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# From data to story

Robin Jung

September 2023



199.33

### Meet the speaker



### **Robin Jung**

Head of Product Management at think-cell

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Journey so far

2016

2019

2021

- Robin began his career as a strategy consultant at the Boston Consulting Group.
  - He later founded his own **productivity solution** for automating Excel and PowerPoint.
  - At think-cell, he serves as the **operational link** between customer needs in data visualization and product development.

#### Today's quote

"There are two goals when presenting data: convey your story and establish credibility." - Edward Tufte

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Accounting needs to convey complex ideas to diverse audiences, such as clients, peers, or executives. However, these audiences may not understand numbers as well as the accountants do.

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There are two goals when presenting data:

- convey your story and
- establish credibility.

**Edward Tufte** 

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People perceive and react to risk differently when information is presented either in tables or graphs.

"Graphs versus numbers: How information format affects risk aversion in gambling"

Michael Dambacher Peter Haffke, Daniel Groß & Ronald Hübner Cambridge University (2023)

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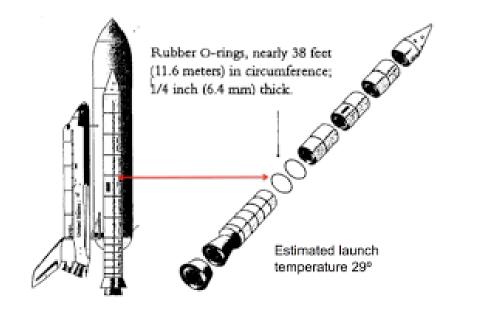
People process and internalize information quicker if presented visually versus textually.

"The Pictorial Superiority Effect in Conceptual Memory"

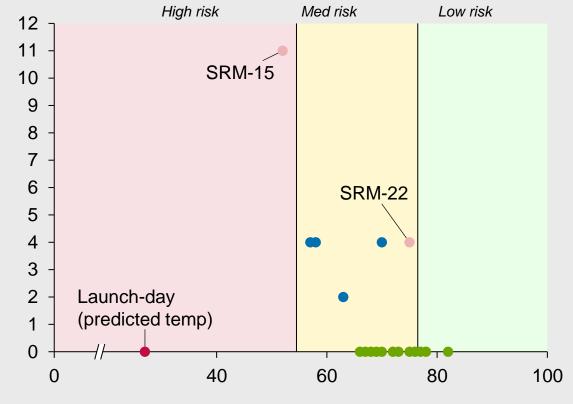
Nelson Cowan, Jeffrey N. Rouder, Candice C. Morey, and Zhijian Chen (2014)

### The 'Challenger' example

BLOW BY HISTORY SRM-15 WORST BLOW-BY	HISTORY OF O-RING TEMPERATURES (DEGREES - F)					
· 2 CASE JOINTS (80), (110) ARC	MOTOR	mar	AMB	D.RING	WIND	
· MUCH WORSE VISUALLY THAN SEM-22	Dm-+	68	36	47	IO MPH	
	Dm - 2	76	45	52	to mpu	
SRM 22 BLOW-BY	Qm - 3	72.5	40	48	10 mPH	
· 2 CASE JOINTS (30-40°)	Qm - 4	76	48	51	10 mp4	
	SRM-15	52	64	53	10 MPH	
SRM-13 R, 15, 16A, 18, 23A 24A	5RM-22	77	78	75	10 MPH	
· NOZZLE BLOW-BY	5 Rm - 25	55	26	29 27	to met	



#### Damage index



**Temperature (Fahrenheit)** 

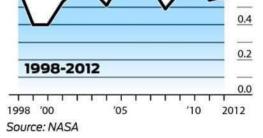
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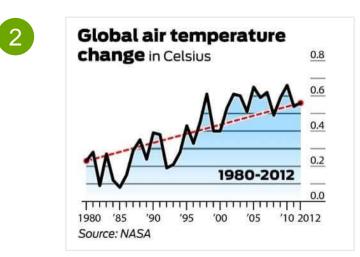
### How data selection changes the story

