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# AI for ecommerce

Real life, real results: applied AI for conversion optimization.

by **ATCOM**



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Chief Commercial Officer



# Knowledge

# Machine Learning

Scientists have been trying to teach machines to do things aiming at **eliminating human error** and **significantly decreasing time** spent on tasks.

Cloud computing has been an enabler for making AI accessible and affordable.

AI will be considered a commodity for organizations sooner than what we think.

tags: [1950] [cloud computing] [AI tech as a commodity]



**How are you  
maturing  
with AI?**

**What can you  
really do with  
it?**



**tip:** Ask these questions to yourself in 12 months again.

Lead scoring and qualification  
Image tagging  
Content personalization  
Product recommendation  
Newsletter personalization  
Personalized search  
Image recognition  
Auto-generated content  
Pricing Optimization  
Website performance optimization  
Anomaly detection  
Product review moderation  
Fake review detection  
Reverse image search  
Replenishment optimization  
Segmentation detection  
Warehouse automation



**fact:** Yes, you can really do these today.

# Data

Product catalogues

Product prices

Offers & bundles

Customer profiles

Orders & Products

Behavioral analytics

Newsletter analytics

Ratings & Reviews

Customer Care Tickets



**lesson learned:** sometimes less data is better at the beginning.

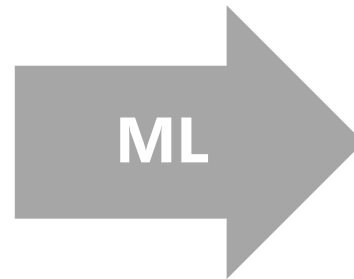
# AI, the only way to go truly personal at scale

Personalization

PICK YOURS

# From rule based to AI driven personalization

Demographics  
Purchase history  
Behavioral data  
Previous actions  
and others...



Your most  
probable next  
action

clue: ML = Machine Learning.

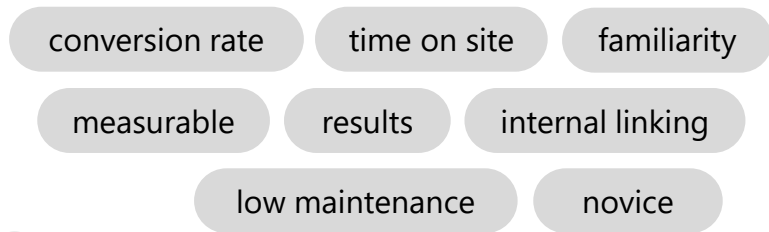


# Personalized Recommendations on home pages or product list pages

Enhances the over all [user experience](#).

Highly recommended for digital properties with [large number of products](#) and [categories](#).

[Conversion rate increases](#) of up to 6% have been recorded.



*Recommended for you*

*You might also like*

*Often bought together*

*Visitors who viewed this also viewed*

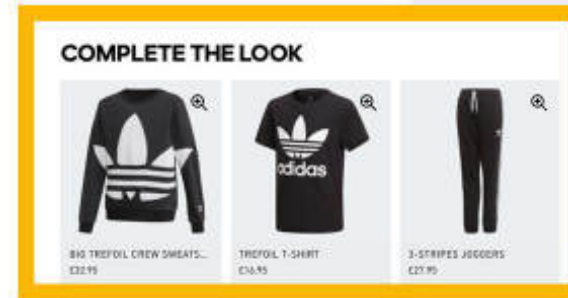


# Personalized Cross Selling and Up Selling

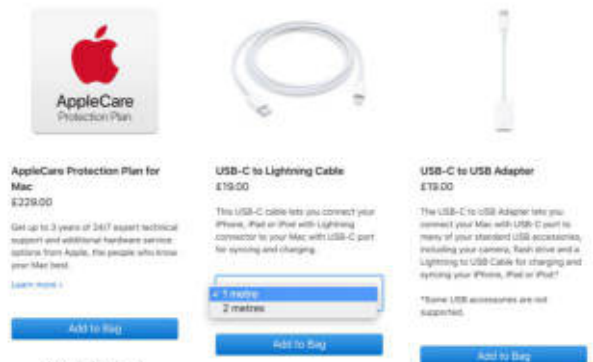
An effective way to catch that **buying mode**.

Perform extremely well on **product detail** pages, **basket** pages and **checkout** pages and on **post purchase newsletter offers**.

Highly effective in fashion, electronics and grocery industries.



