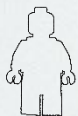


Data,
Analytics &
AI 2023

Israel Market Study 2023

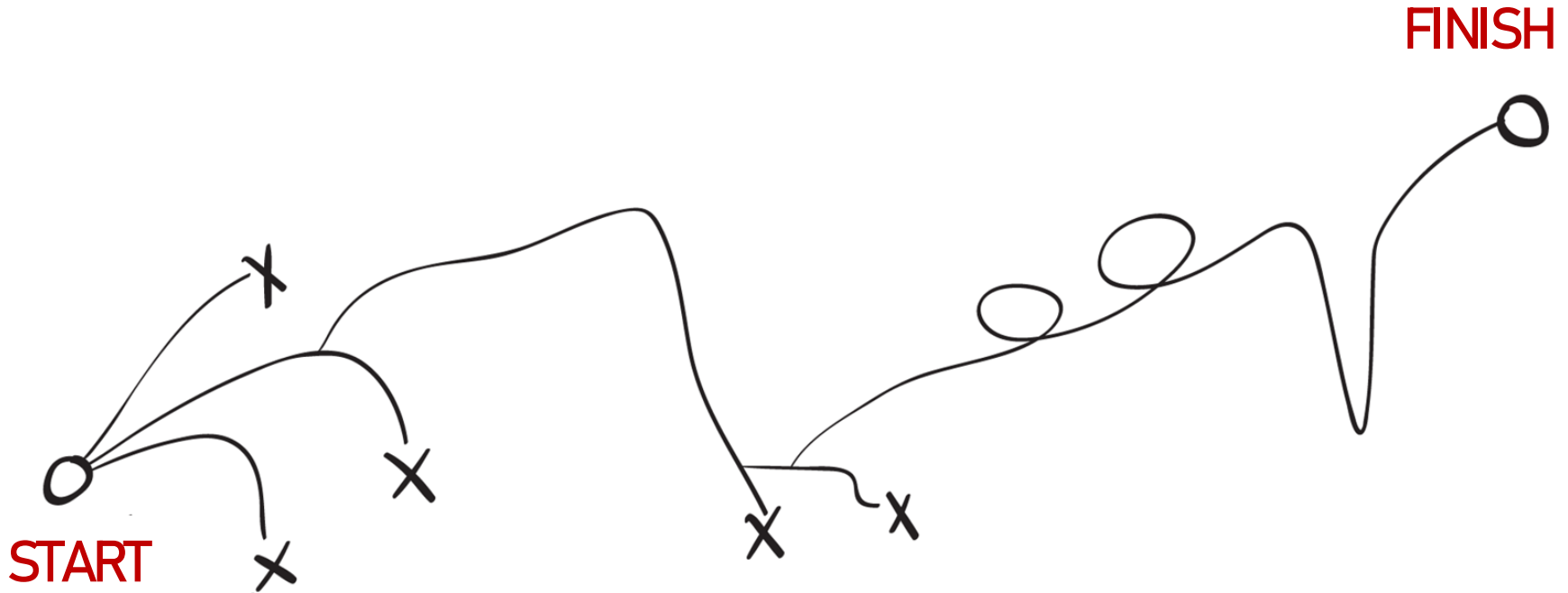
Einat Shimoni



Working on this
year's study was
incredibly
challenging
as well as
overwhelmingly
interesting



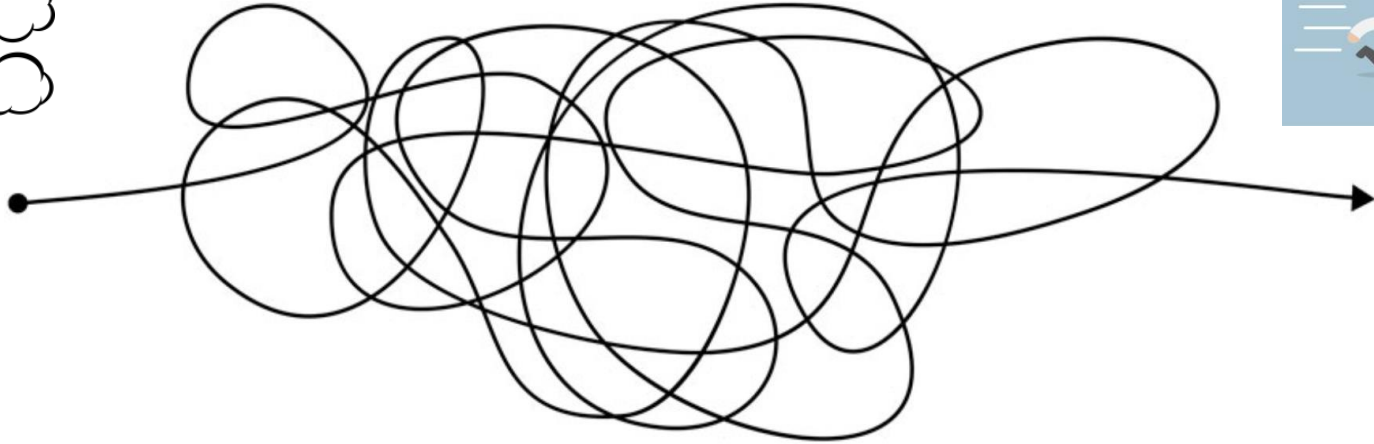
A typical research process:



Research process in 2023:



START



FINISH?

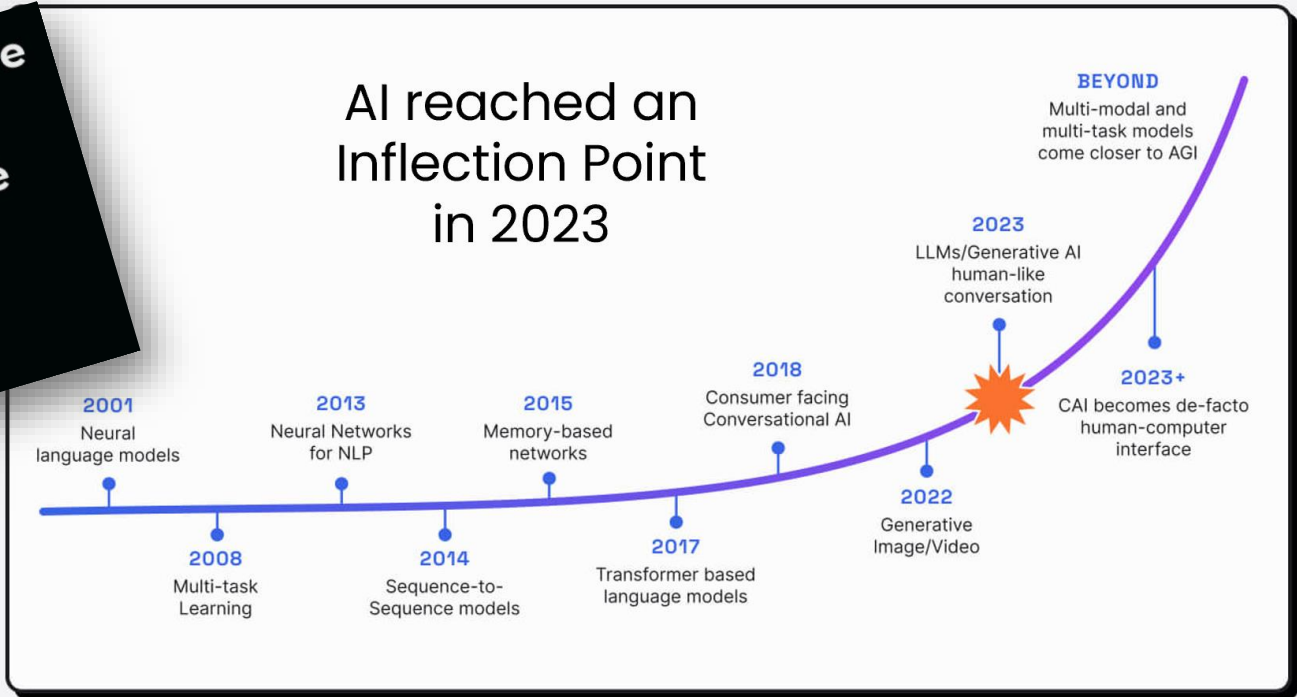
(NOT REALLY)

AI's exponential growth: The Foundation Model inflection point

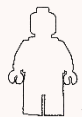
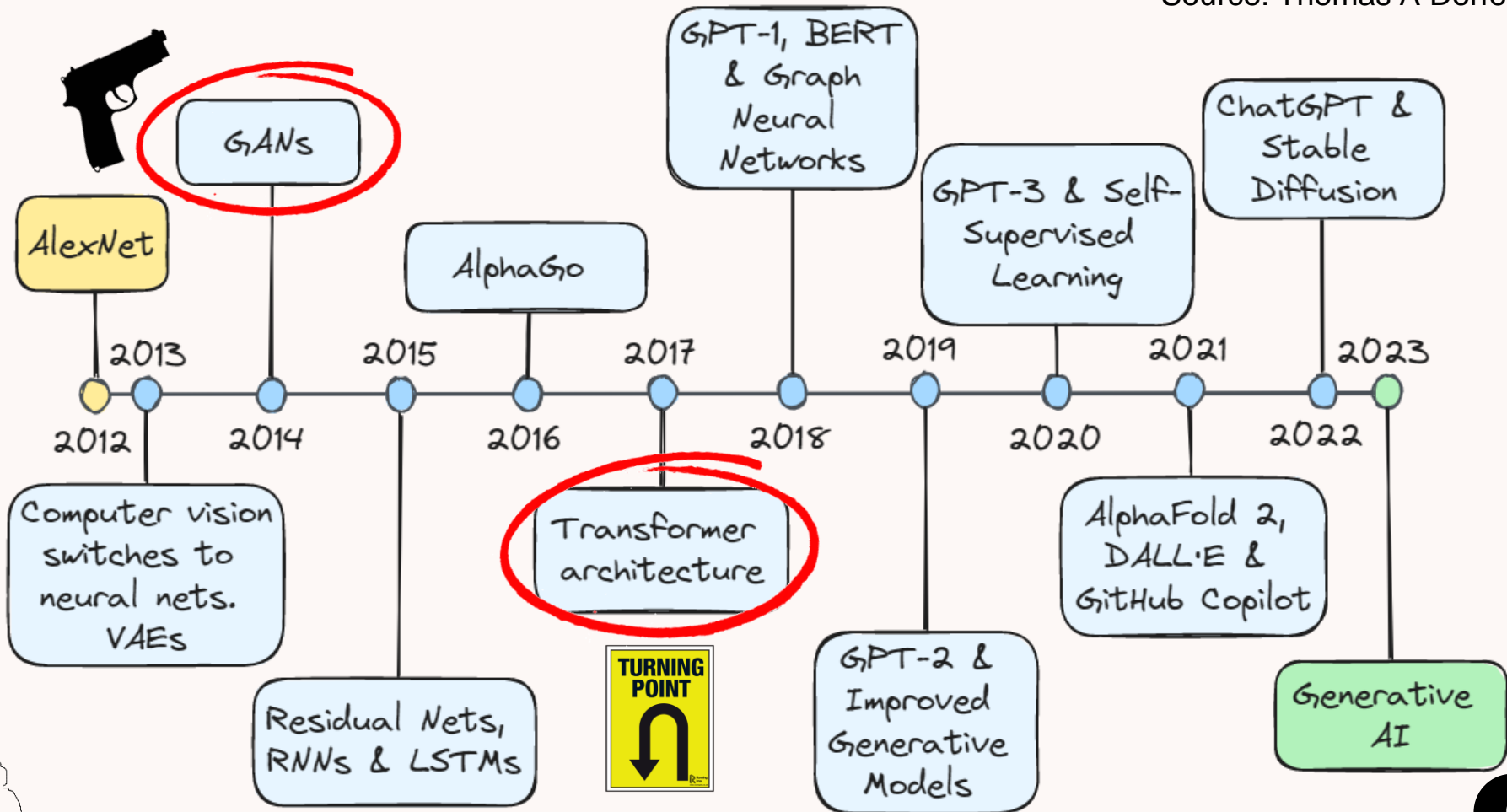
There are decades where nothing happens; and there are weeks where decades happen.

