

AI inom samhällsbyggnad

An aerial night view of a city, likely Gothenburg, Sweden, showing a large body of water in the foreground and middle ground. The city lights are illuminated, and the sky is a deep blue with a hint of sunset or sunrise. The text is overlaid on the upper part of the image.

Chalmers
25 april 2019

Göran Lindsjö

Kontakta mig gärna via LinkedIn

Disruption





amazon

*“De senaste decennierna har digitaliseringen bl a inneburit att uppgifter som kan beskrivas med **tydliga algoritmer** har automatiserats. Nu använder vi AI för att göra samma sak med uppgifter som **inte enkelt kan beskrivas**. Det mesta värde vi får från AI händer under ytan. Det är bokstavligen **hundratals användningsområden** som bra sökresultat, bättre rekommendationer och bättre prognostisering för lagerhantering. AI kommer att förbättra **all privat och offentlig verksamhet**.”*

Jeff Bezos, CEO Amazon

”Det var inte så smart av konkurrenterna att ge Jeff Bezos flera års försprång.”

Warren Buffett



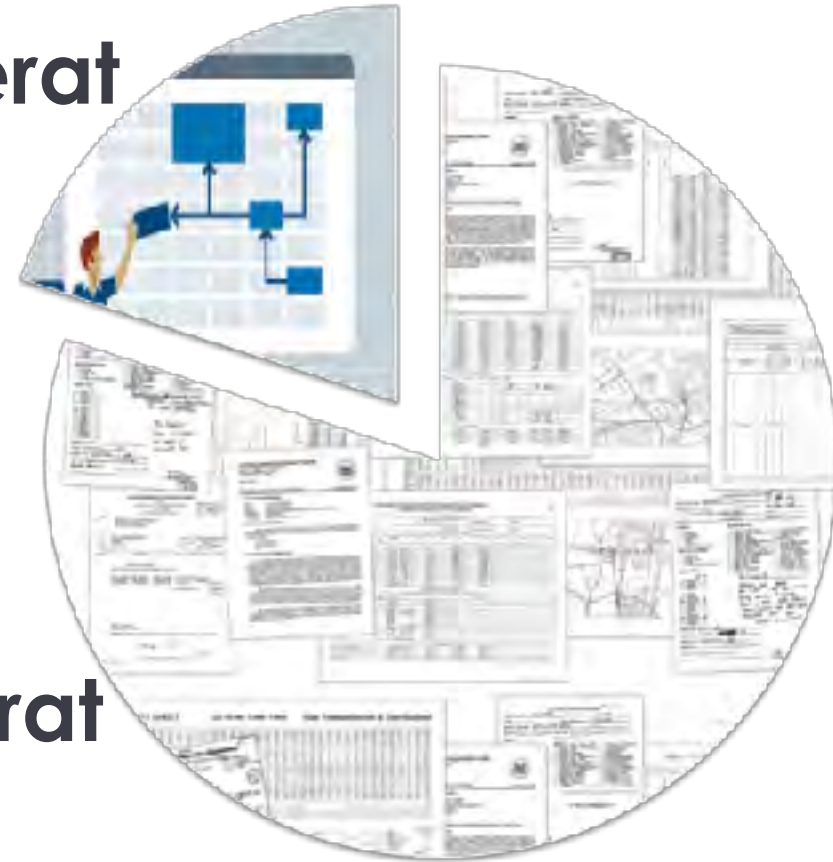
Arbete

Data

Kolumn2

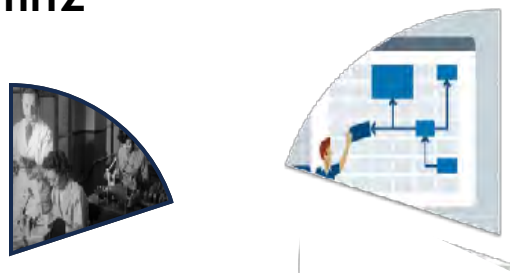


Strukturerat



Ostrukterat

Kolumn2



Kolumn2



Digitalisering

Väldefinierade problem

Förutsägbara situationer

Generella lösningar

Strukturerad data

Rationaliserar

AI

Även svårdefinierade problem

Även oförutsägbara situationer

Anpassade lösningar

Även ostrukturerad data

Förstärker människor



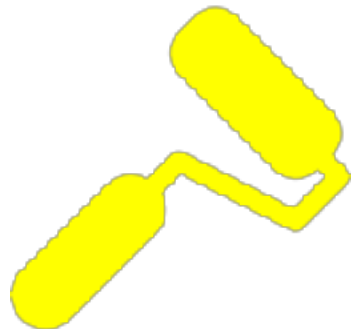
Prediktion



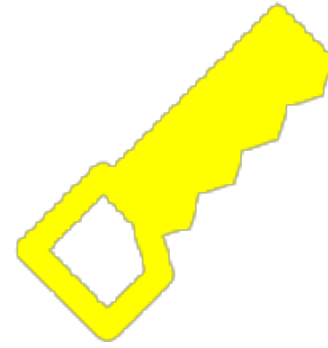
Kategorisering



Diagnosticering



Rekommendationer



Planering



Beslutsstöd



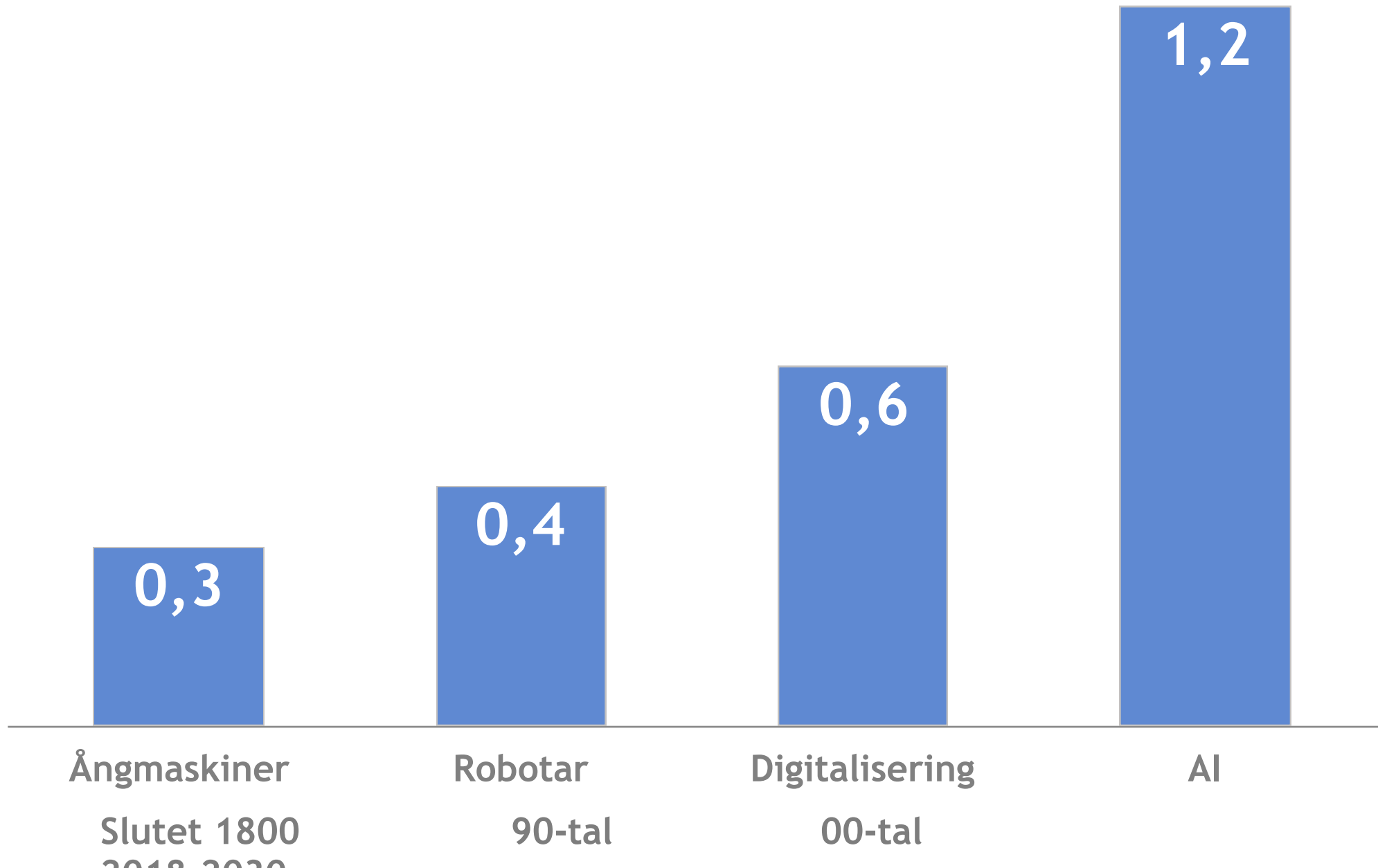
Optimering



Mönsterigenkänning



Beräknat bidrag till BNP i procent



Baidu 百度

阿里巴巴
Alibaba.com

Tencent 腾讯



Microsoft

Google

amazon

facebook



IBM

Kanadas strategi

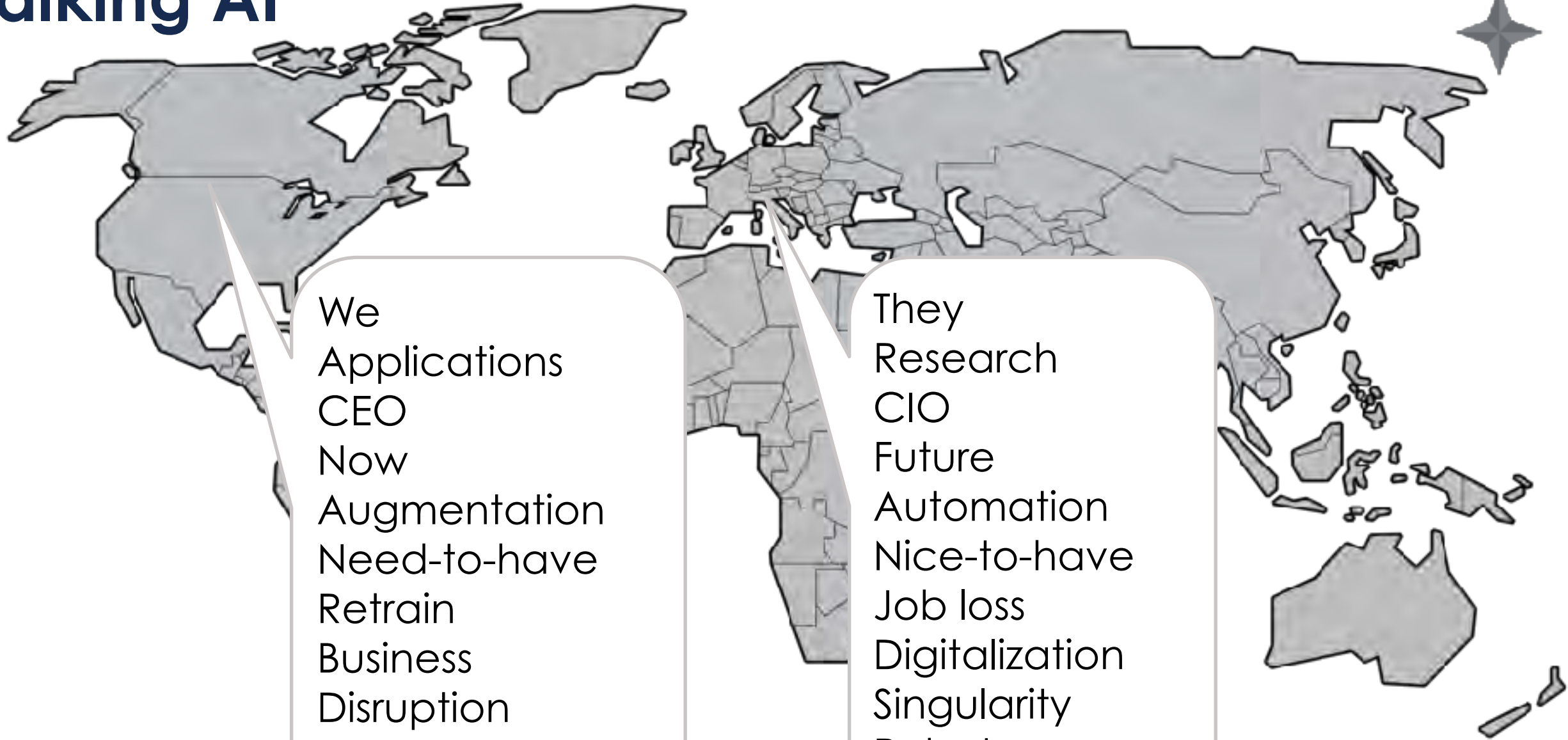
- ✦ Få starka universitet
- ✦ Multilaterala samarbeten
- ✦ Locka AI-företag
- ✦ Locka talanger
- ✦ Kvinnliga AI-ledare
- ✦ Enkelt för entreprenörer