Shop accessories for your MacBook.



- basket increase
- time on site
- familiarity
- measurable
- results
- internal linking
- low maintenance
- novice

further reading: diderot effect

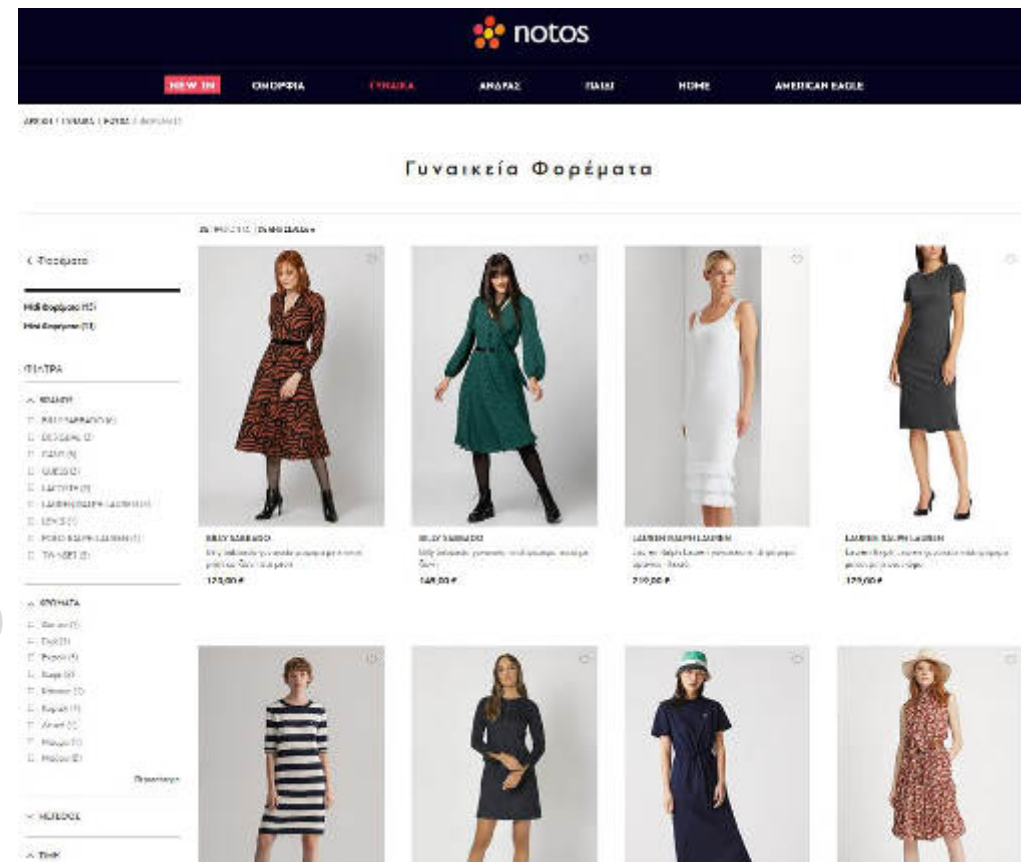
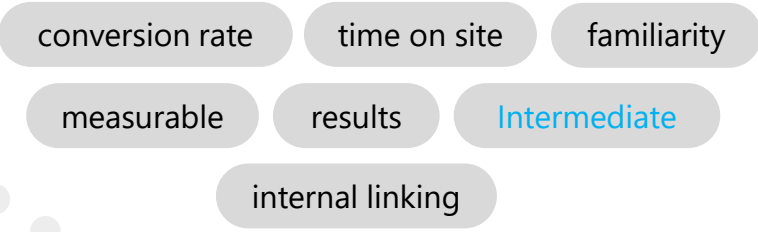
# Personalized product list sorting

Deliver a more **relevant default product list** to each customer.

Highly recommended for digital properties with **large number of products** and **categories**.

Highly effective in fashion, electronics and grocery industries.