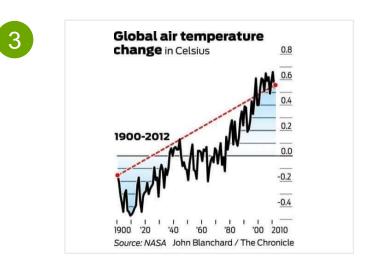
### think-cell 🍢

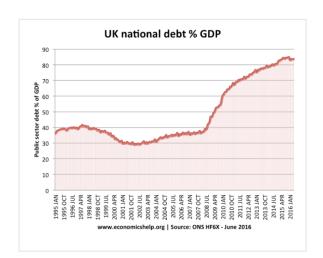


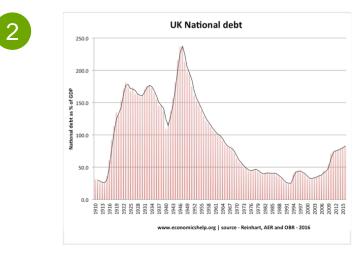
Global air temperature change in Celsius 0.8 0.6 0.6 0.4











Source: https://www.datapine.com/blog/misleading-statistics-and-data/

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# **93%** of executives and data professionals

### believe successful data storytelling can boost revenue.

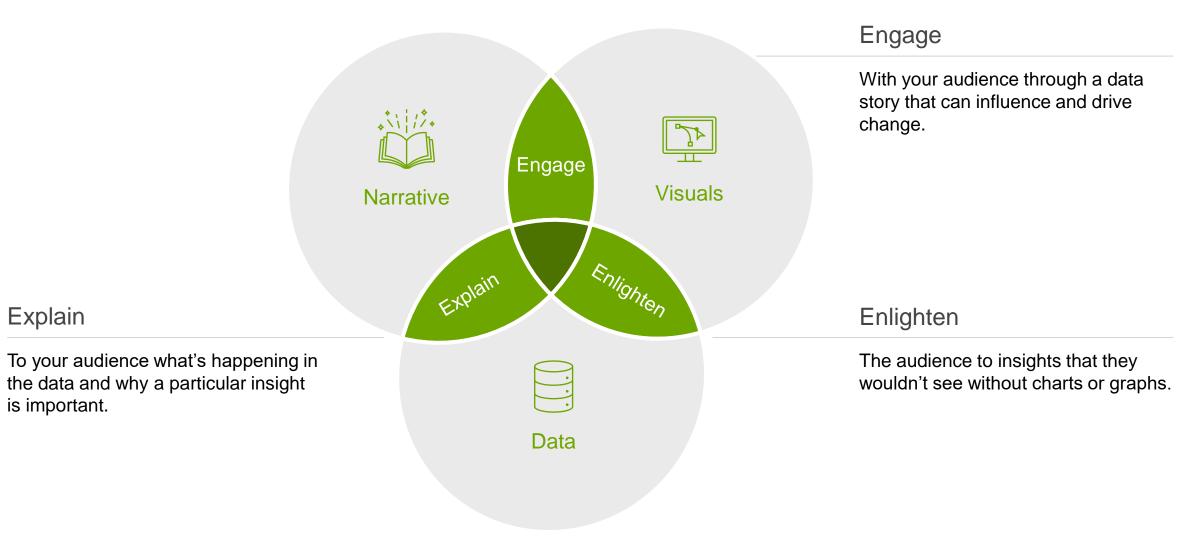
# However, **49%** admit their employees

lack storytelling skills regardless of data literacy.

Source: From the 'what' to the 'why': how data storytelling is key to success Exasol survey of 500 executives & data professionals (2021)



## Data storytelling is a structured approach for communicating data insights



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### Approach

### Explain:

When narrative is coupled with data, it helps to explain to your audience what's happening in the data and why a particular insight is important. Ample context and commentary are often needed to fully appreciate an insight.

### Enlighten:

When visuals are applied to data, they can enlighten the audience to insights that they wouldn't see without charts or graphs. Many interesting patterns and outliers in the data would remain hidden in the rows and columns of data tables without the help of data visualizations.

### Engage:

Finally, when narrative and visuals are merged together, they can engage or even entertain an audience. When you combine the right visuals and narrative with the right data, you have a data story that can influence and drive change.