VLADIMIR LENIN

AI reached an Inflection Point in 2023



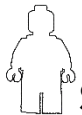
Source: [LivePerson](#)

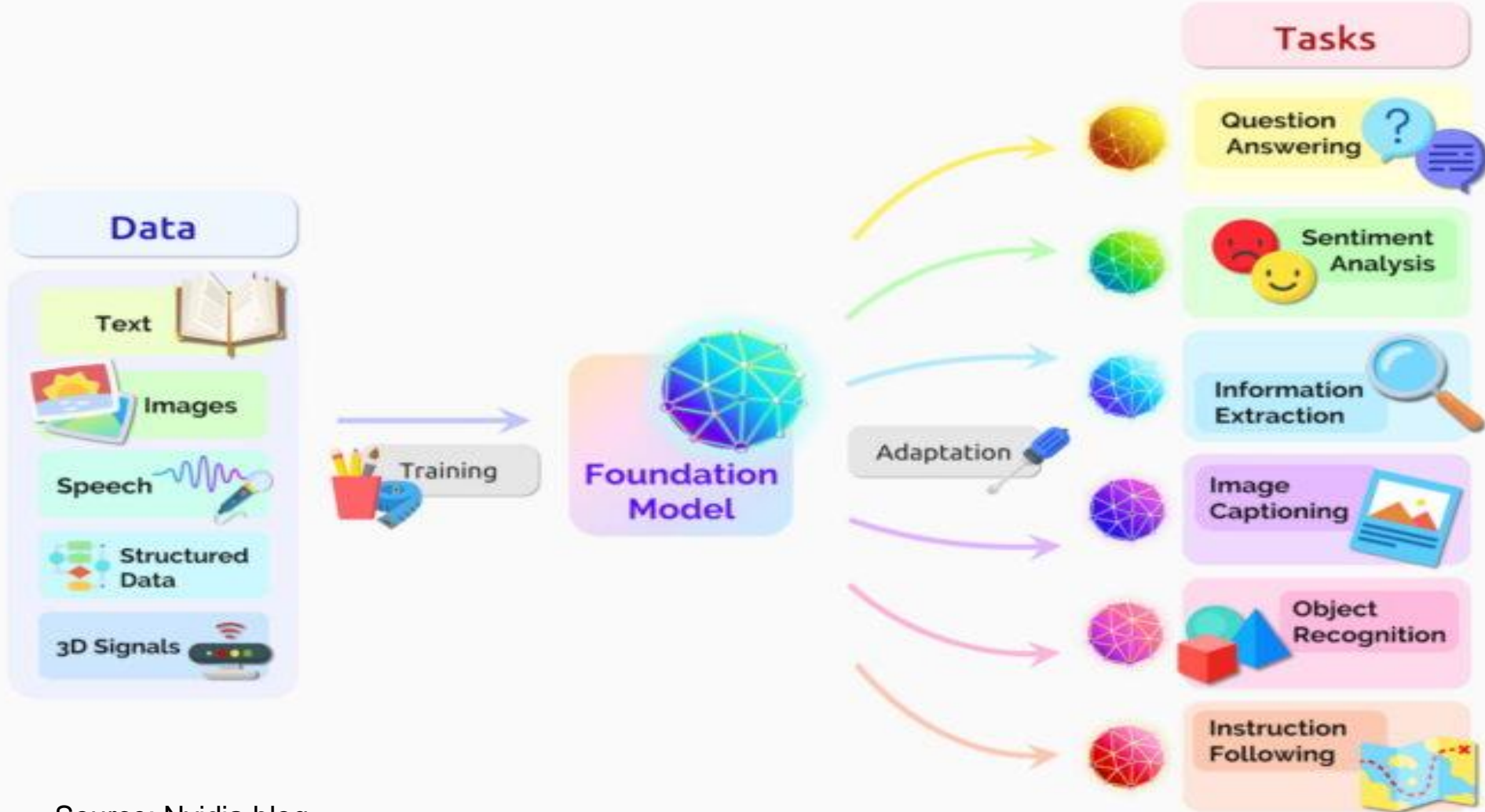


The result: Many foundation models developed

“**foundation model**”: a large AI model trained on a vast quantity of (unlabeled) data at scale (often by self-supervised learning or semi-supervised learning) resulting in a model that can be adapted to a wide range of downstream tasks.

TL;DR: It can do stuff it wasn't specifically trained to do (math, poetry, translating text etc.)





Where are we?



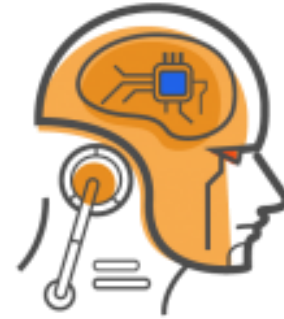
Narrow AI

Dedicated to assist with or take over specific tasks.



General AI

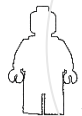
Takes knowledge from one domain, transfers to other domain.



Super AI

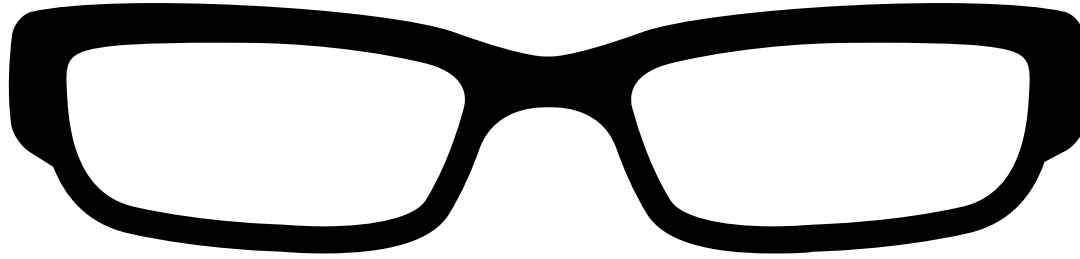
Machines that are an order of magnitude smarter than humans.

Source: BBN Times

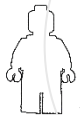




Is it Good or bad?



Depends on your
perspective



Will help solve
the world's
biggest
problems

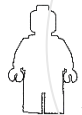
Will cause
more harm
than good



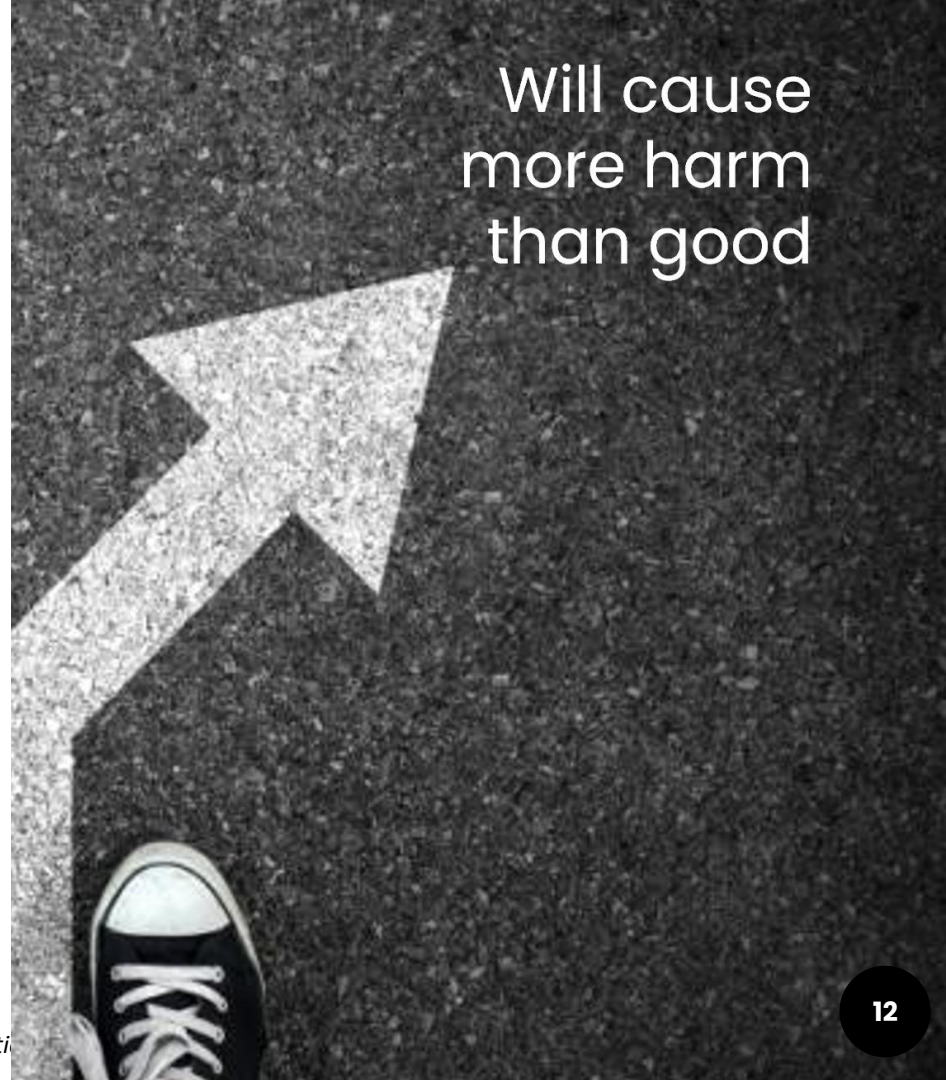


"The godfather of AI"

Dr. Geoffrey Hinton quits Google and warns the world of the **alignment problem**, manipulation, taking over control, polarization and fake news.



Will cause
more harm
than good



What is real?

Real-Life Deepfake: President Zelenskyy Calling for the Surrender of Ukrainian Soldiers

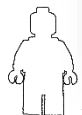
Source: [NPR, 2022](#)



No, The pope didn't dress this way



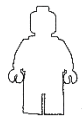
Fake AI-generated image of explosion near Pentagon spreads on social media



Your kid is calling you in their own voice asking for help...



Voice Cloning



Will help solve
the world's
biggest
problems



Professor Scott Galloway: “Stop catastrophizing AI”

AI is the most **exciting** tech for a long time. It's going to do amazing things in **Healthcare** and **Education**. It will eventually create more jobs than it destroys.

But with all due respect to
humanity, the future of our
world and synthesized
pictures of cats,

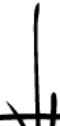
We'd like to examine AI's impact on
Enterprises

Data economics have changed:
Those who will change and adapt will win

DATA



INSIGHTS



ACTIONS

✓ Democratized

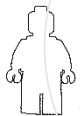
Access to data at scale

✓ Commoditized

Foundation models accessible for all

Winners will be the ones who

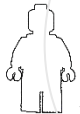
change and adapt fast





"The future is here
- it's just not
evenly distributed"

William Gibson





Let's take a look at

Data & Analytics

Trends & Israel market analysis

*How will the AI boom impact
this field?*

Data, Analytics & AI Trends 2023-2024

Self Service and Democratization hits a roadblock

Change is coming from unexpected place

Data Literacy meets new challenges

Value creation and measurement will change

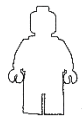
Will 'Data management winter' finally be over?