"AI will shape the world that our kids and our grandkids grow up in."

Justin Trudeau



Talking AI



We
Applications
CEO
Now
Augmentation
Need-to-have
Retrain
Business
Disruption
ROI
Sense of urgency

They
Research
CIO
Future
Automation
Nice-to-have
Job loss
Digitalization
Singularity
Robots
Hype

AI för alla



Utbildning



Bättre matematikkunskaper



Elever skapar AI



Breda akademiska utbildningar



Ständigt lärande



”AI toppar listan som möjliggörare för 12 av 17”

Lucid Analytics Project Februari 2019



Individuella behandlingsmetoder



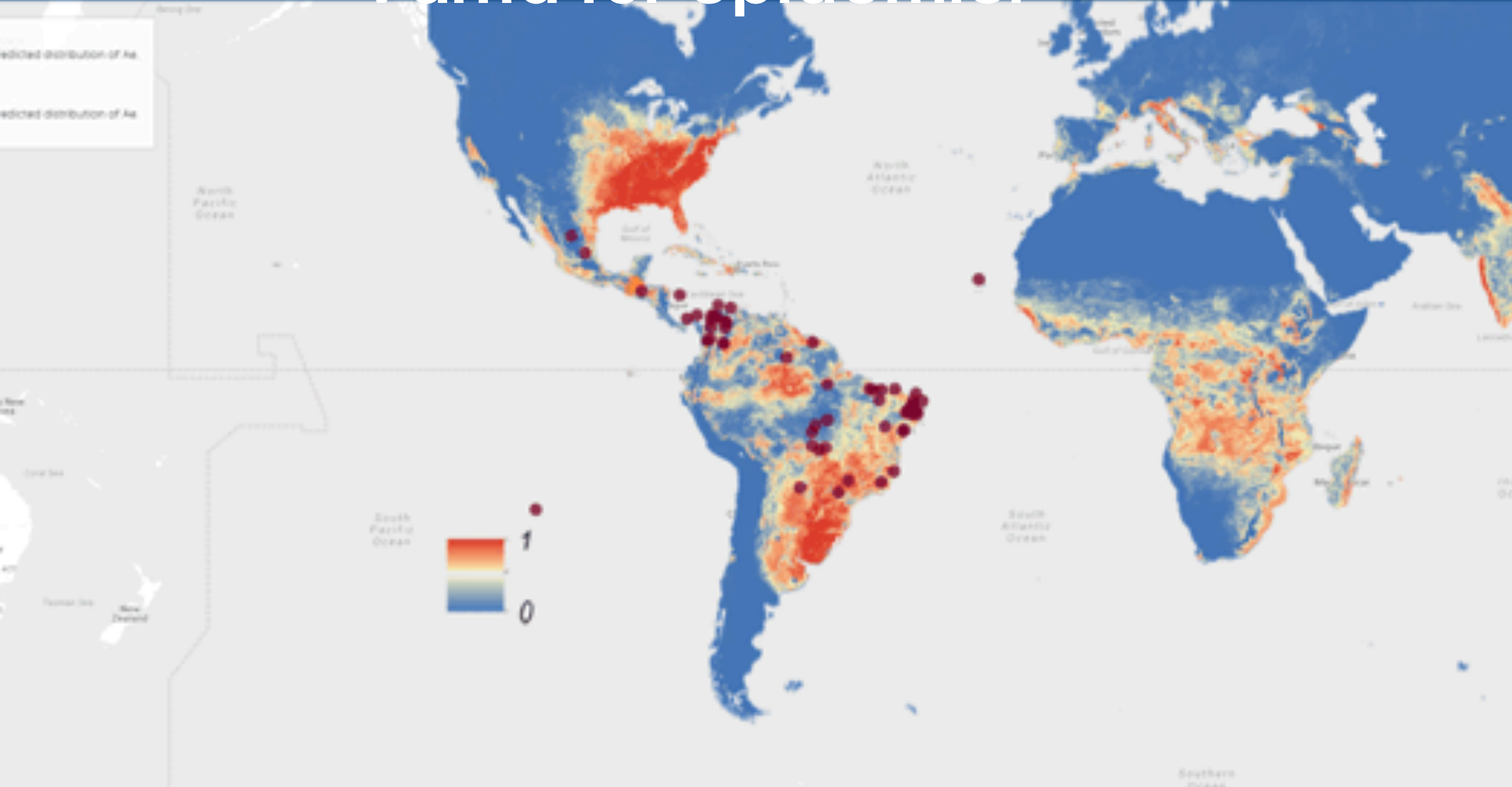
CAUTION

ESTABLISHED
PROCEDURES.