### "The table"

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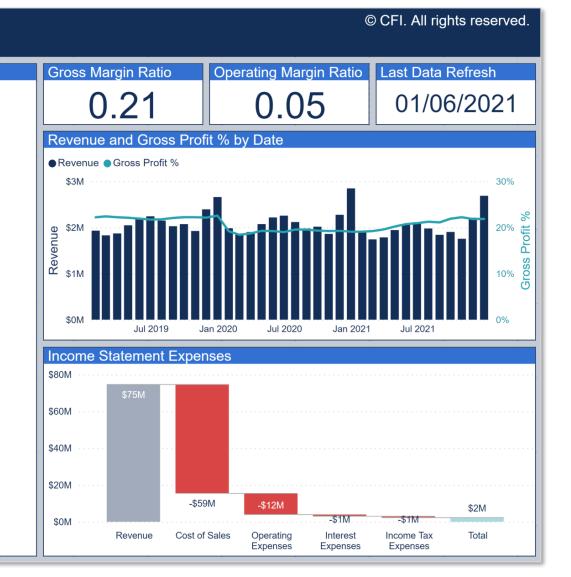
CONSOLIDATED STATEMENT O								CONSOLIDATED STATEMENT OF CASH FLOWS			
For the 52 weeks ended 1 F	ebrua	ry 2020	0			Total equity		For the 52 weeks ended 1 February 2020			
	Ordinary share				currency.	attributable to equity olders of the or parent	Non-			52 weeks to 1 February 2020	52 weeks to 2 February 2019
	CADION	premium 011	0 m	(M	- On	00	interest equit	Cash flows from operating activities		Det	05
Balance at 3 February 2018	2.4	11.7	773.6	(33.8)	16.5	770.4	63.9 834.3	Profit for the period		250.7	264.2
Profit for the period			2618	-	-	261.8	2.4 264.3	Engretal expenses	9	97.8 79.8	75.7
Other comprehensive income:								Francial income	7	(1.7)	7.5 (12)
Exchange differences on translation								Depreciation and amortisation of non-current assets	3	450.0	115.0
of foreign operations	0.02				(1.8)	(1.8)	10 (0.	Forex losses on monetary assets and liabilities		9.9	25
Total other comprehensive income	- 6	-			(1.8)	(1.8)	10 (0.	Impairment of other intangibles and non-current assets		12.9	11.9
Total comprehensive income								Loss on disposal of non-current assets Other exceptional items		6.3 47.2	2.0
for the period						260.0	3.4 263.4	Impairment of goodwill and fescia names		47.2	7.2 8.1
Dividends to equity holders			(15.9)		1000	(15.9)	(0.7) (16.6	Increase in inventories		(9.5)	(26.2)
Put options held by				Same		12.63	(2)	Increase in trade and other receivables		(13.0)	(22.5)
non-controlling interests Acquisition of non-controlling intere		-					(5.2) (9.3	Increase in trade and other payables		58.1 (7.9)	212
Divestment of non-controlling interv	HA -		0.9	-		0.9	0.4 13	Interest paid Leave interest		(71.9)	(7.5)
Non-controlling interest arising								Income taxes paid		(97.8)	(80.3)
on acquisition							(0.2) (0.3 6.4 6.4	Net cash from operating activities		854.0	377.6
Share capital issued								Cash flows from investing activities			
Balance at 2 February 2019							68.0 1076.0	Interest received		1.7	12
Profit for the period		+	246.1			246.1	4.6 250.3	Proceeds from sale of non-current assets		3.1	10
Other comprehensive income:								Investment in software development	12	(23.2) (147.2)	(12.3) (173.6)
Exchange differences on translation							-	Acquisition of property, plant and equipment Acquisition of non-current other assets	15	(6.8)	(53)
of foreign operations							(2.6) (21.5	Acquisition of subsidiaries, net of cash acquired	10	(89.3)	(362.0)
Total other comprehensive income	1.17				(18.9)	(18.9)	(2.6) (21.5	Net cash used in investing activities		(261.7)	(550.8)
Total comprehensive income						Verene					
for the period Dividends to equity holders	-					227.2	20 229.3	Cash flows from financing activities (Repayment) / draw down of interest-bearing loans and bi	mowings	(88.6)	82.1
Put options held by		-	(10.7)	-	-	(10.77	(co) field	Repayment of lease liabilities	errog er erges -	(264.8)	
non-controlling interests	22	-		(0.0)	1	(0.1)	- (0.	Repayment of finance lease liabilities		-	(15)
Non-controlling interest arising							140.000	Draw down of finance lease fabilities			5.8 6.4
on acquisition	17	-				-	13 L	Subsidiary shares issued in the period Equity dividends paid	26	(16.7)	(15.9)
Balance at 1 February 2020	2.4	11.7	1,245.7	(36.4)	(4.2)	1,219.2	70.0 1,2892	Dividends paid to non-controlling interest in subsidiaries	-	(1.3)	(0.7)
								Net cash (used) / from in financing activities		(371.4)	76.2
										220.9	(97.0)
								Net increase / (decrease) in cash and cash equivalents			
								Cash and cash equivalents at the beginning of the period		237.7	354.6 01
								Foreign exchange gains on cash and cash equivalents			237.7
								Cash and cash equivalents at the end of the period	29	460.3	251.1
180											