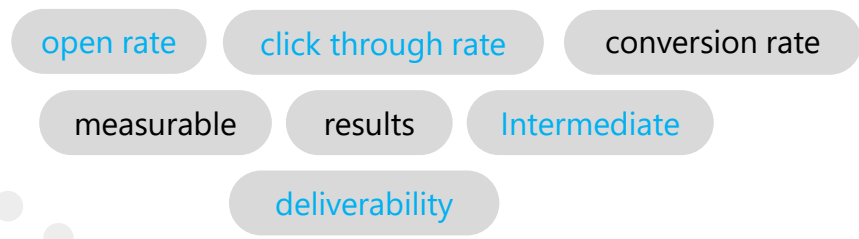
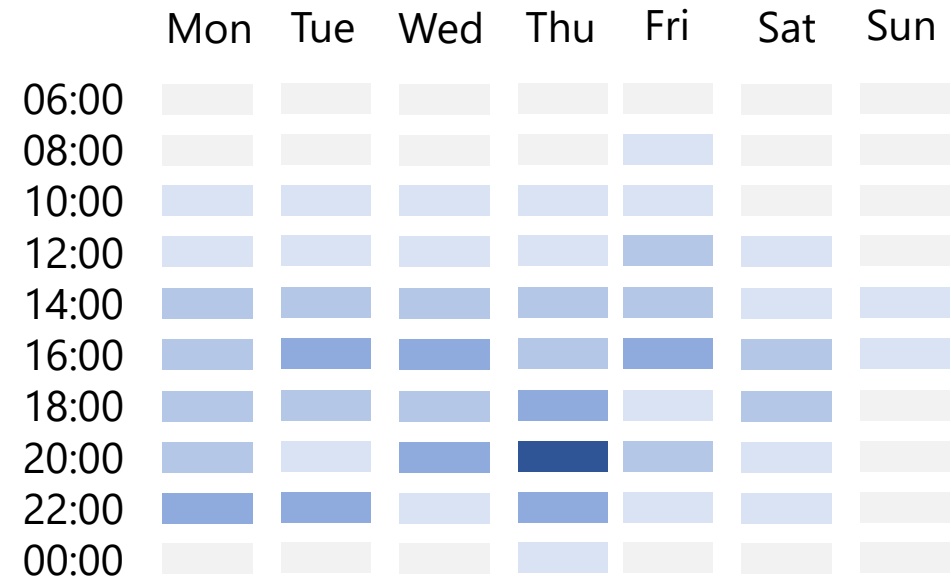
Extremely low maintenance effort.