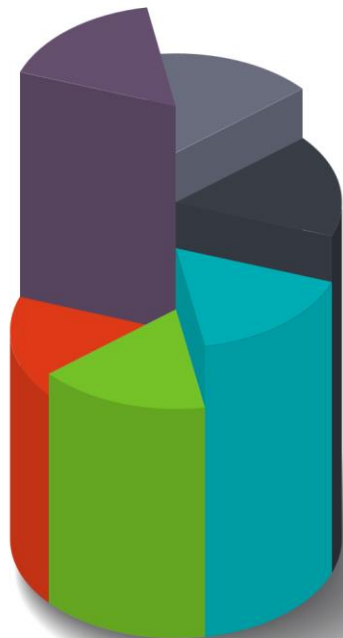
Knowledge Discovery Graphs and Synthetic Data

AI models will become a commodity and accessible for all

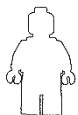
AI Literacy and Prompt Engineers

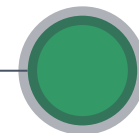
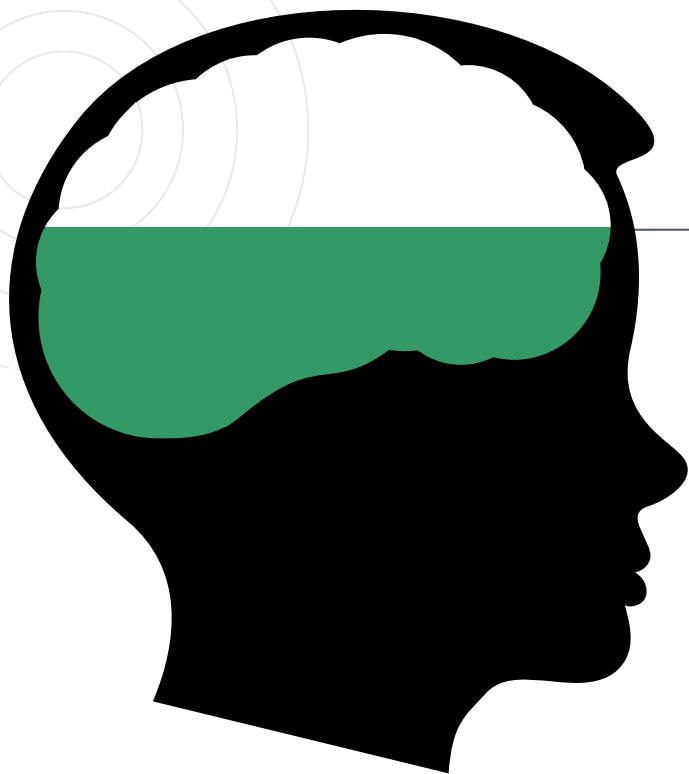
Analytic clouds become the mainstream





State of Data in Israel

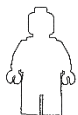


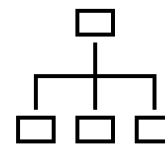


49%

Do you have a CDaO*?

*CDaO: Chief Data & Analytics Officer





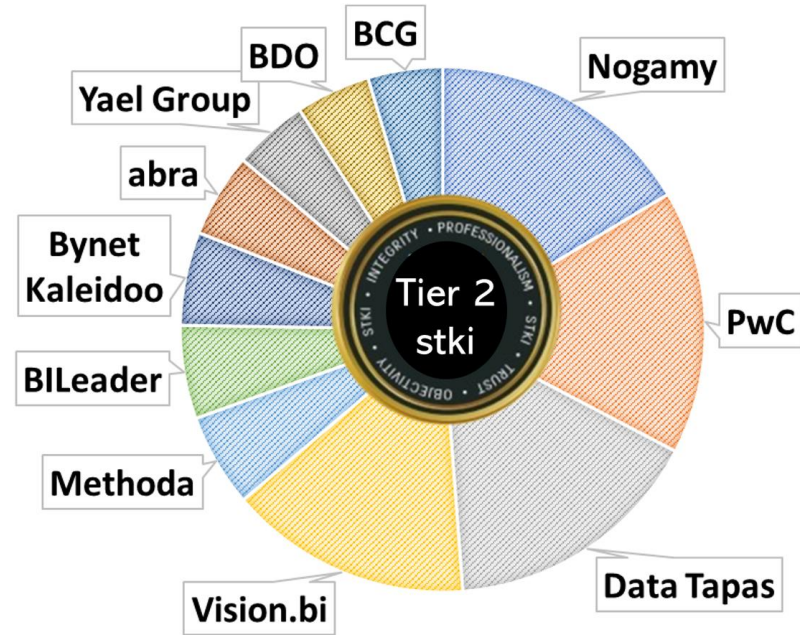
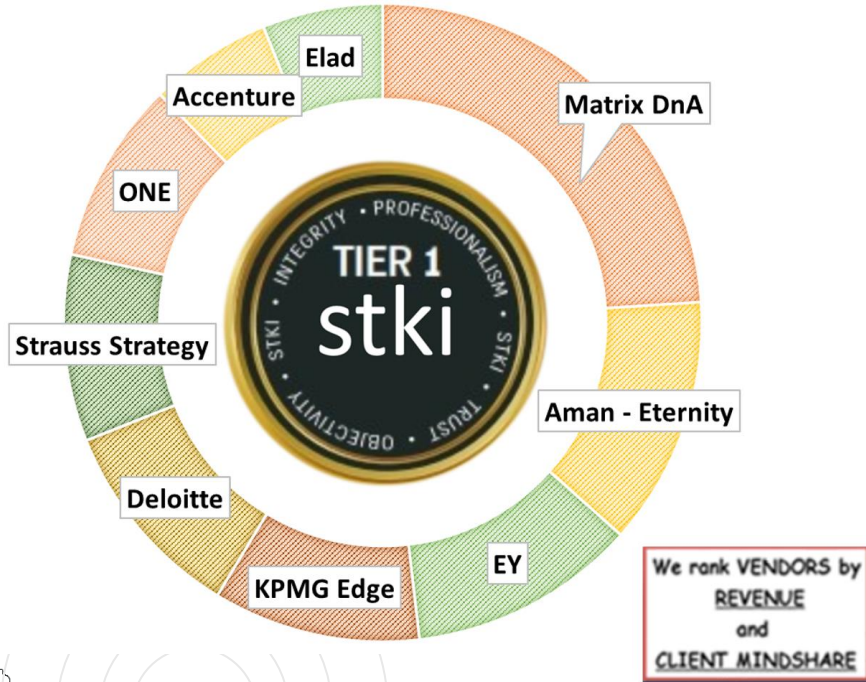
למי ה CDO כפוף?



Many CDOs planned a **Data Strategy** in 2022–2023



Enterprises will need help to revisit their data strategy In light of technology major changes



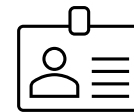


CDOs' Agenda*:

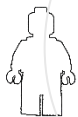
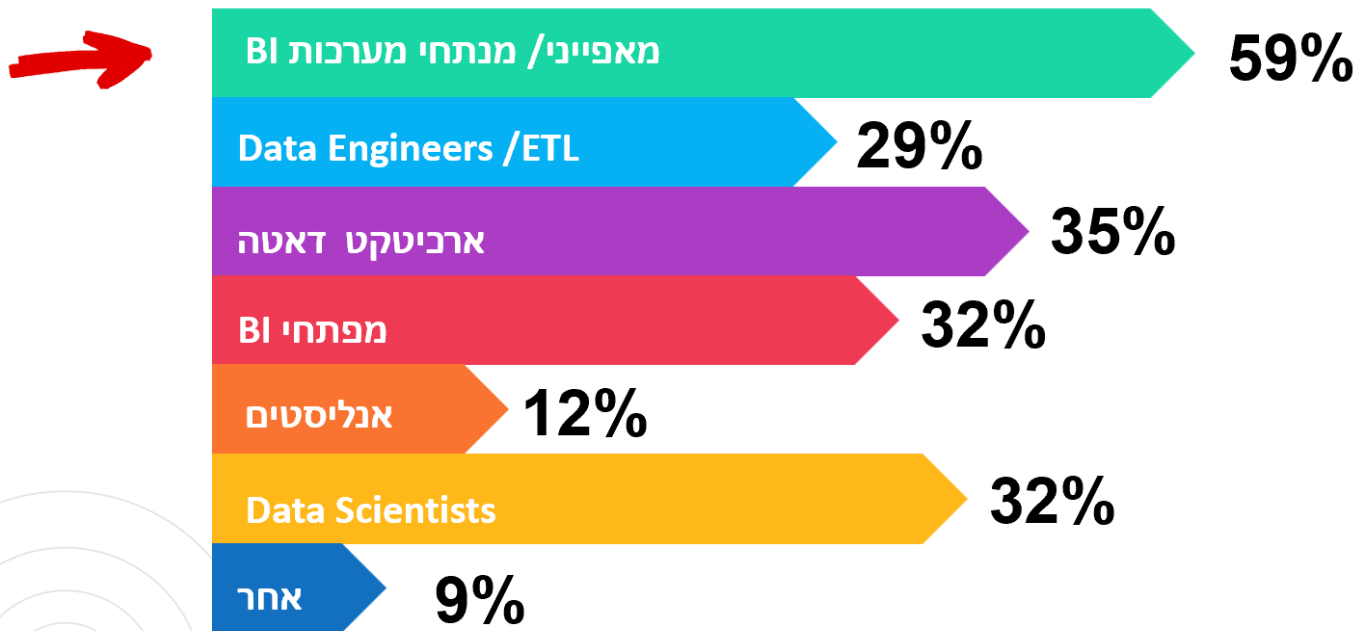
- ✓ Self Service
- ✓ CoE
- ✓ Literacy
- ✓ Value creation & measurement
- ✓ Hire & train data talents

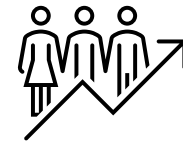
* Based on Israeli CDO & data leaders brainstorming discussions

Copyright@STKI_2023 Do not remove source or attribution from any slide, graph or portion of graph



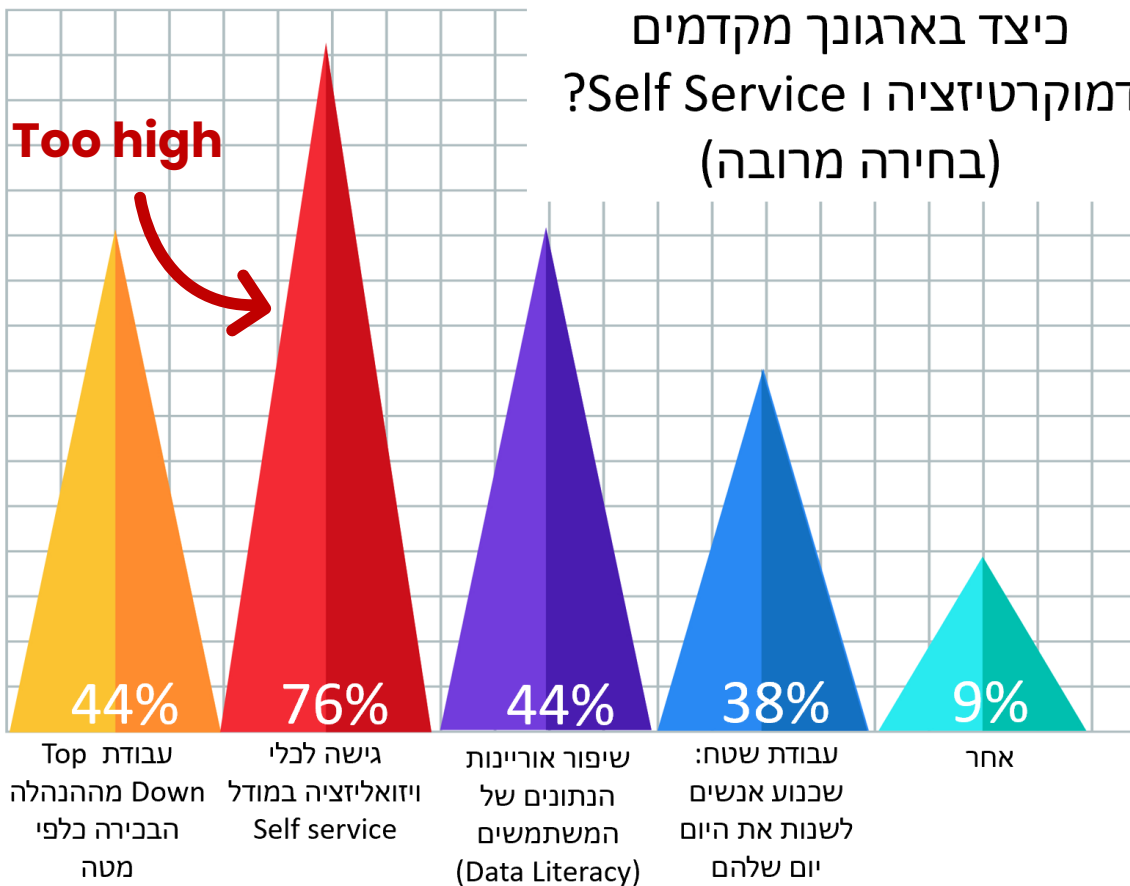
אילו בעלי תפקידים מאתגרים יותר לגיוס (בחירה מרובה)?