### "The Excel dashboard"

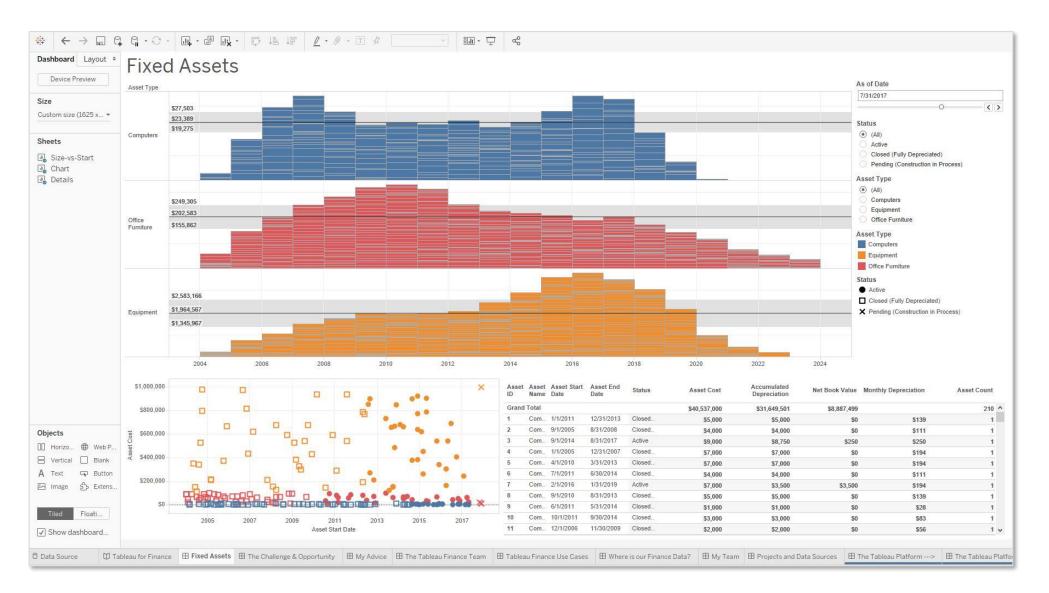


Financial Statements in Power BI - Income Statement Income Statement - GL Retail Inc.

Income Statement			
Category	2019	2020	2021
Revenue	25,331,784	25,376,781	23,916,661
Revenue	25,331,784	25,376,781	23,916,661
Cost of Sales	19,727,425	20,518,047	18,924,683
COGS	16,687,610	17,472,833	16,054,683
Employee Expenses	3,039,814	3,045,214	2,869,999
Gross Profit	5,604,360	4,858,734	4,991,978
Gross Profit %	22.12%	19.15%	20.87%
Operating Expenses	3,586,108	3,935,327	4,014,821
Bank Charges Expenses	2,400	2,760	696
Depreciation Expenses	388,240	389,962	392,296
Employee Expenses	2,844,553	3,165,249	3,230,871
Office Supplies	71,761	78,831	78,672
Property Expenses	279,154	298,525	312,287
EBIT	2,018,252	923,408	977,157
EBIT %	7.97%	3.64%	4.09%
Interest Expenses	342,327	302,407	261,572
Interest Expenses	342,327	302,407	261,572
EBT	1,675,925	621,000	715,584
Income Tax Expenses	393,171	178,186	193,103
Income Tax Expenses	393,171	178,186	193,103
Net Income	1,282,754	442,814	522,481
Net Income %	5.06%	1.74%	2.18%