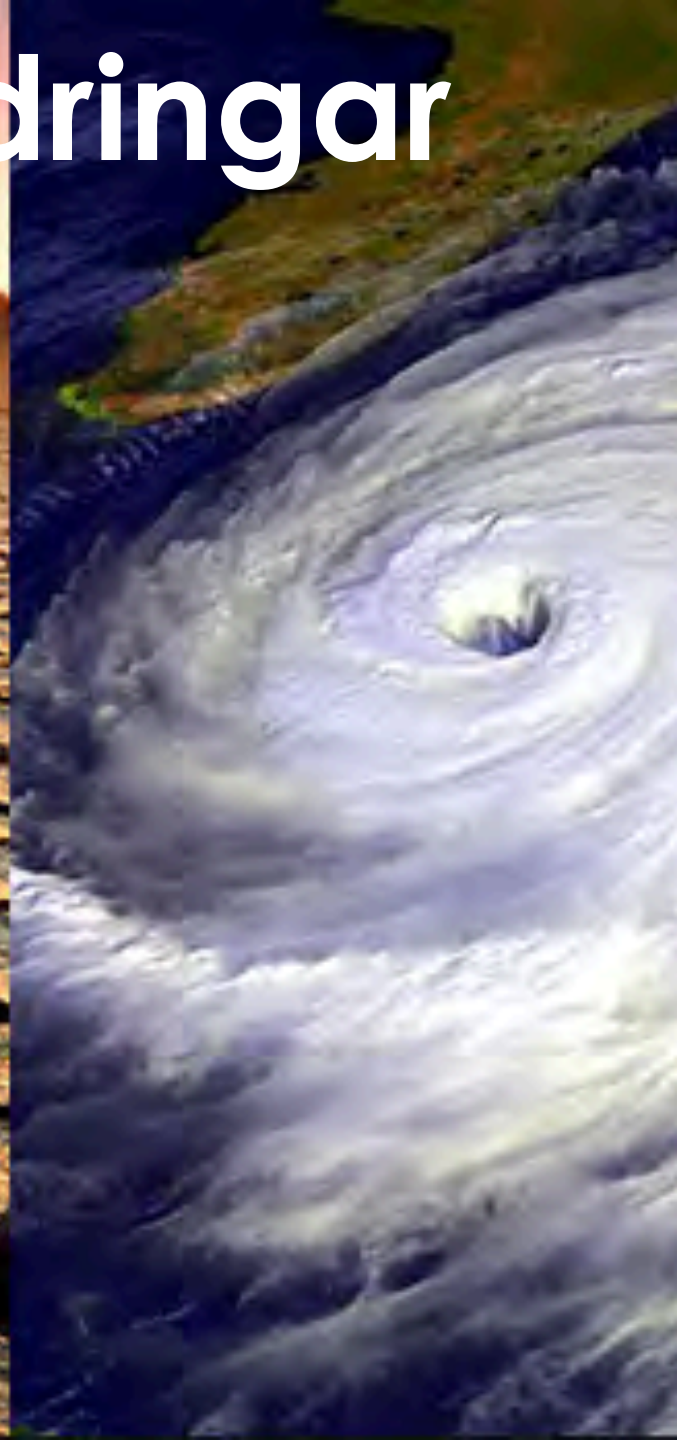
CHEMOTHERAPY DRUG

OBSE

Varna för epidemier



Analysera klimatförändringar



Minimera energianvändning



Optimera solenergi



Livsmedelsförsörjning med minimalt uttag av naturresurser



Varna för jordbävningar



Ledningsstöd i katastrofområden



RISK OF FLOODING

HOUSING

GROUNDWATER

SCHOOL

GROUNDWATER

Eliminera djurförsök



Lokalisera tjuvjägare



Hitta plaster i haven



Förhindra penningtvätt



Anpassa utbildning



Förenkla samhällstjänster



Exempel vardagliga tillämpningar ✨

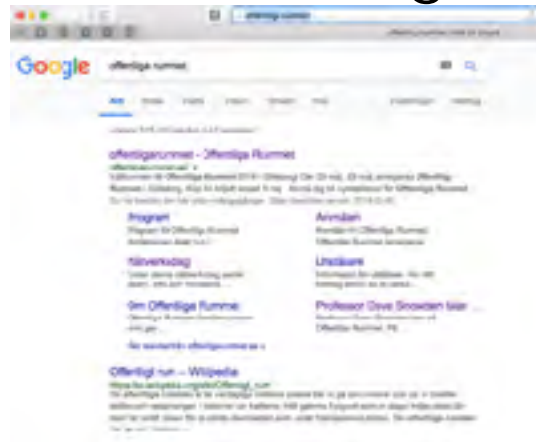
Använda kreditkort



Nya kontakter



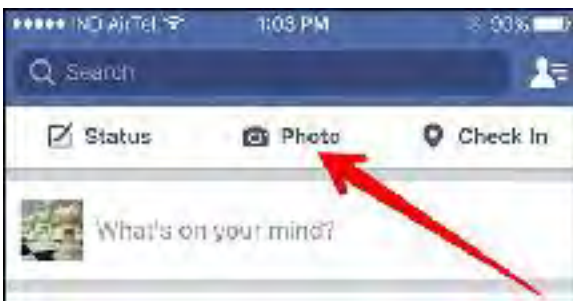
Sökning



Ansiktsigenkänning



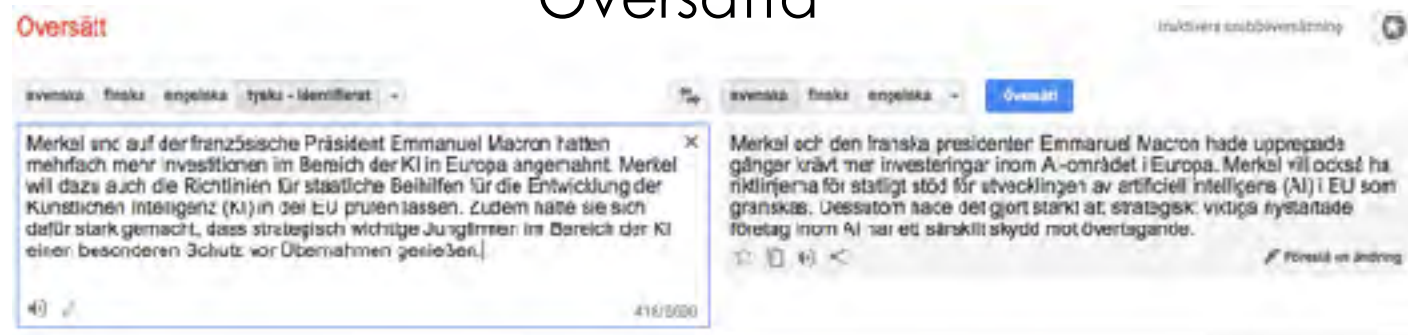
Ladda upp bilder



Slippa skräpmail



Översätta



Mer synlig AI i USA



Intelligenta assistenter

Robotar i stan

Termostater

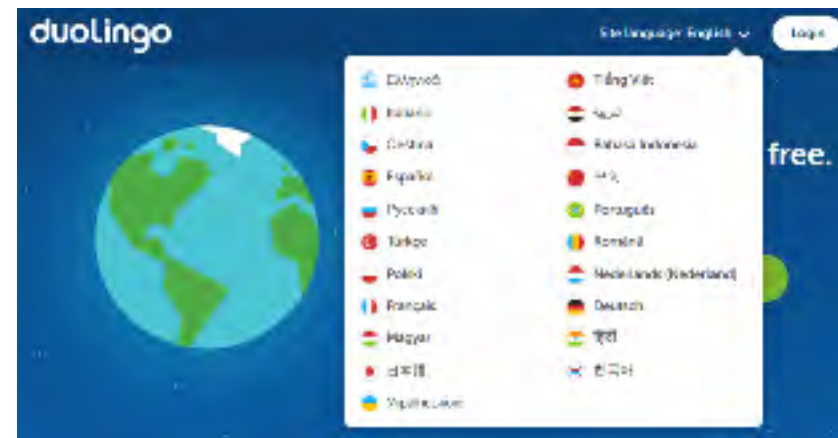
Smarta leveranser



Stöd till ideella föreningar

Språkinläring

Självkörande bilar



HR



Ekonomi



Juridik

5. NONHIRE OF COMPANY EMPLOYEES. To further preserve the rights of the Company pursuant to the non-disclosure covenant discussed above, and for the consideration promised by the Company under this Agreement, during the term of the Employee's employment with the Company and for ~~Deleted in 1 document.~~ months thereafter, regardless of the reason for termination, the Company and Employee will not, directly or indirectly, (i) hire any current or prospective employee of the Company, or any subsidiary or affiliate of the Company (including, without limitation, any current or prospective employee of the Company within the 6-month period preceding the Employee's last day of employment with the Company or within the 18-month period of this covenant) who worked, works, or has been offered employment by the Company and with respect to whom Employee had any role, direct or