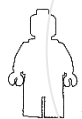


Self Service

כיצד בארגון מקדמים דמוקרטיזציה ו Self Service (בחירה מרובה)

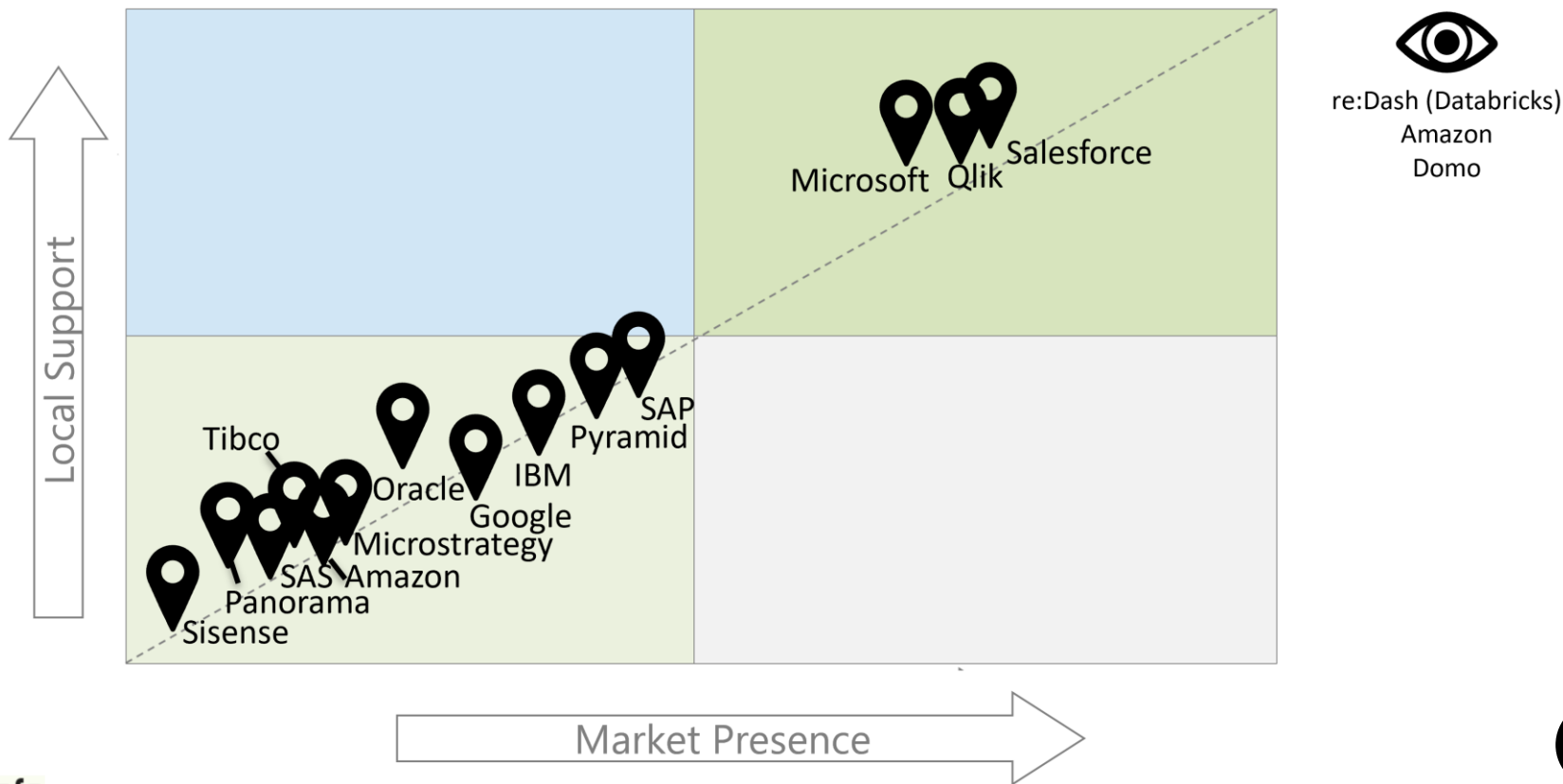


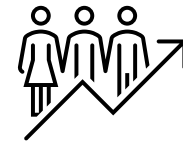
Too high



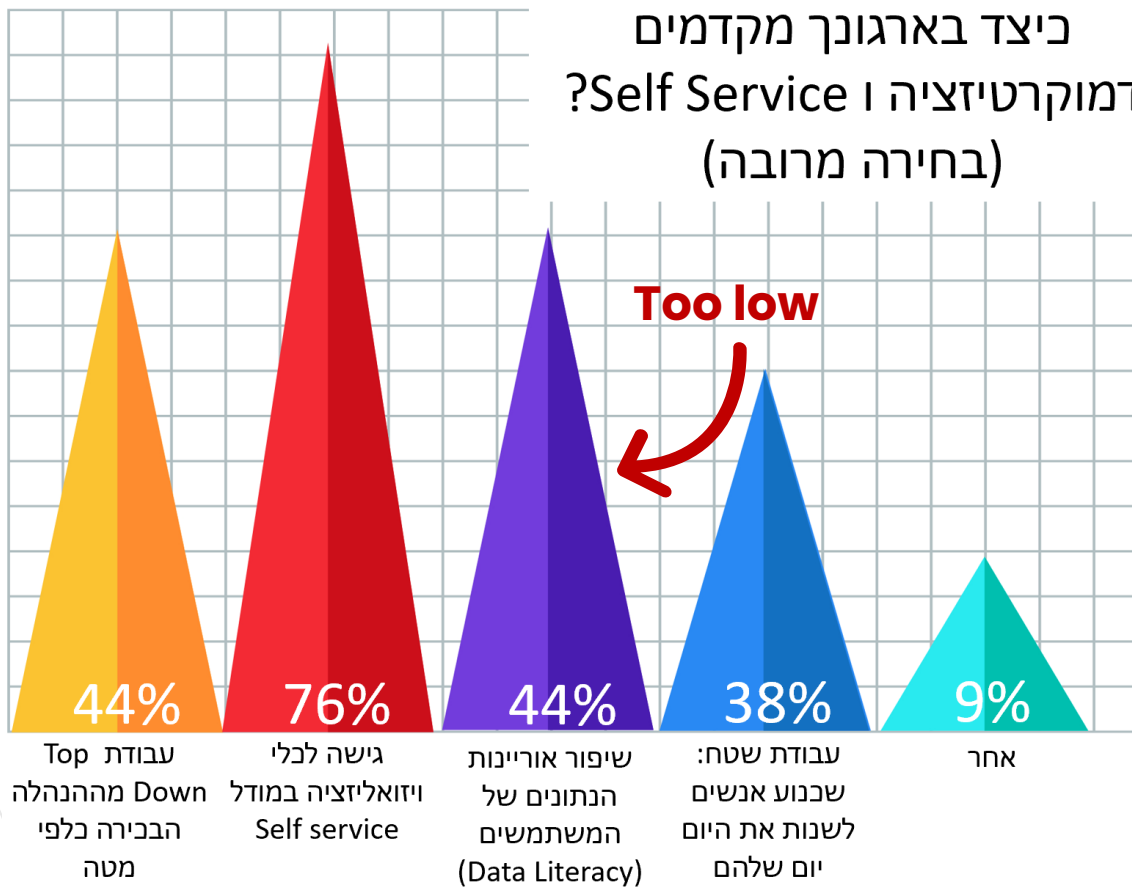
Business Intelligence 2023

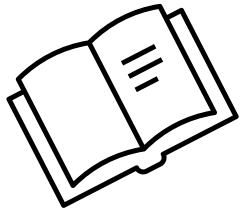
Presence & Support in Israel





כיצד בארגון מקדמים דמוקרטיזציה ו Self Service? (בחירה מרובה)





GenAI will impact your **data literacy** program



Access to data & insights will be democratized



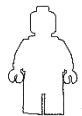
Chatting with information will become common



It will be much more personalized

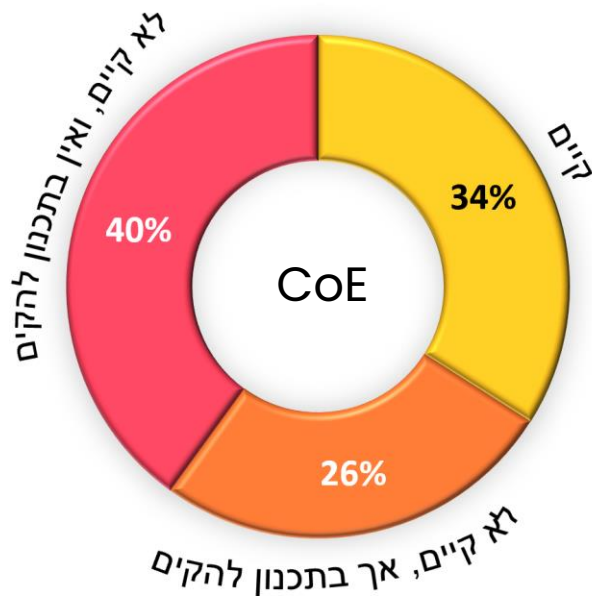


Challenge will shift towards raising awareness to limitations, biases, and critical thinking (arguing with data)

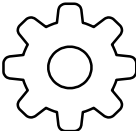


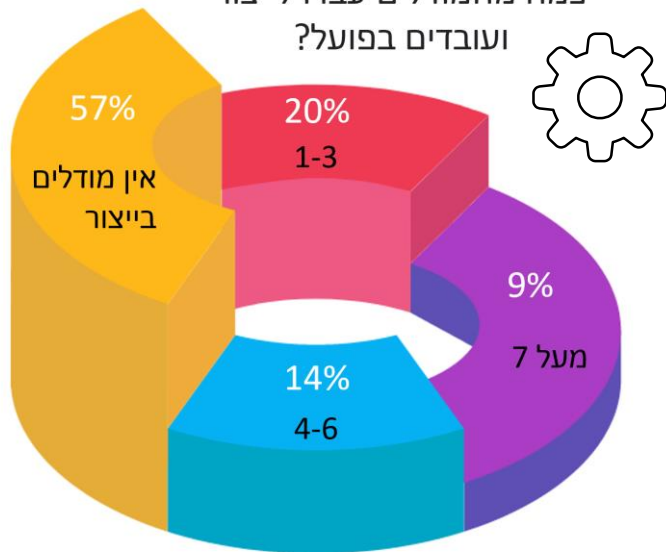


האם קיים Center of Excellence המנחה ומעצים אנליסטים ומשתמשי דאטה?

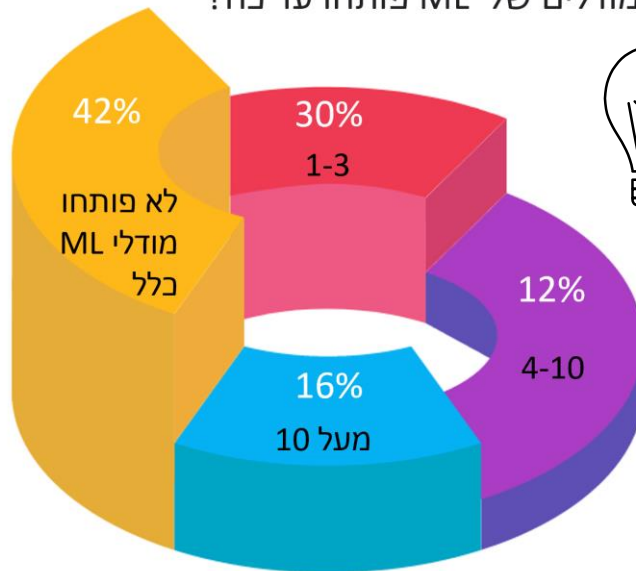




כמה מהמודלים עברו לייצור
ועובדים בפועל?