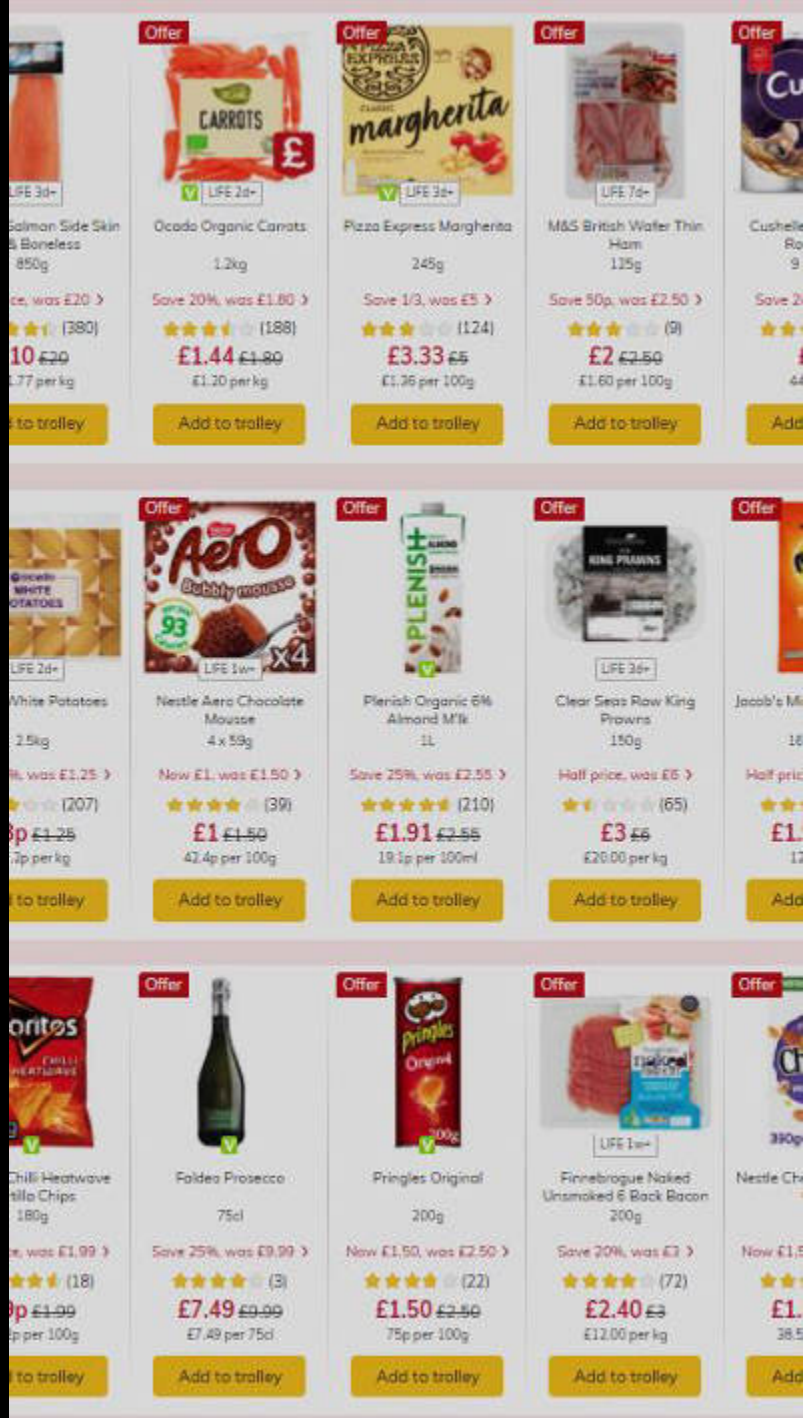


# Personalized newsletters

Email subject and content personalization to provide the most relevant offers.

Go beyond content personalization by targeting newsletter subscribers the **day of the week** and **time of the day** that are most probable to open the email and make a purchase





# Maximize profit

Price Optimization through dynamic pricing

# Dynamic Pricing

Predict the best price for each product that will maximize profits for a specific timeframe.