indirect, in recruiting on behalf of the Company or who was, or would have been, a direct report of Employee in his position at the Company; or (ii) solicit or encourage any such employee to terminate their employment with the Company, or any subsidiary or affiliate of the Company, or act as a solicitor of

IT



Säkerhet



Kundtjänst



Prediktivt underhåll



The screenshot displays the KONE 24/7 Connect mobile application interface. At the top, it shows the KONE logo and the title "KONE 24/7 Connect". Below the title, a status bar indicates "REMOTELY MONITORED PORTFOLIO". The main content area features a large banner with a checkmark icon and the text "5 / 6 elevators in service". Below this, an "EQUIPMENT OVERVIEW" section displays a grid of six elevator status cards. Each card shows an elevator icon with a status indicator (green circle for normal, red triangle for not in service) and a text description. The third card from the left indicates "Not in service" and "Technician notified". Below the overview, there are sections for "EQUIPMENT USAGE" and "FLOOR ACTIVITY".

KONE 24/7 Connect

REMOTELY MONITORED PORTFOLIO

KONE is constantly monitoring the performance and safety of your equipment.

✓ 5 / 6 elevators in service

Next check is proceeding as we speak

EQUIPMENT OVERVIEW

Mikrosol street 10 A	Mikrosol street 10 B	Mikrosol street 10 C	Mikrosol street 10 A	Mikrosol street 10 A	Mikrosol street 10 A
Operating normally Alarm equipment OK	Operating normally Alarm equipment OK	Not in service → Technician notified	Operating normally Alarm equipment OK	Operating normally Alarm equipment OK	Operating normally Alarm equipment OK

EQUIPMENT USAGE

STARTS

FLOOR ACTIVITY

SL upptäcker felet innan de uppstått



A construction worker wearing a blue jacket and a yellow hard hat is holding a rolled-up blueprint. The background is a blurred construction site with a blue sky.

