.760	3.84M	5.76M	KPIN	ame	Period	Previous Value	Actual	Target	Variance	Variance %	Performance %	Frequency		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		~								records			ronance is				
/						Sales	Revenue	Dec-2014	52.13.206	51.94.643	56.93.774	-4.99.131	-9	91	Monthly	-	
	9.61M	1.09M	S 21M	5.19	u 🖉 👘	•											-
0.00	M 9.81M 0.00M	9.61M 0	00M 9.81M	0.00M	9.81M												-
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	Alert (0.00M - 3.84M)	Warning (3.84M	- 5.76M) • Norr	nal (5.76M - 9.	61M)	Profit	Margin %	Dec-2014	33	37	40	-3	-8	92	Monthly	-	
						Sales	Performance	% Dec-2014	89	91	100	-9	-9	91	Monthly		
12.00M																	
9.00M						*					_	_			_		

PROPER OBJECT ARRANGEMENT—PREVIEW MODE

b. Design with minimum resolution of target desktop

For the desktop view, design the dashboard in minimum targeted resolution. This will avoid scrolling within the sections for lower resolution.

The example below shows that sample dashboard is developed in 1600x900 screen resolution. When it renders in 1024x780 resolution, the dashboard becomes clumsy. To avoid this, always design the dashboard in lower resolution.



PREVIEW MODE—1600X900 SCREEN RESOLUTION



c. Carefully place auto-growing components

Place auto height growing objects in the proper place to avoid height growing effects. Objects such as filter components, time series component and text component are auto height growing objects based on values. These objects adjust their height based on the content of the objects.

Problem

The sample dashboard layout below shows the actual problem. There are filter components placed in the first row.

DASHBOARD PREVIEW MODE

After selecting multiple values in filters, as shown in the screen below, the height of filter components are increased. It causes the empty space below some components of the first row.

DASHBOARD PREVIEW MODE—AFTER FILTER INPUTS

Recommendation

To avoid the above problem, the developer should design the dashboard as shown below. In this design, auto-growing components, such as filters, are placed at the left-hand side. As shown in preview below, this kind of layout avoids auto height growing effects.

AUTO-GROWING COMPONENTS—DESIGN MODE

AUTO-GROWING COMPONENTS—PREVIEW MODE

d. Enable vertical grouping option when required

With default (horizontal) grouping, system displays objects from left to right in the tablet view.

For example, consider this particular dashboard design where state wise vertical strips are designed with a gauge, a performance and a table view for each state.

Advanced Data Discovery				Welcome Demo User
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DASHBOARD IN DESIGN MODE

Advanced Data D	iscovery																	W	/elcome Demo User
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Category	Actual	Target	Performance	Category	Actual	Target	Performance	Category	Actual	Target	Performance	Category	Actual	Target	Performance	Category	Actual	Target	Performance
Alcoholic Drinks	5.68M	4.17M	136.25%	Alcoholic Drinks	16.95M	12.48M	135.84%	Alcoholic Drinks	20.43M	16.04M	127.32%	Alcoholic Drinks	8.06M	7.35M	109.75%	Alcoholic Drinks	16.99M	11.93M	142.45%
Bakery	8.35M	11.33M	73.70%	Bakery	15.31M	28.51M	53.69%	Bakery	21.40M	27.37M	78.21%	Bakery	8.31M	7.08M	117.38%	Bakery	11.26M	15.03M	74.92%
Confectionary	0.33M	0.58M	56.98%	Confectionary	1.80M	2.90M	62.10%	Confectionary	1.63M	2.67M	60.95%	Confectionary	0.65M	1.07M	60.60%	Confectionary	1.17M	1.63M	71.46%
Cool Drinks	0.58M	1.07M	54.50%	Cool Drinks	1.00M	1.53M	65.70%	Cool Drinks	0.95M	1.04M	90.75%	Cool Drinks	0.32M	0.48M	67.37%	Cool Drinks	0.56M	0.76M	73.37%
Fruit Juices	4.02M	2.89M	138.86%	Fruit Juices	7.93M	6.23M	127.23%	Fruit Juices	7.99M	6.38M	125.25%	Fruit Juices	2.70M	1.82M	148.11%	Fruit Juices	6.86M	5.51M	124.53%
Health Drinks	1.29M	1.22M	105.55%	Health Drinks	4.30M	5.68M	75.76%	Health Drinks	5.68M	6.56M	86.68%	Health Drinks	2.00M	2.17M	92.00%	Health Drinks	4.13M	4.29M	96.33%
Ice Cream	3.46M	3.51M	98.59%	Ice Cream	5.57M	6.97M	79.90%	Ice Cream	5.57M	5.88M	94.85%	Ice Cream	2.66M	2.56M	103.99%	Ice Cream	4.01M	4.15M	96.69%
Snacks	0.54M	0.77M	70.61%	Snacks	1.31M	1.94M	67.67%	Snacks	1.50M	1.59M	94.40%	Snacks	0.49M	0.50M	98.77%	Snacks	1.76M	2.90M	60.85%
Tea	0.87M	3.29M	26.53%	Tea	0.74M	2.70M	27.46%	Tea	1.01M	2.27M	44.37%	Tea	0.42M	1.18M	35.69%	Tea	0.74M	2.63M	28.06%
Summary	25.11M	28.82M	87.15%	summary	54.91M	68.94M	79.66%	summary	66.16M	69.80M	94.79%	Summary	25.60M	24.19M	105.83%	summary	47.49M	48.84M	97.24%
							DAS	HBOARD	N DE	sкто	P VIEW								

With default (horizontal) grouping, system displays objects from left to right in the tablet view. So, in this example, tablet view will display gauge chart for Arizona and then gauge chart for Arkansas.

DASHBOARD IN TABLET VIEW WITH HORIZONTAL GROUPING

To avoid the above problem in such a scenario, the developer should design the dashboard with vertical grouping. If vertical grouping is applied, system displays objects from top to bottom in the tablet view. So, in this example, tablet view will display gauge chart for Arizona, performance view of Arizona, report of Arizona, gauge chart for Arkansas and so on.

DASHBOARD IN TABLET VIEW WITH VERTICAL GROUPING

9 Product and Support Information

Find more information about Smarten and its features at <u>www.smarten.com</u> Support: <u>support@smarten.com</u> Sales: <u>sales@smarten.com</u> Feedback & Suggestions: <u>support@smarten.com</u> Support & Knowledgebase Portal: <u>support.smarten.com</u>