- Real time and automatic price configuration
- Assist humans to set prices

Dynamic & personalized bundles

Tool to help you fight price wars during sales periods

increase profit

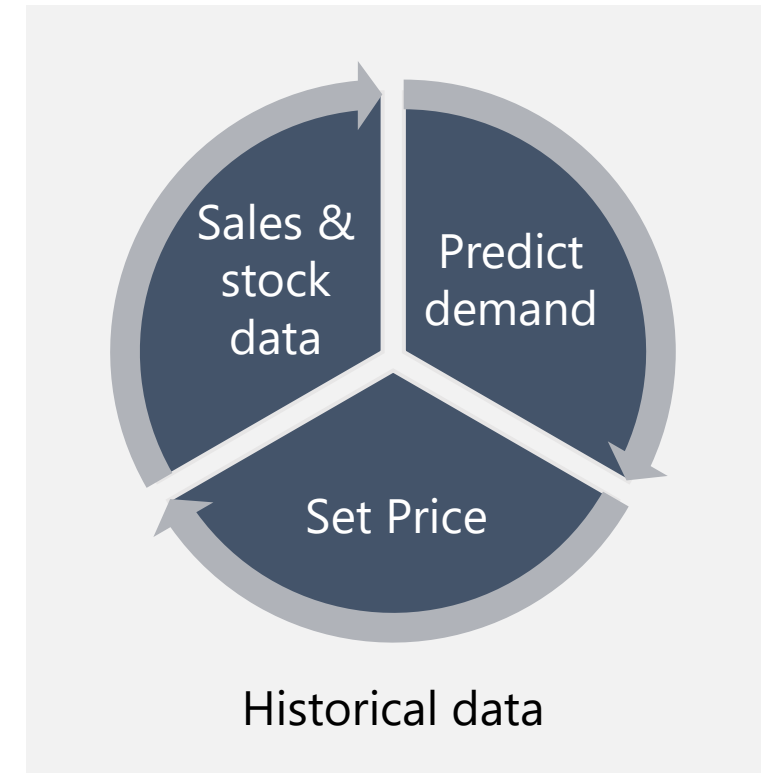
high impact

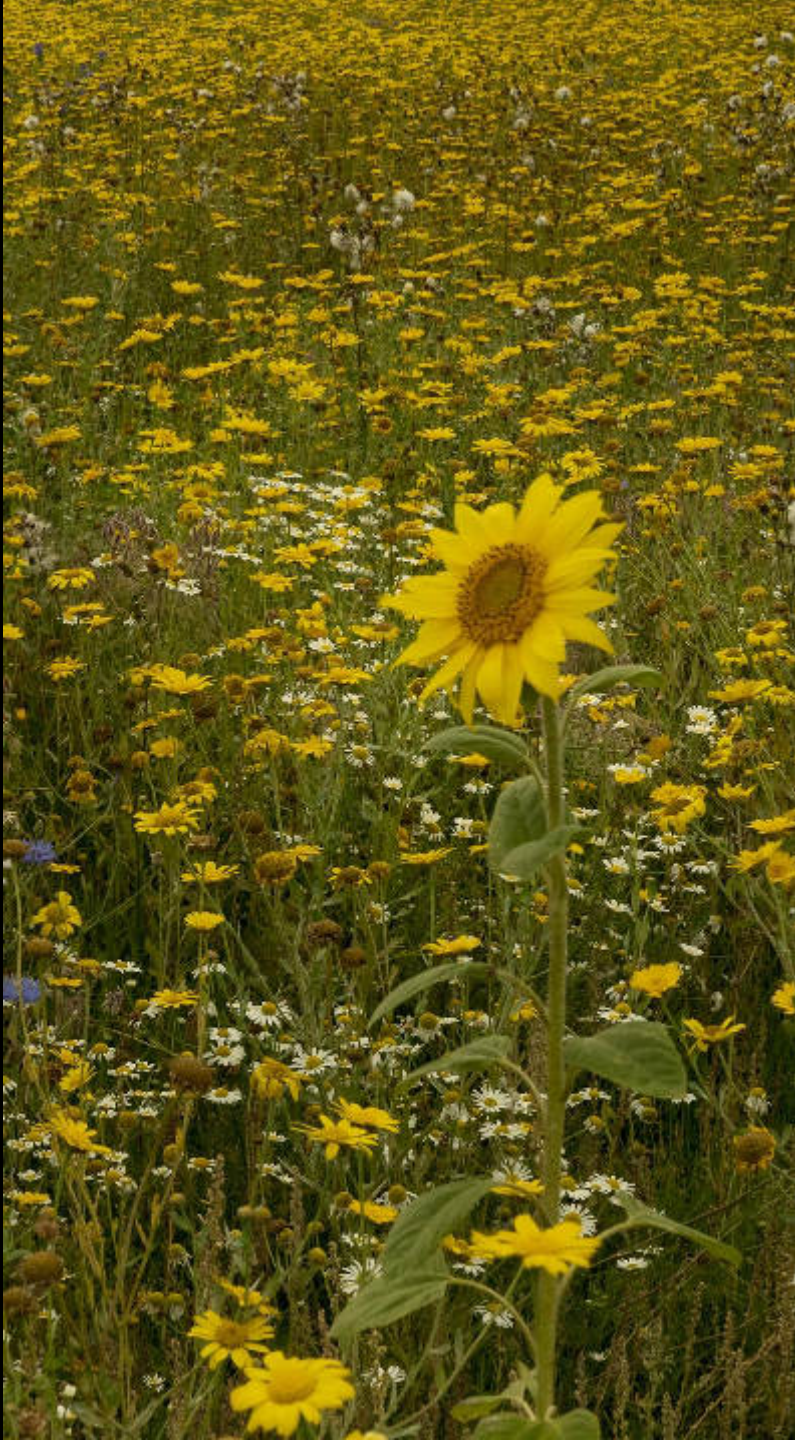
scalable

measurable

results

advanced





# Know what is happening and know it on time

Anomaly detection could save the day, every day

# The What and Why of anomaly detection in ecommerce

Machine learns and understands normal operations.

Can detect KPIs that change abnormally and then alerts accordingly.

Detect **spikes** and **drops** considering **seasonal behaviors**.

smooth operations

high impact

measurable

results

advanced

act fast

confidence

*"An anomaly is when something happens that is outside of the norm"*

**clue:** anomalies are also known as "outliers"



# Drill down to great granularity

Spike or Drop on transactions

Spike or Drop on bad or Good reviews

Spike or Drop on returns

Spike or Drop on charge backs

Spike or Drop on margins

## Break down by

Country

Category

Brand

Gender

Age group

smooth operations

high impact

measurable

results

advanced

act fast

confidence



# The sum is greater than the parts

Combining scenarios could change the rules

You have just purchased that pair of jeans you have been eyeing for some time.