State of the Construction Sector

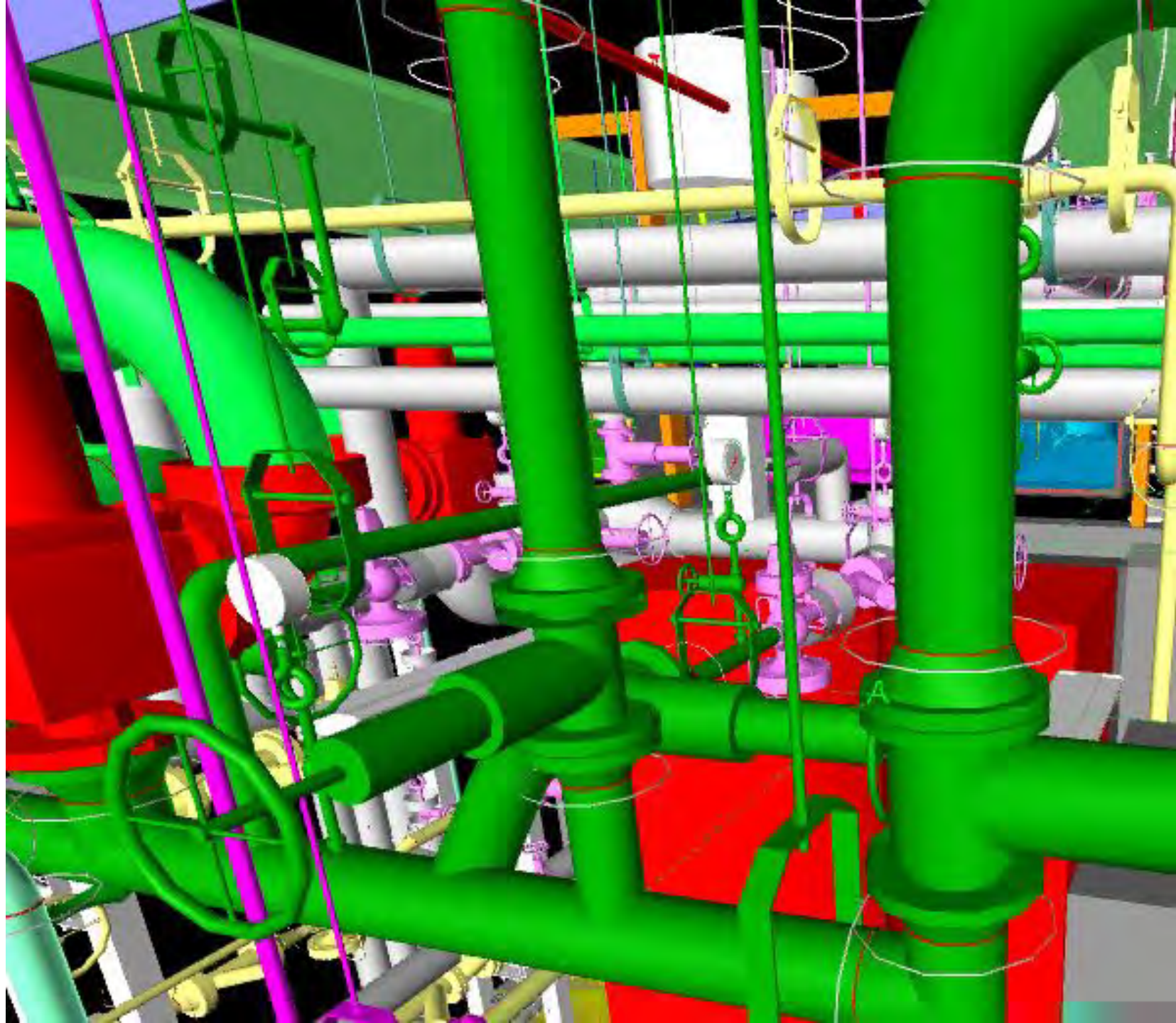
“While the customers to the engineering and construction sector are increasingly sophisticated using AI, the sector itself is lagging severely.”

McKinsey

Tidiga varningar för planeringsrisker



**Återanvändning
av lärdomar från
tidigare
designprojekt**



Analysera pågående byggnation

MECHANICAL

ELECTRICAL

PLUMBING

78.30%

42.61%

83.26%

Actual/Targeted Production Rate=78.2%

Smarta anläggnings- maskiner



Identifiera säkerhetsrisker i realtid

POLICY VIOLATION: SPILL



STORAGE AREA 04



Fluor använder AI i stora projekt för att prediktera, övervaka och beräkna status på konstruktion, inköp och tillverkning

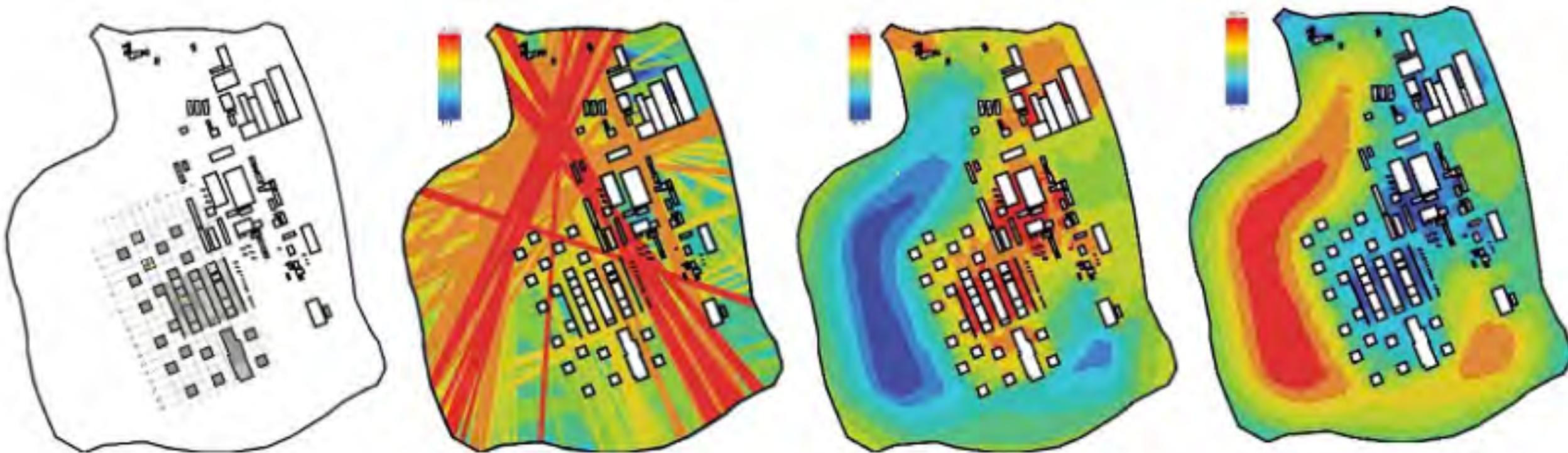
Fler nyttor med AI inom konstruktion

- Komplexa konstruktioner på kort tid
- Kalkylera tid och kostnad
- Riskkalkyler
- Kategoriserar och föreslår åtgärder för risker
- Analyserar kontinuerligt underleverantörer