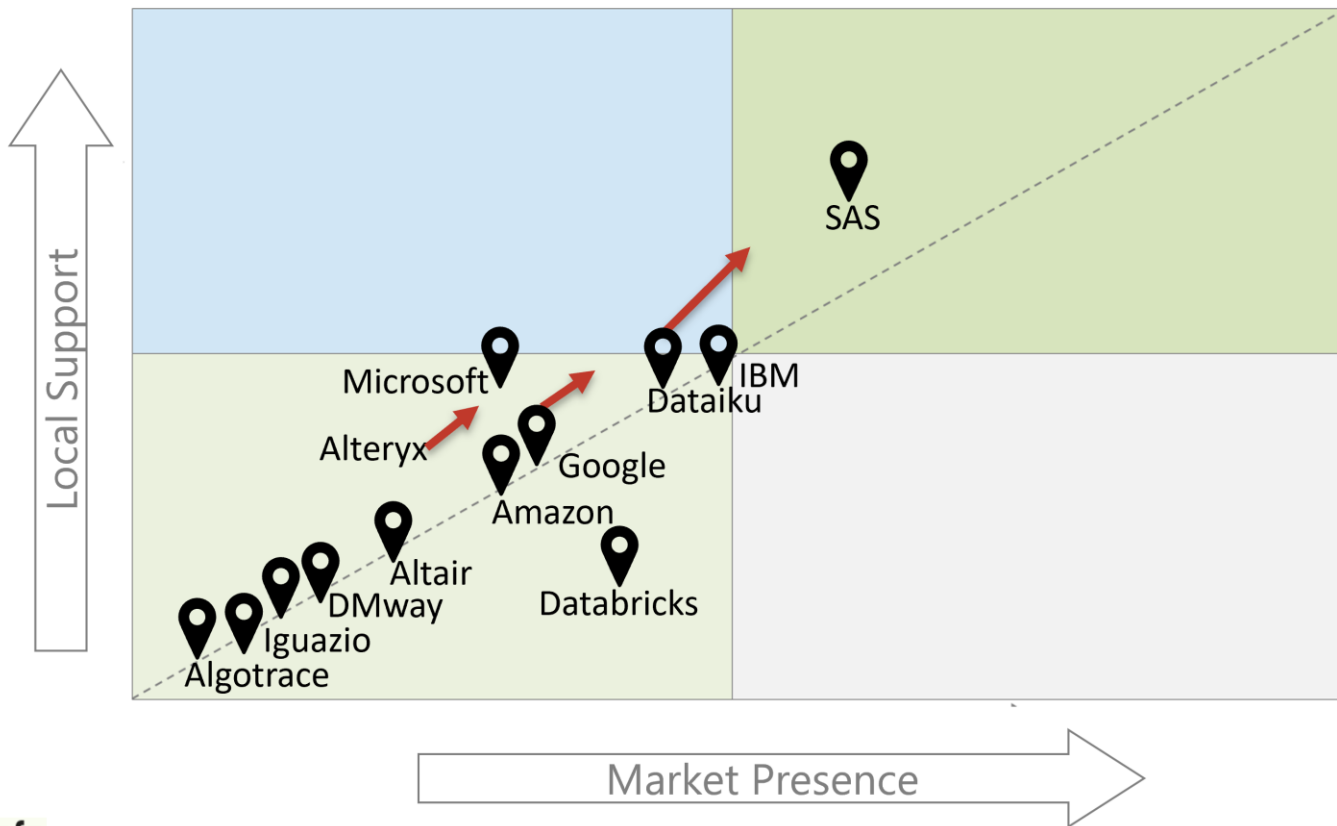


כמה מודלים של ML פותחו עד כה?

Data Science Platforms 2023

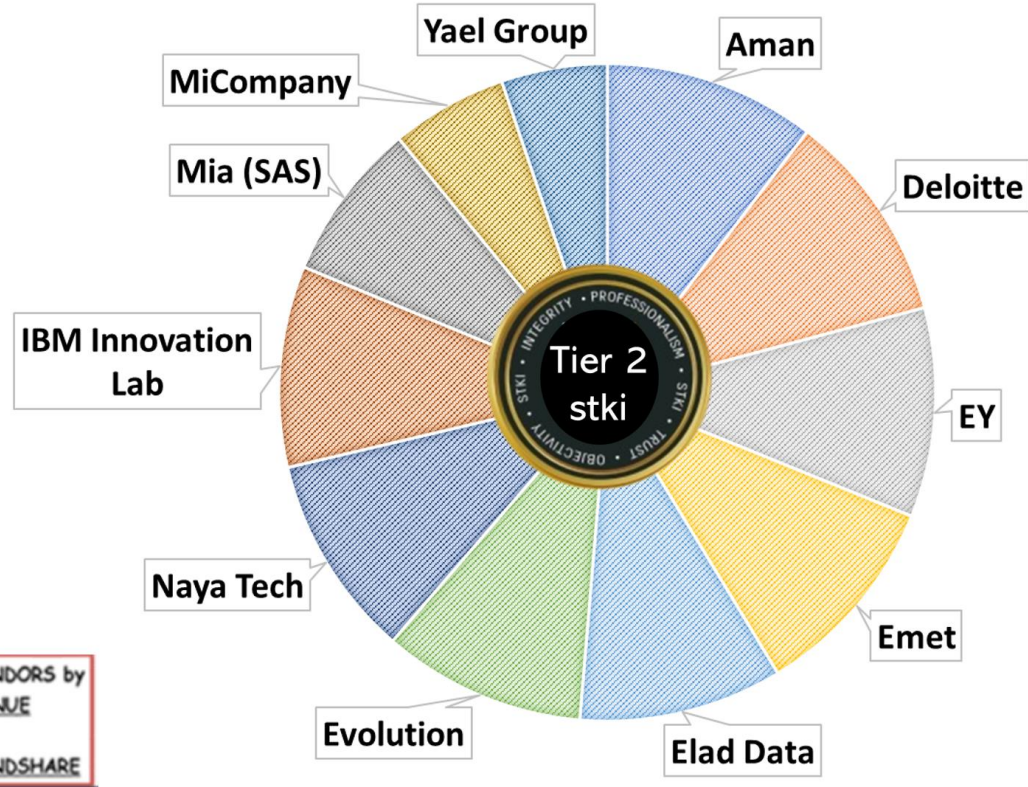
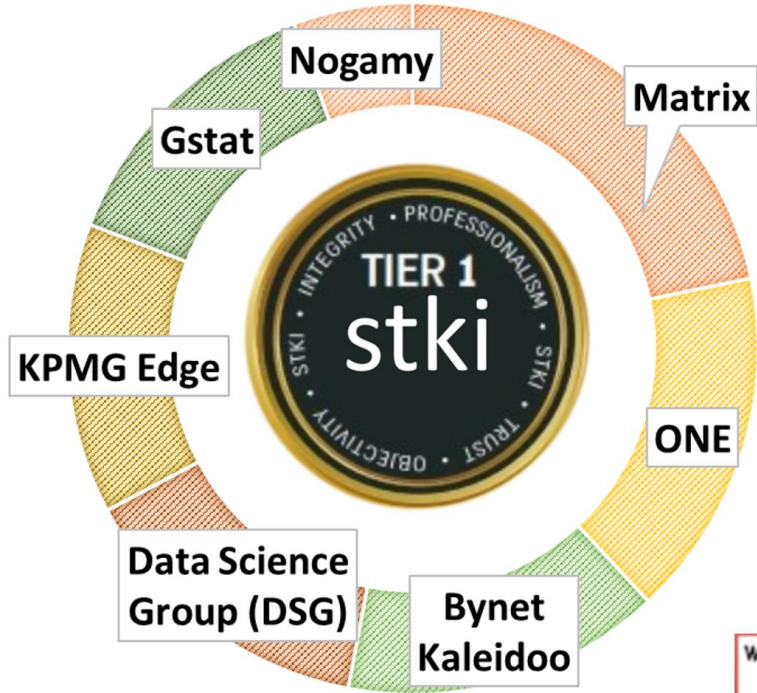
Presence & Support in Israel



- Data Robot
- Oracle
- SAP
- Evolution
- ClearML
- Pecan



Advanced Analytics, Data Science and ML projects



We rank VENDORS by
REVENUE
and
CLIENT MINDSHARE

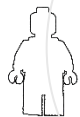
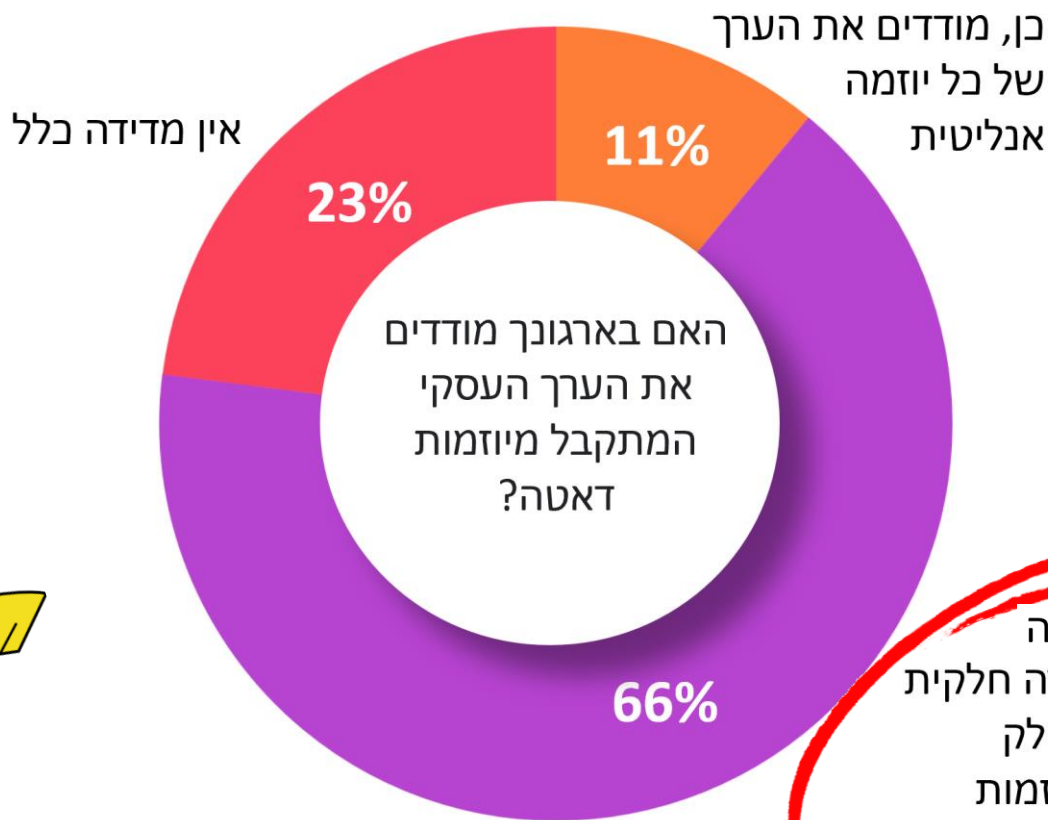
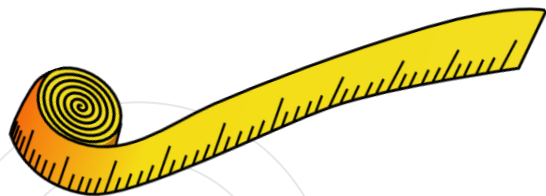
+ Tier 3

Let's talk about value

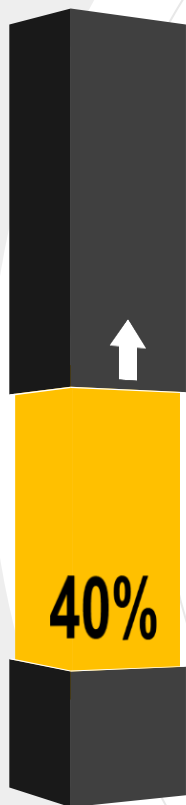




Are organizations measuring the value of D&A products?

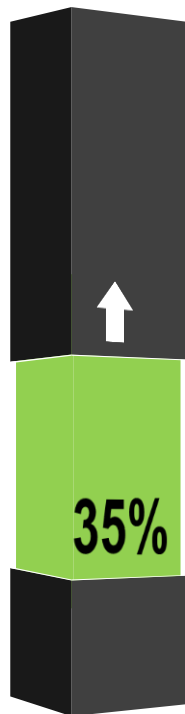


האם מממשים תפיסת "ניהול מוצר" בעולם הדאטה ואנליטיקה?