### "The Tableau dashboard"



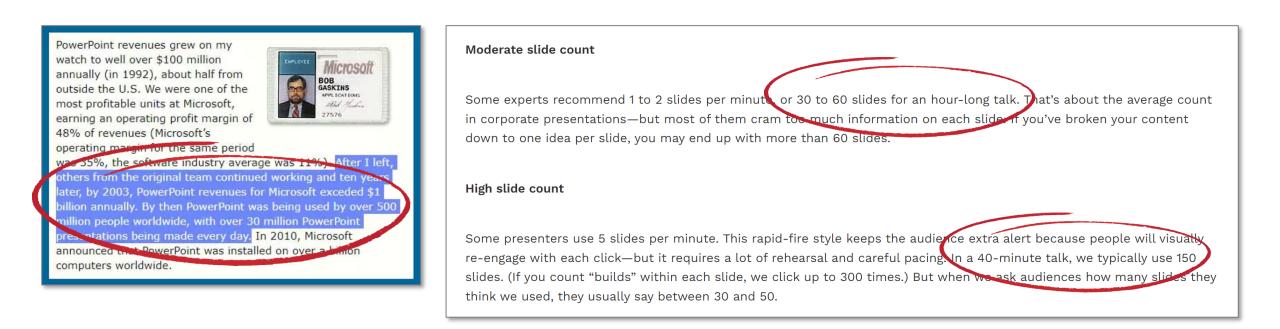
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## Done right, PowerPoint is a **strategic asset**

## that sits at the **epicenter of business decisions.**

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## PowerPoint changed the way we work and make decisions think-cell



## 20 years later, we don't know whether it is 1.2bn or 1.5bn users and whether they build 50m or 150m presentations a day

Sources: Robert Gaskins (2010); HBR Guide to Persuasive Presentations by Nancy Duarte

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# 75% of all presentations FAIL to convince the audience

Source: Presentations impact the bottom line (2014), survey n=273 evaluating 780 presentations, The Lolly Group

17

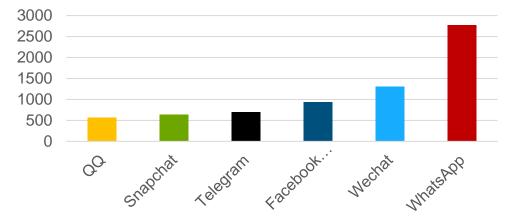
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## PowerPoint is not the problem.

## It is how we use it.

## WhatsApp downloads

### Monthly active users (in millions), January 2023



- WhatsApp leads other messenger apps with 2780
   monthly active users
- In 2022, WhatsApp announced end-to-end encrypted backups
- Instagram leads in the total global downloads with 547 million
- Last year, WhatsApp was downloaded 424 million times



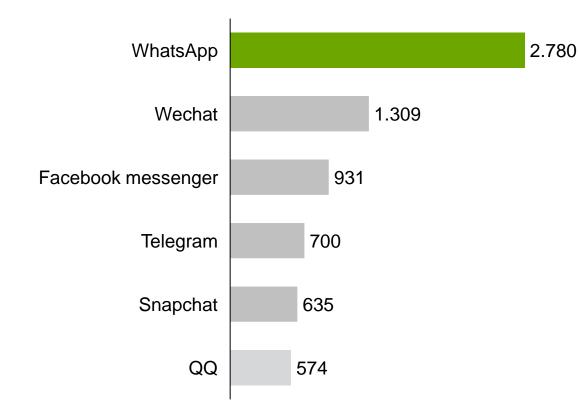
### Total global downloads (in millions), 2022

Source: Analyst Academy 'Most PowerPoint slides are bad' (2023)

## WhatsApp's expansive reach and popularity make it an appealing option for connecting with customers

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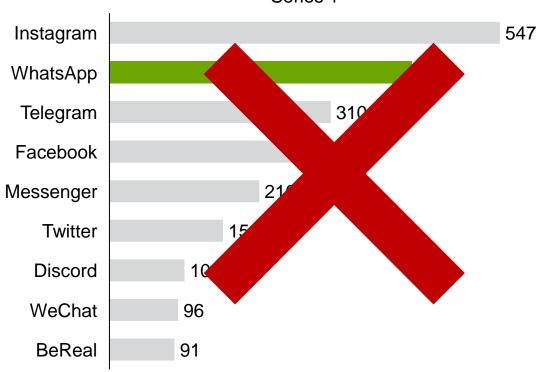
#### WhatsApp leads the global messenger market