Stadsplanering

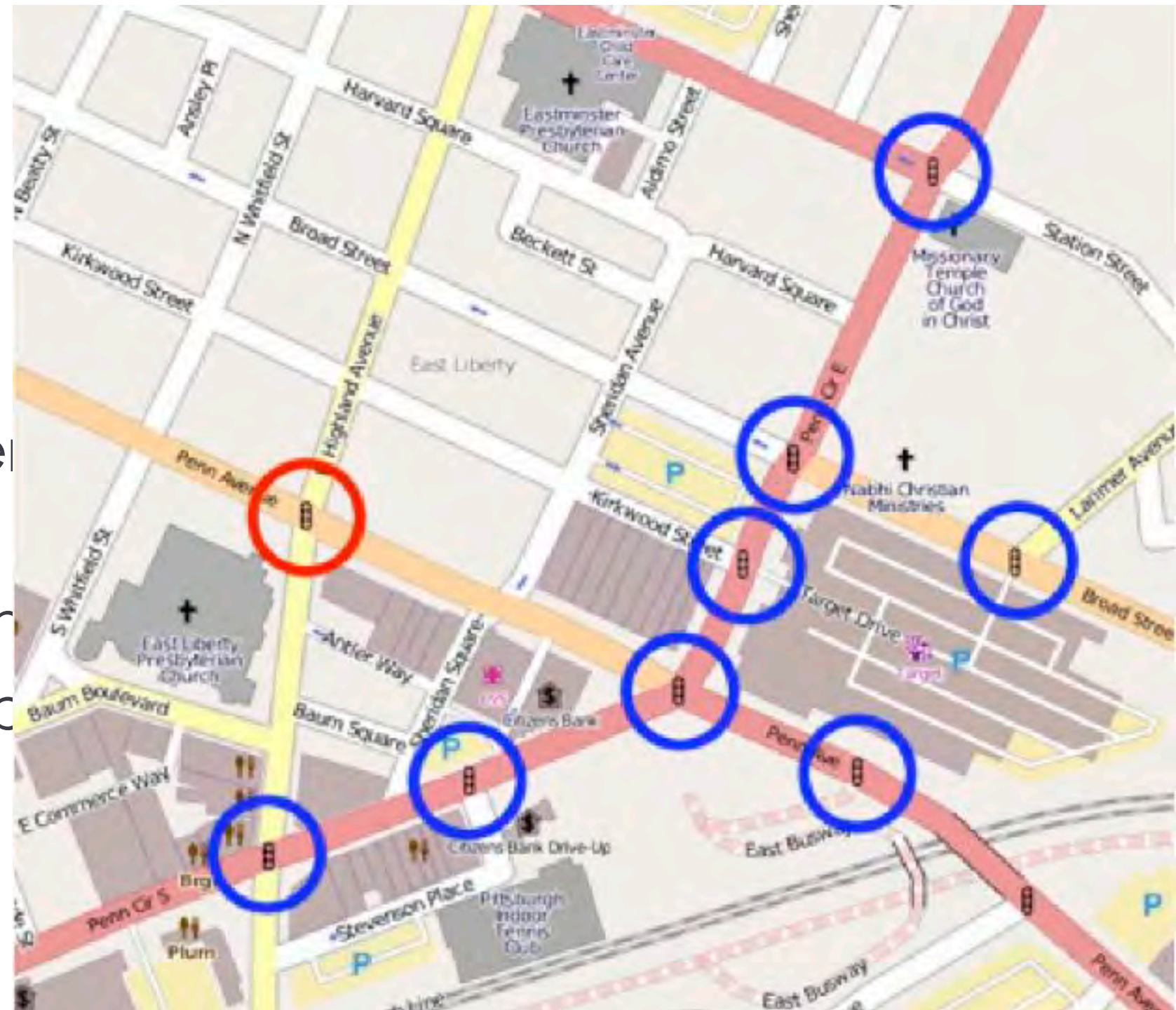


- ✦ Identifiera potentiella "Main Streets"
- ✦ Utvärdering av befintliga stadsmiljöer
- ✦ Planering infrastruktur
- ✦ Stöd för fördomsfri stadsplanering



Smarta trafikljus i

- ✦ 25% kortare restider
- ✦ 31% färre stopp
- ✦ 40% kortare väntan
- ✦ 21% mindre utsläpp