The product approach is a step in the right direction for measuring value

יש התחלה
שימוש בחלק מהעקרונות



כיום לא
אך מכוונים לכיוון זה



כלל לא
ואין כוונה

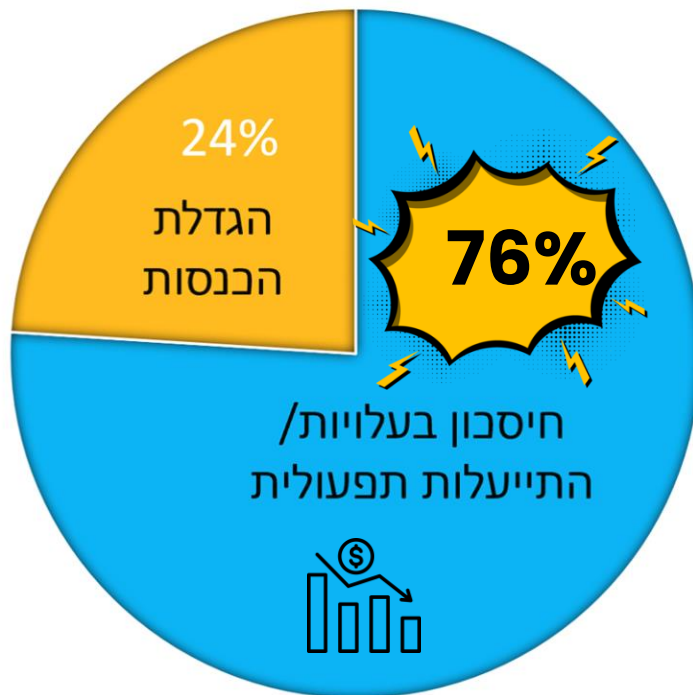


State of Data in Israel
STKI 2023

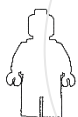




בשנתיים האחרונות, מה היה הפוקוס העיקרי
של יוזמות אנליטיות/ML ?



Focus on cost
cutting and
operational
efficiency





אופטימיזציה והתייעלות תפעולית
(אוטומציה, תחזוקה מונעת, חיסכון בעלויות)



באילו אזורים עסקיים
התמקדתם השנה
בפיתוח מודלי ML ?
(בחירה מרובה)

אנשים מנסים להשתמש בכלים וכוונת לקוח

Why are we focusing on point-specific efficiencies?



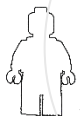
Similar situation worldwide
- State of AI, McKinsey

חדשנות/מודלים עסקיים חדשים

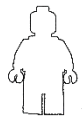
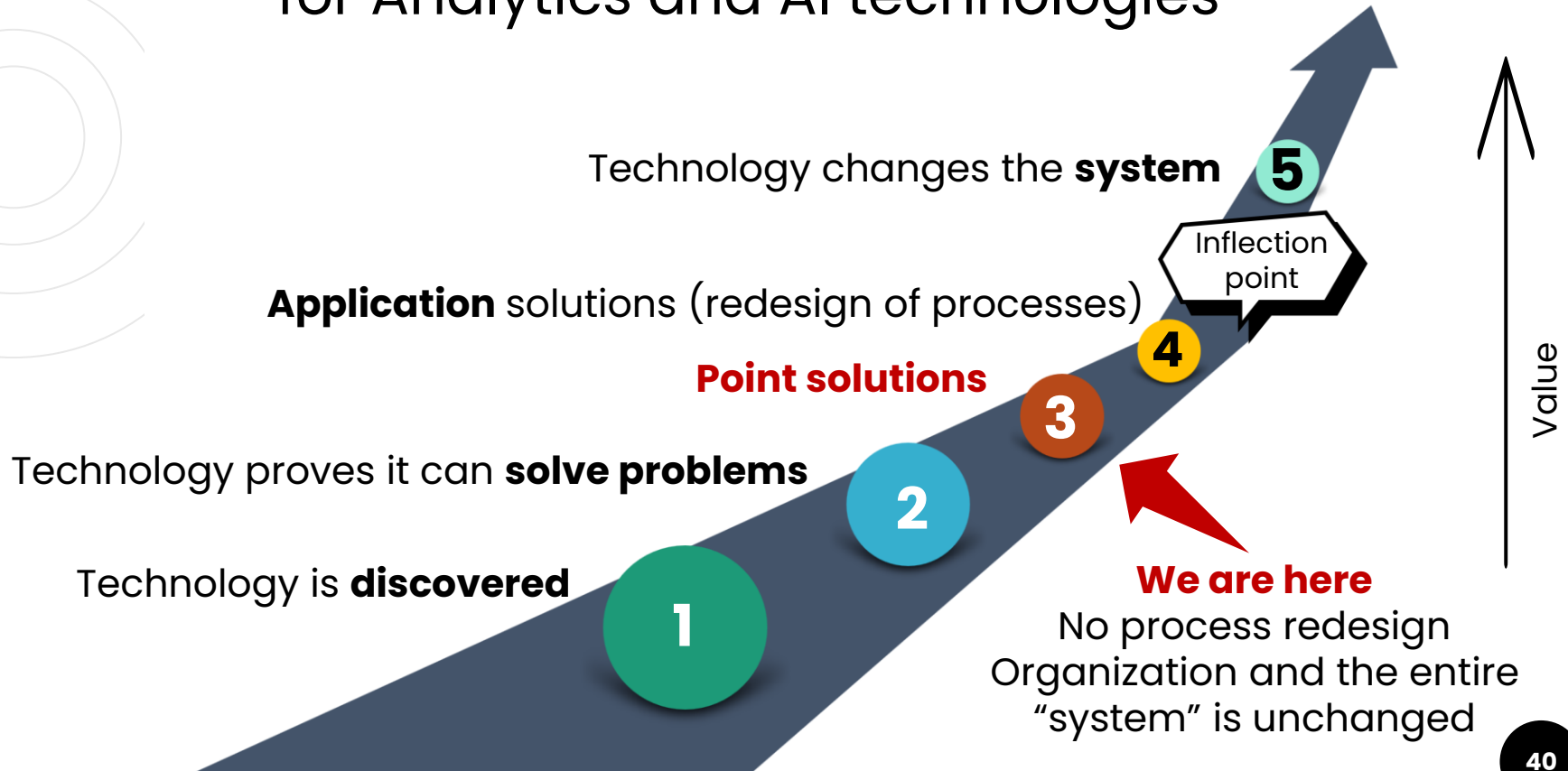
אחר

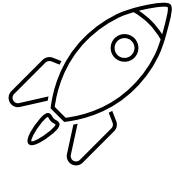
לא רלוונטי

ניהול סיכונים/ זיהוי הונאות/ סייבר



Tech-organizational value model for Analytics and AI technologies





High Performers

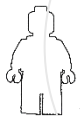
Only 8% percent of respondents are high performers
They are seeing >20% of EBIT from AI use.

They're more likely to report that:

**AI is driving revenues*
rather than reducing costs**

Though they do report AI decreasing costs as well

*CX, new product development and strategy



Some initiatives value is more challenging to measure

Foundational data transformation programs:

- ✓ Data Literacy programs
- ✓ Data platform build
- ✓ Governance initiatives





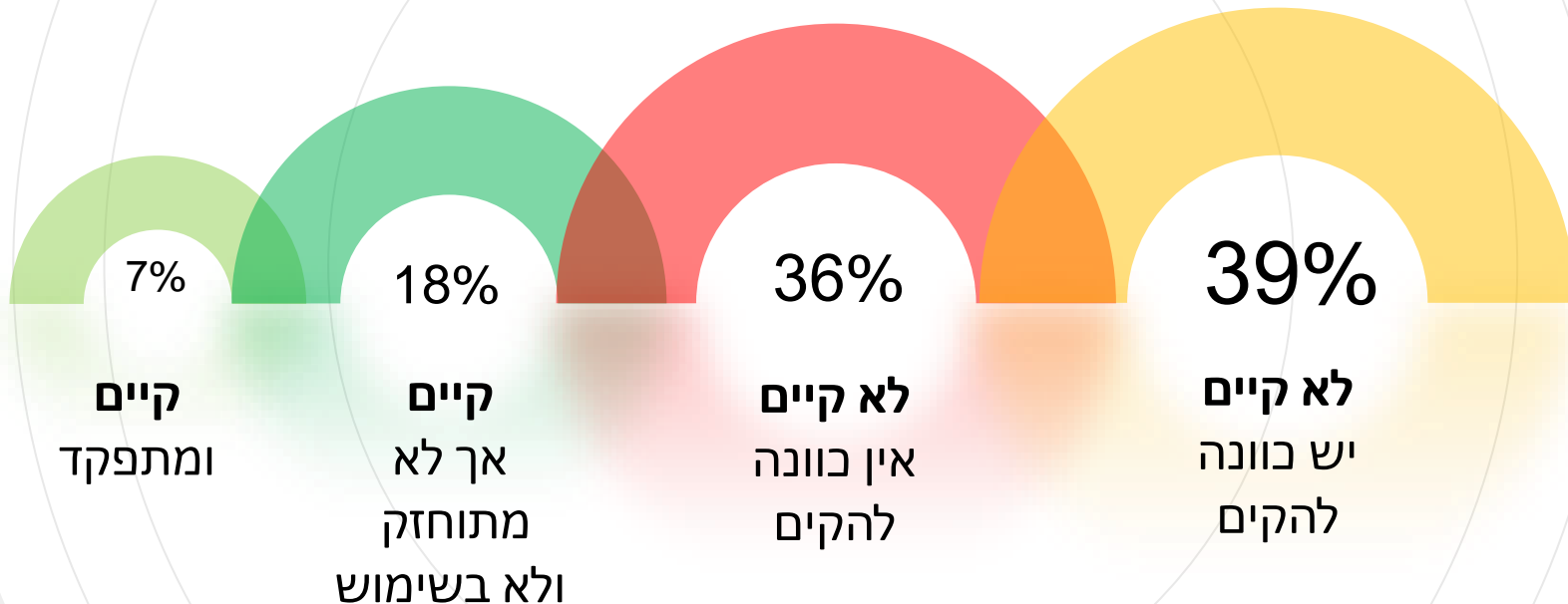
מה דעתך על Data Governance (בחר את המשפט המתאים ביותר)



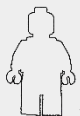
How does Data Governance create Value?



האם קיים בארגון קטלוג נתונים ארגוני?



Data Catalog projects are failing all over



האם קיימים בארגוןך Data Owners עסקיים?



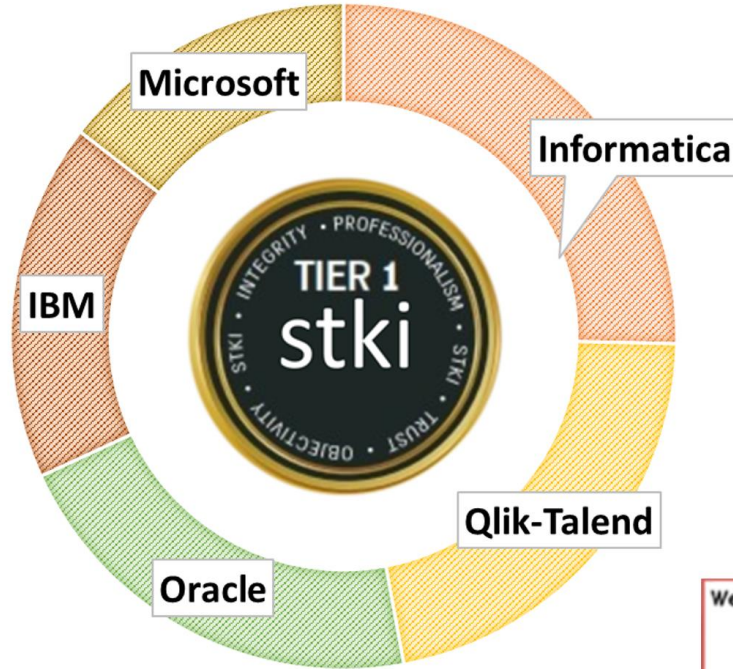
Data Catalog, Data Governance and Data Preparation Tools

Product	Description	Rep/Partners in Israel
Informatica EDC	Data Catalog, Data Governance	Informatica Israel, Aman Computers – Partner
IBM Data Governance WKC: Watson Knowledge Catalog	Data Catalog	Yael
Qlik-Talend Data Catalog	Data Catalog	UCL Group
Octapi	Metadata Management, Data Lineage	Aman Computers - Eternity
Alteryx (+ acquired Trifacta)	Data Preparation	Rep: ONE, Partners: UCL Group, ONE, SIT
Apache Atlas	Data Catalog and metadata	Matrix DnA
Immuta	Data Privacy	Matrix DnA
Alation		Matrix DnA, Vision.bi
Azure Purview	Data Catalog	Microsoft Israel, Matrix and others...