#### Monthly active users (in millions), January 2023

#### WhatsApp is the most downloaded messenger app

Total global downloads (in millions), 2022



Series 1

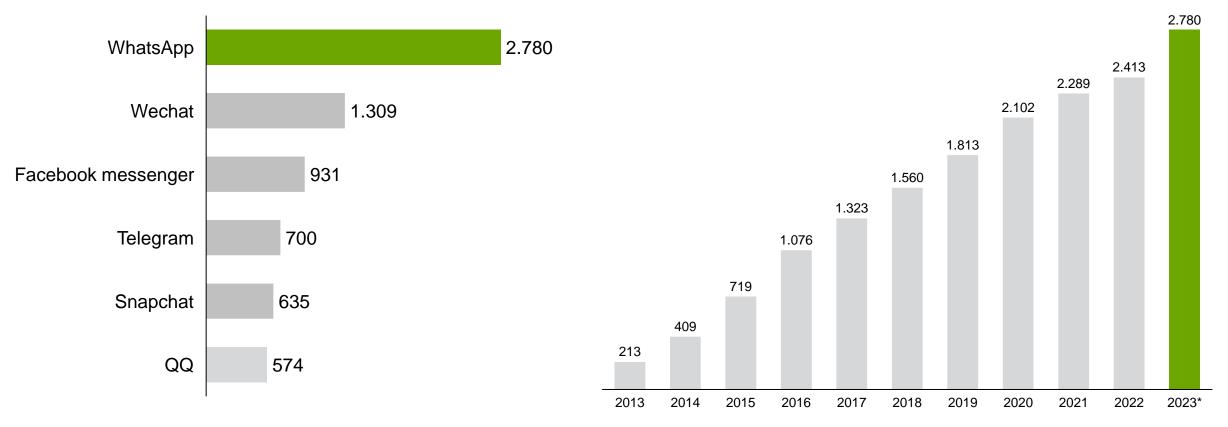
### How else can I visualize my narrative?



Monthly active users (in millions), January 2023

WhatsApp shows a nearly 30% CAGR between 2013 and 2023

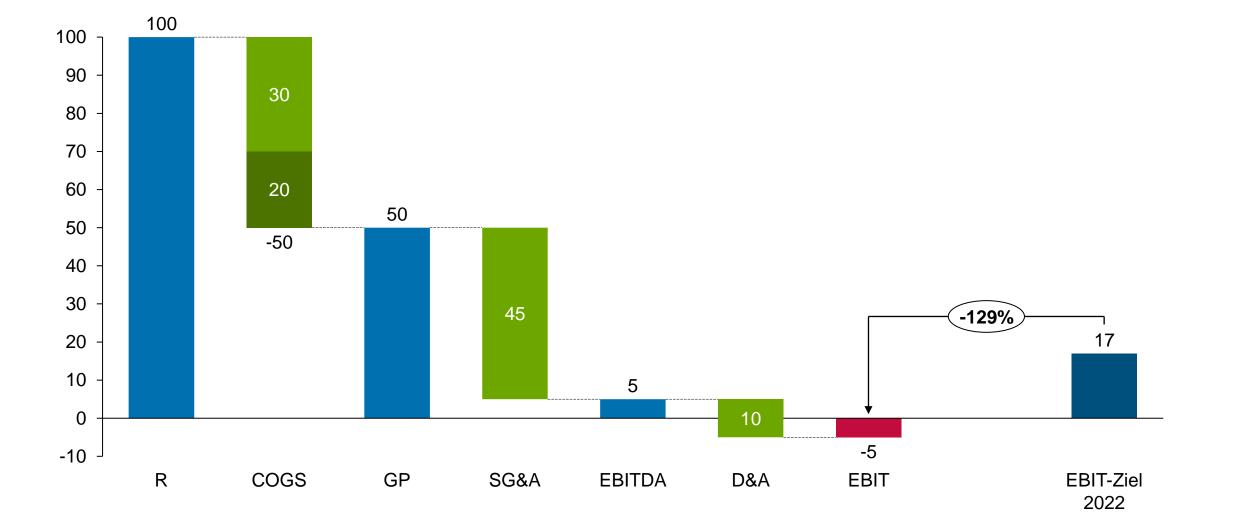




Source: https://www.businessofapps.com/data/whatsapp-statistics/

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### **P&L Waterfall from Revenue to EBIT**