A few days later you receive an email from the same retailer asking you if you are still interested at the pair of shoes that you had removed from the shopping cart during your latest purchase.

In fact, it offers a special price for you if you bundle them with a belt that others have bought with those shoes.

the right  
day & time

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recommendation

dynamic  
pricing

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cross sell  
(dynamic bundle)

# 4 <sup>tips</sup> to start teaching machines your knowledge

1

### **Take top management on your side**

Top management will listen to revenue generators. Pick your first experiments wisely at the beginning to make them AI advocates.

2

### **One man show is a no show**

Set up a cross functional team, train, read, learn. Involve tech, marketing, finance, help from outside of your organization. AI needs diverse brains and passion.

3

### **Get your technology sorted**

AI requires technology. You can buy it; you can build it or even you can go hybrid. Consult an expert to guide you through this decision.

4

### **Actionable - Measurable - Scalable - Make impact**

AI experiments need to be actionable, measurable, scalable and need to make an impact. If more than one is missing don't invest.



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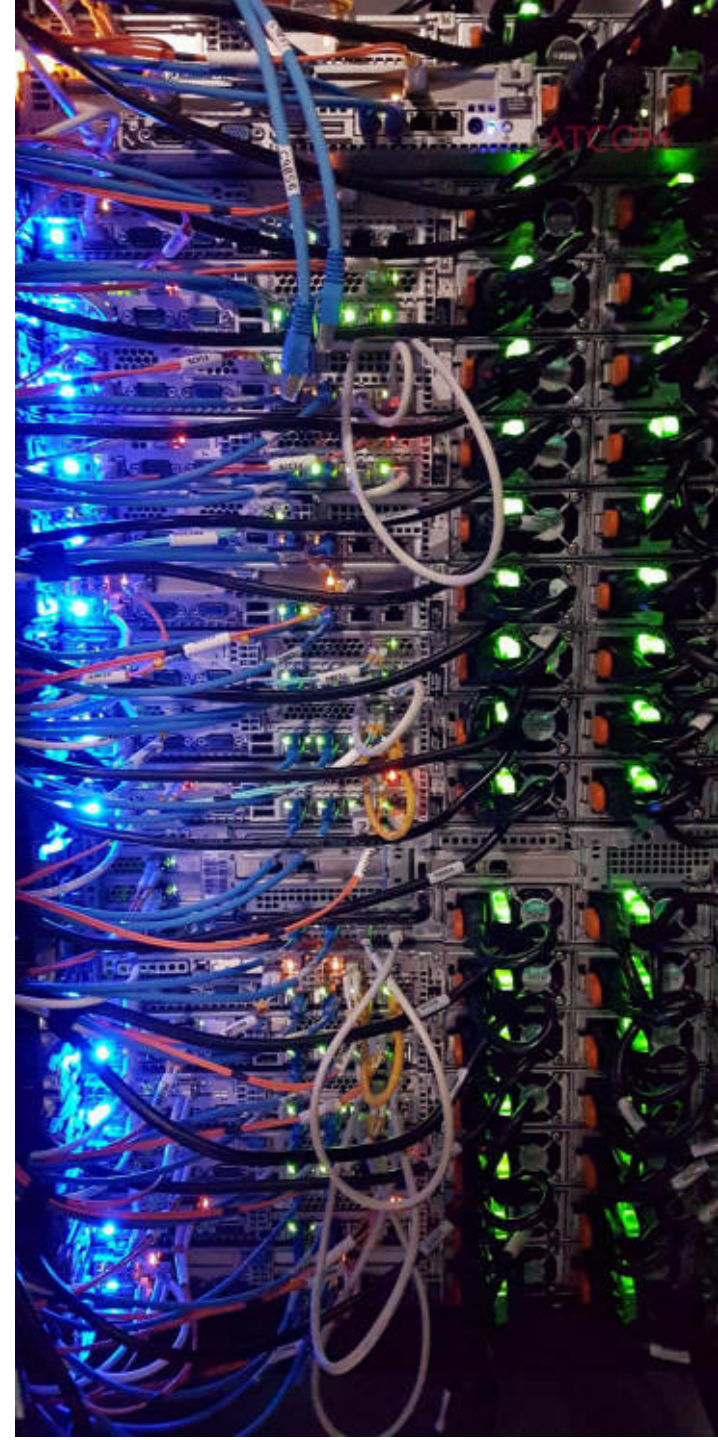
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*thank you*

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