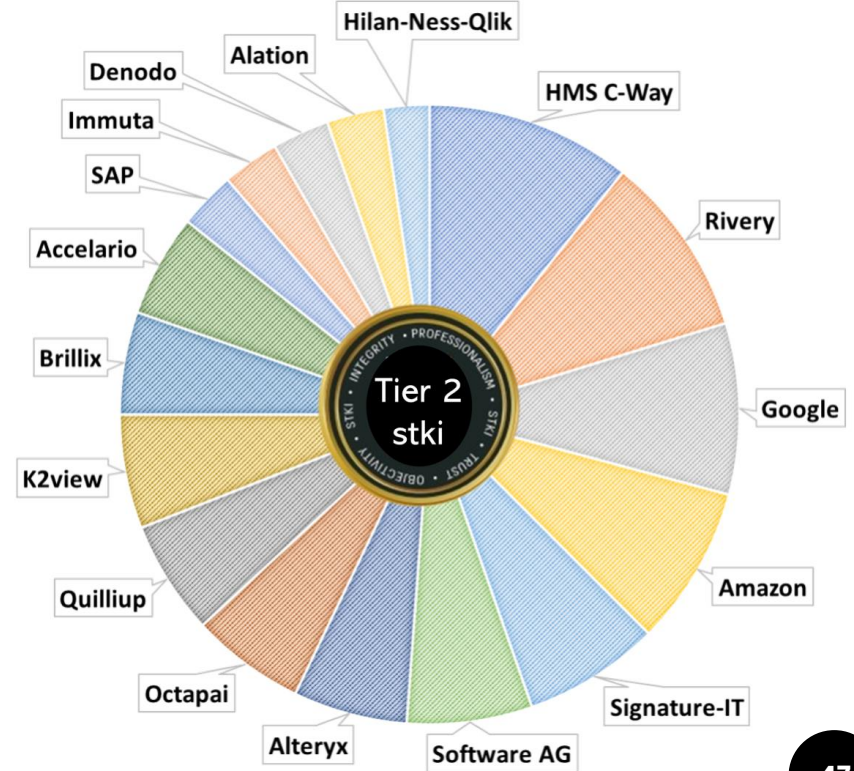


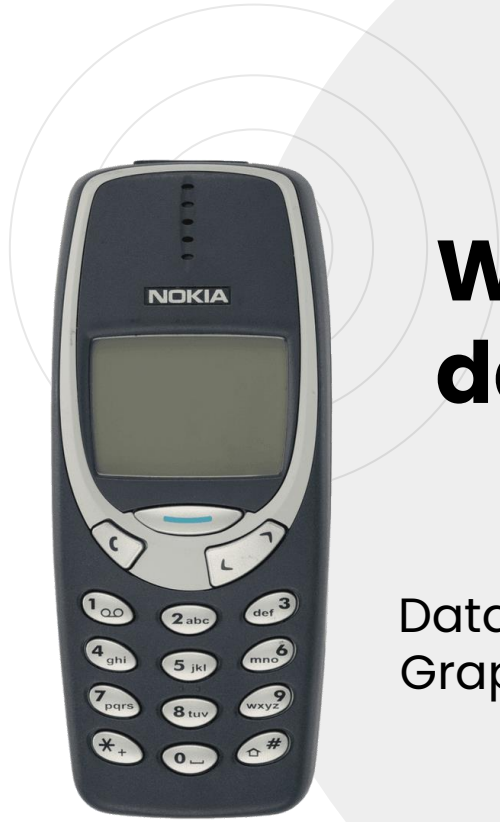
Data Mgmt. Tools

(including data catalog, governance, ETL, quality, CDP)



We rank VENDORS by REVENUE and CLIENT MINDSHARE





We are managing data like it's 2002.

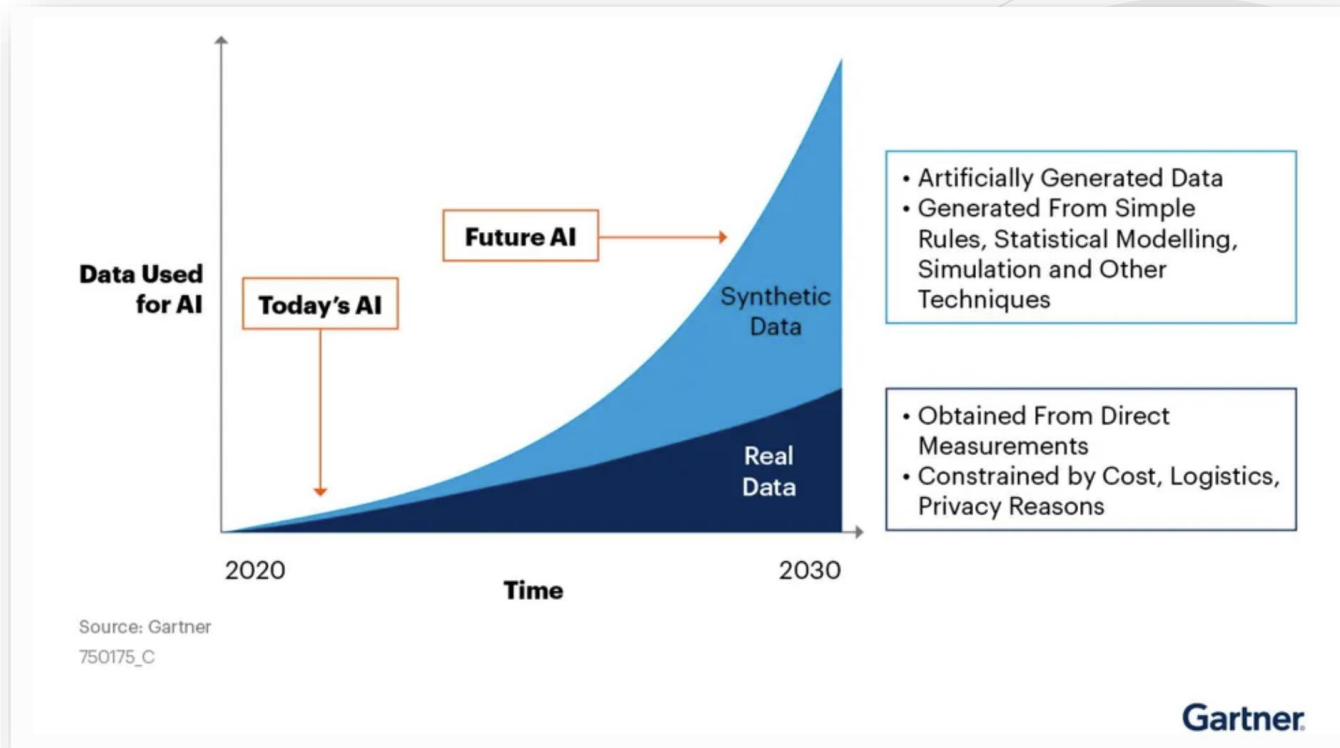
Data Mesh, Data Fabric, Knowledge Graphs, Synthetic Data are coming



Synthetic data: Fake it to make it

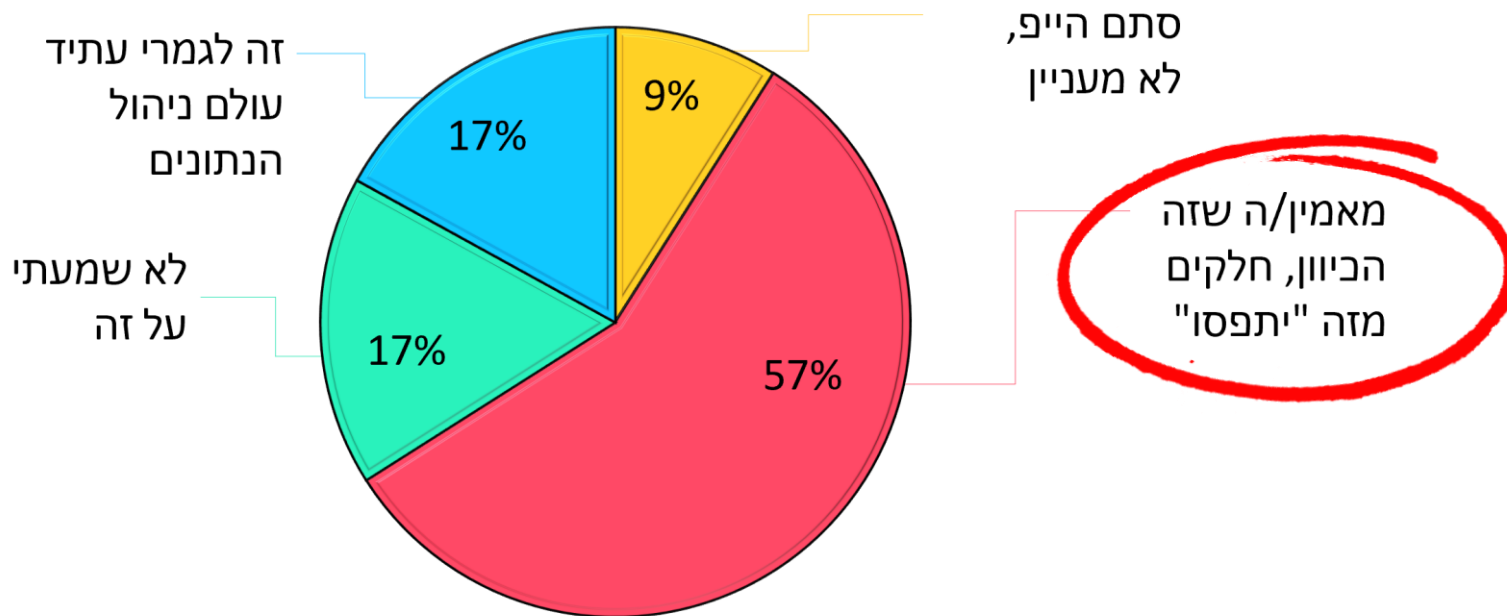
Artificially generated data

Should be combined with real data





מה דעתך על מגמת ה Data Mesh ו- Data Fabric?

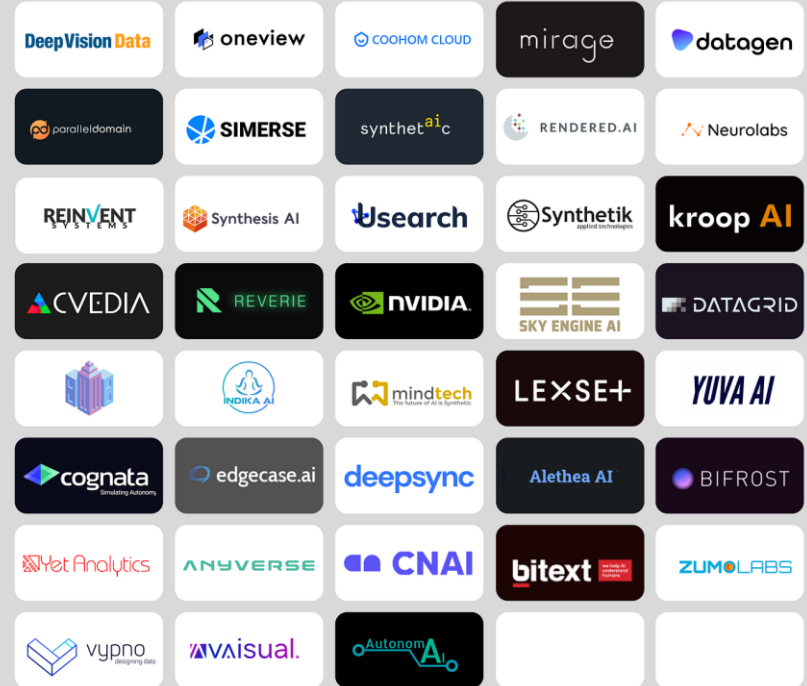


Synthetic data space

Synthetic data vendors | Structured synthetic data



Synthetic data vendors | Unstructured synthetic data



Source: Elise Devaux

Copyright@STKI_2023 Do not remove source or attribution from any slide, graph or portion of graph

I RECOMMEND

1. Rebrand Data Governance as **data enablement**
2. Target Data governance on a **case-by-case basis**
3. Examine new technologies such as **knowledge graphs** for more discovery-driven catalogs
4. Examine **synthetic data** for currently “problematic” areas (helalthcare, construction etc...)