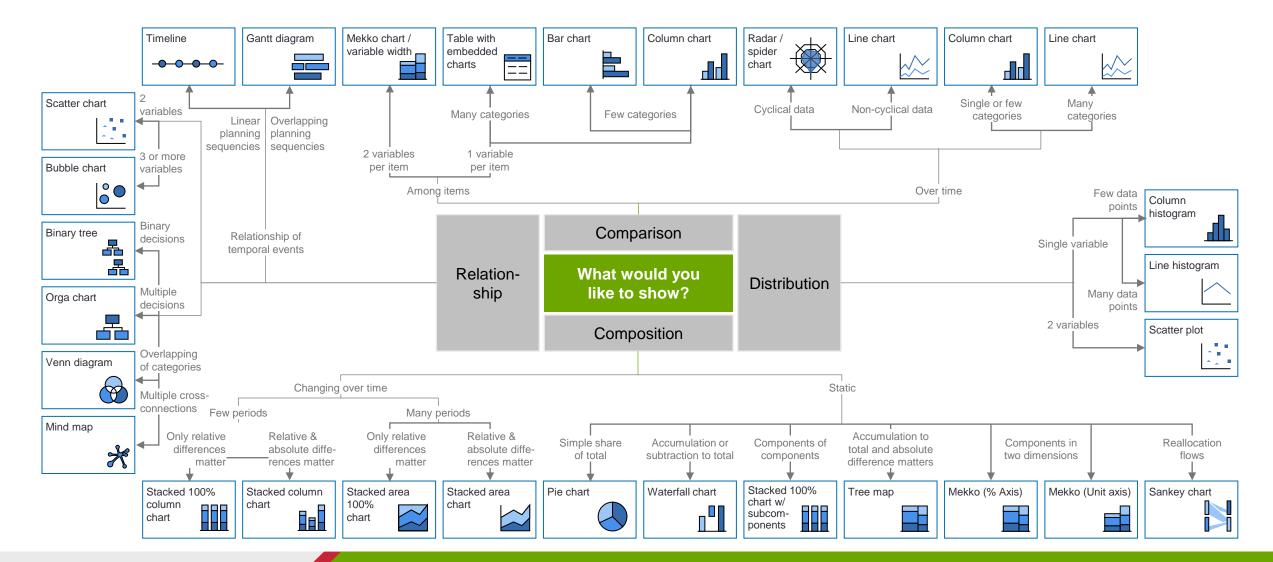


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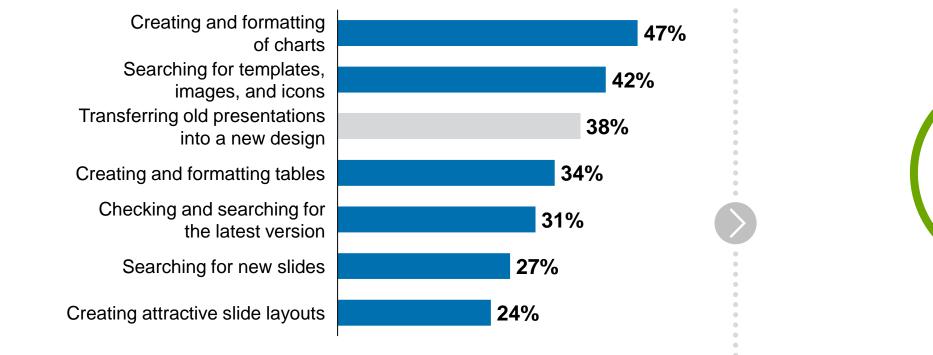
Strictly confidential

### There is a visual for your data story











Hours saved by creating presentations with think-cell

hours

per week

Source: The Big PowerPoint Study, Where is time wasted - and how we can prevent it. think-cell client experience study, 2022

## think-cell is the gold standard in creating professional slides



### Saves time with every click

- Saves up to 70% of working time on charts
- Offers unparalleled ease of use for many more features



### Creates beautiful output without tweaking

- · Optimizes for clean and appealing layouts automatically
- · Creates all output CI/CD compliant by default



#### Reduces errors from manual tasks

- · Replaces all manual calculations of any chart annotations
- Provides most reliable linking to Excel and Tableau



#### Integrates natively into Microsoft Office

- · Uses only native PowerPoint shapes for its output
- · Charts shared with others remain data-driven and changeable

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## Key takeaways



To convey a story, we cannot separate the narrative from the data and visualizations



PowerPoint is not the problem, it's how we use it



Many "time wasters" in PowerPoint can be addressed with the right tools like think-cell

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## **Convince your audience with think-cell**

Get your free 30-day trial at <u>www.think-cell.com</u>



## Thank you

Contact us www.think-cell.com