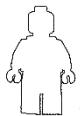
WHY

Bad rep for DG (The “G” word)

You can’t “boil the ocean”, will take 3 years and will be irrelevant when finished

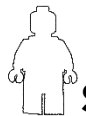
Knowledge graphs more mature and can discover semantic layers

Thanks to GenAI, new possibilities for NEW data at scale are created



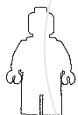
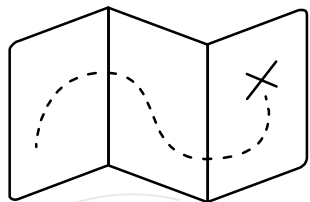
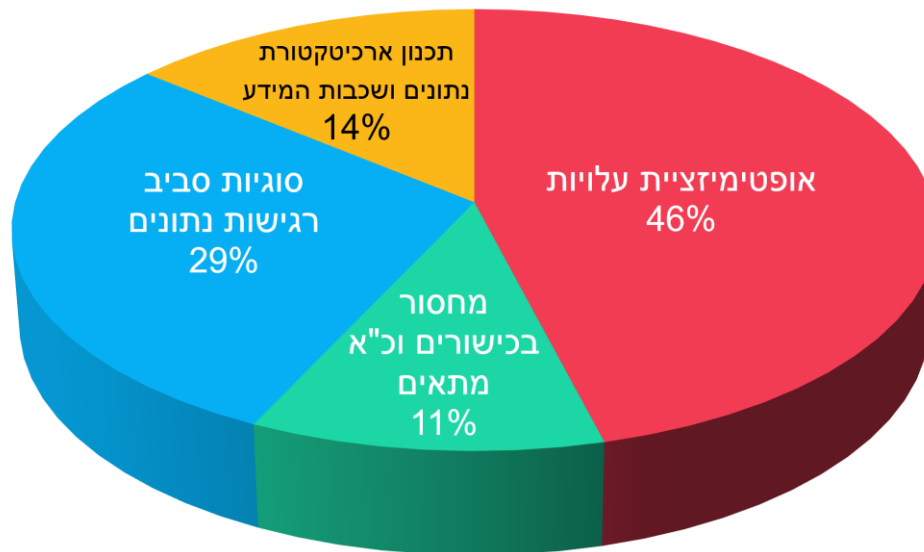
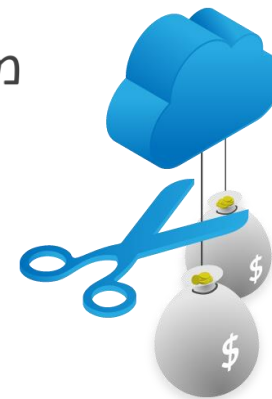


האם אתם עובדים כיום בענן לטובת דאטה ואנליטיקה?





מה לדעתך האתגר העיקרי במעבר לדאטה ואנליטיקה בענן?

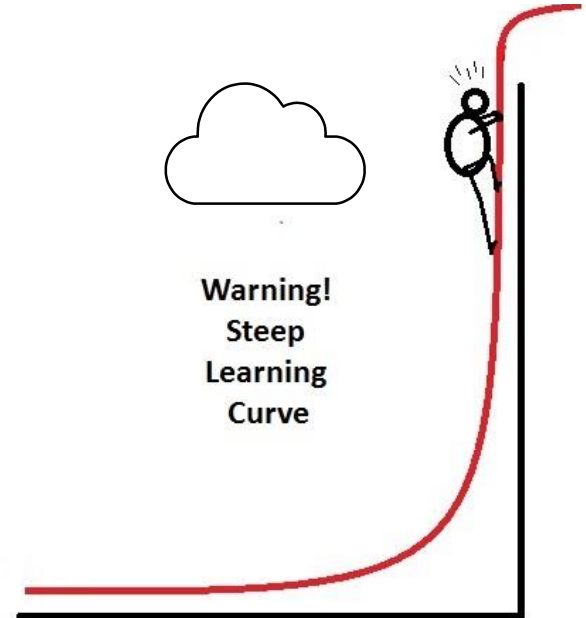


A word to Vendors:

Help is required in all stages of the cloud learning curve:

- Cost optimization
- FinOps
- Upskilling
- Cloud operations methodologies
- Framework to decide what goes to cloud and what not

Just a Word.



Data & Analytics in the Cloud: Platforms and Integrators

* Partial list of players

Package	Integrators
Microsoft Azure	Matrix, Aman, Hilan-Ness, ONE, Nogamy, Malam-Team, EY, Naya, Cloudingnow, abra, Elad, KPMG Edge, Nogamy, PWC, SQLink
Amazon AWS	Matrix, Aman, Commit Twingo, Hilan-Ness, ONE, Nogamy, Malam-Team, AllCloud, Cloudbuzz, Yael Software, EY, Naya, abra, Deloitte, Elad, Emet Midlink, KPMG Edge, Nogamy, PWC
GCP: Google Cloud Platform	Yael Group, Bynet Kaleidoo, Matrix, Google, Aman, DoIT, WideOps, Twingo - Commit, Sela, Razorlabs (ML), SQLink Deloitte, KPMG Edge, Accenture, EY, Naya, Vision.bi
Snowflake	Vision BI, Malam-Team, ONE, AllCloud, Matrix, iProsis, Aman

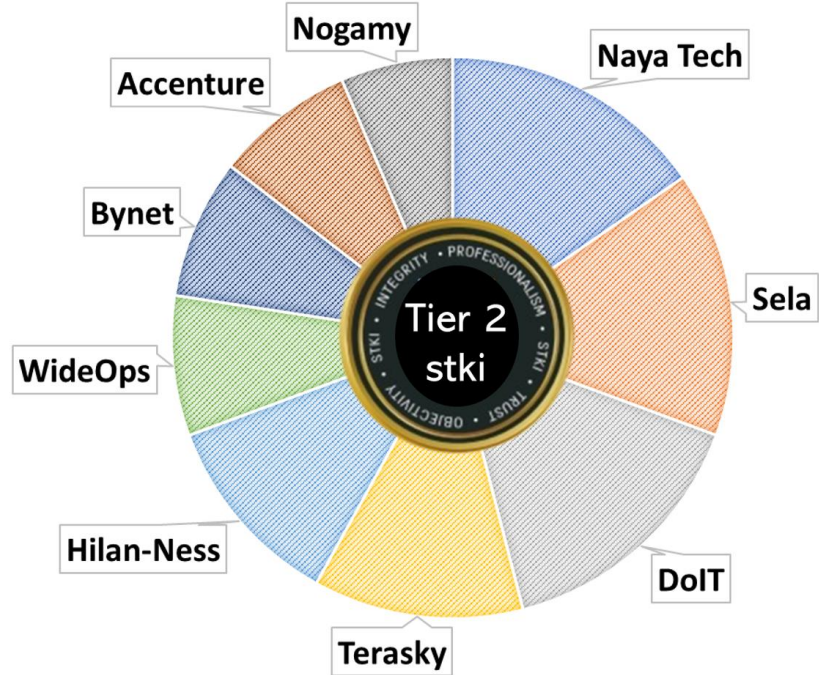
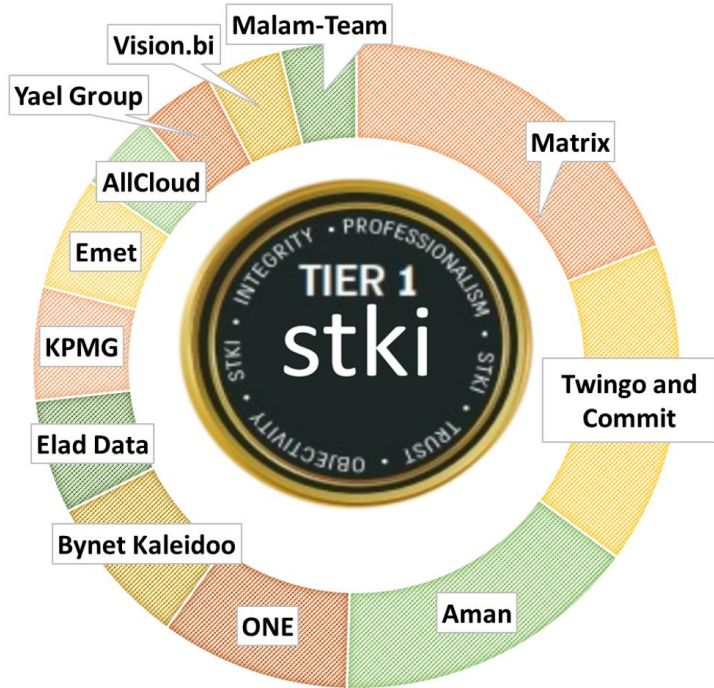


Israel cloud ecosystem is growing rapidly



Data & Analytics Cloud migration

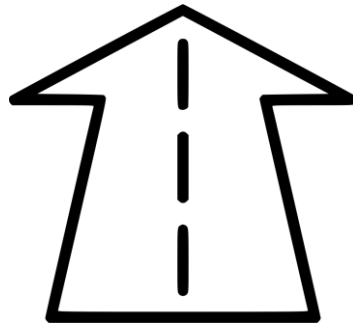
(help in migrating DW and Data Lakes to the cloud)



We rank VENDORS by
REVENUE
and
CLIENT MINDSHARE

+ Tier 3

So what's next?



AI will not
replace you. A
person who's
using AI will
replace you.

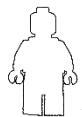
Prompt Engineer is a
new skill which we
will all need to learn,
not a new job

המשרה החמה בשוק: "לוחש לבינה מלאכותית" בשכר של 335 אלף דולר בשנה

ההתפתחות המהירה של תעשיית הבינה המלאכותית הפכה את מהנדסי הפרומפטים - שתפקידם לגרום לבינה המלאכותית להניב תוצאות טובות ומדויקות יותר - למצרף מבוקש מאוד



Source: Jim Fan



SO
what's
next?



Every role in the enterprise can be reinvented

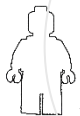


Every task can be redesigned



Humans working with a co-pilot will become the norm

“Imagine every employee in your company had an assistant that “knew” everything your organization had ever known—the history, context, intent of the business—and could process, analyze and use that information in repeatable ways” (Source: Accenture)



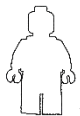
I RECOMMEND

1. **Decompose** jobs into tasks and examine which can be automated / assisted
2. **Reskill** employees to work with co-pilots in relevant tasks

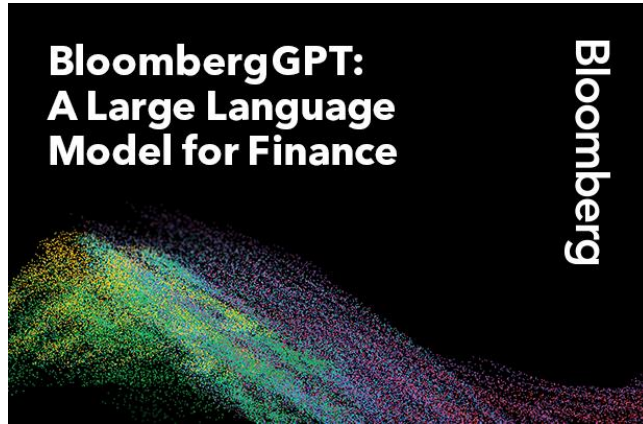
WHY

AI will impact 75% of jobs
And up to 65% of the workday

It is one of the most important value orgs can provide to its employees
Will be crucial part of implementing AI successfully



Expect to see “domain-specific LLMs”



Introducing BloombergGPT, 50-billion parameter large language model, built from scratch for finance

Cross-domain LLMs (what humans can't do) will be transformative and will have a dramatic impact on areas such as healthcare

AI Round Table 7/6/23

From AI Hype to Reality: Harnessing the Practical Value of AI for Your Organization

Visit stki.info to register



07.06.23

10:00-12:30

במשרדי STKI
המנים 3
בני ציון



Thank
you