Smarta trafikflöden
i Köpenhamn

Självkörande matarbussar i Barkaby

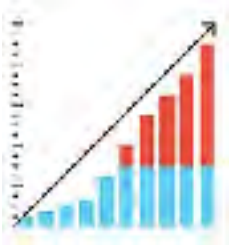




Toronto



Nyttor



Effektivitet



Kundnöjdhet



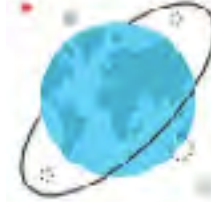
Arbetsmiljö



Insikt



Säkerhet



Hållbarhet



Kvalitet



Rättsäkerhet



Insikter om passagerares preferenser och beteenden

1 Tänk stort

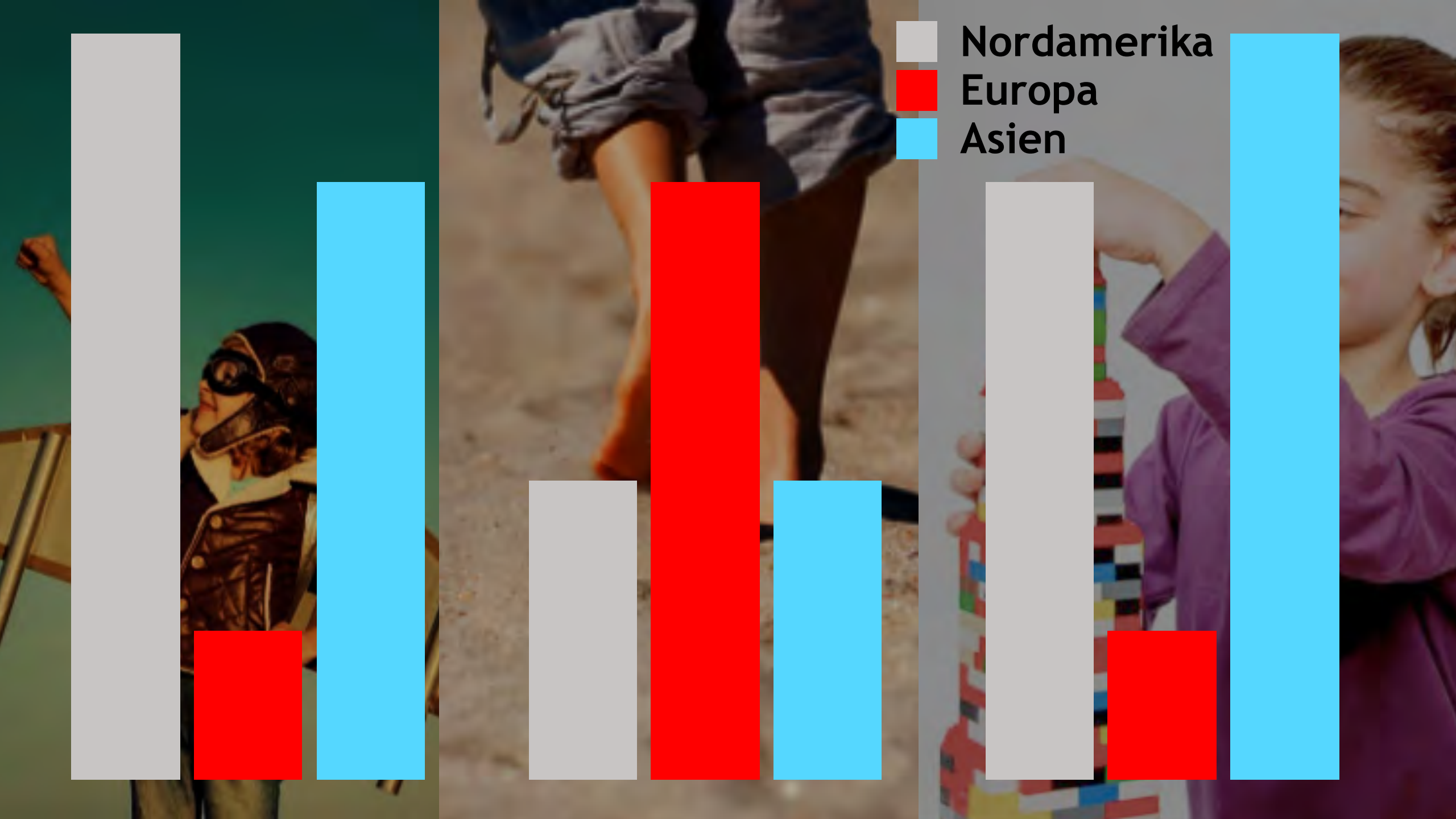


3 Skala snabbt

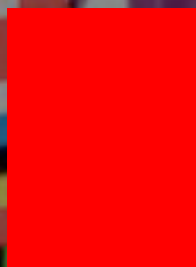
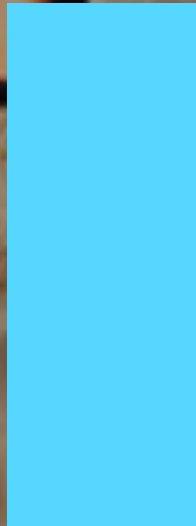
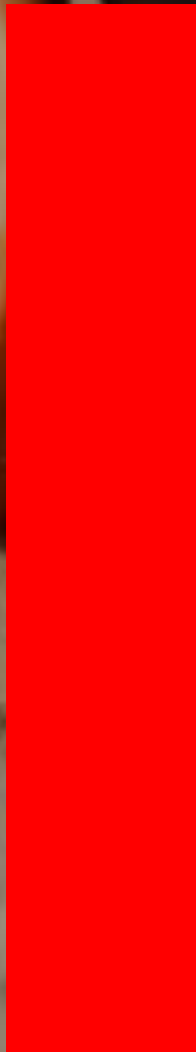
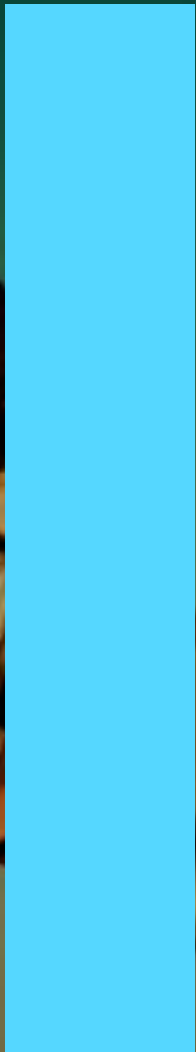
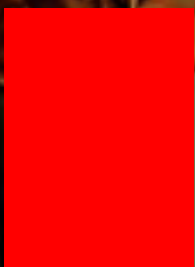
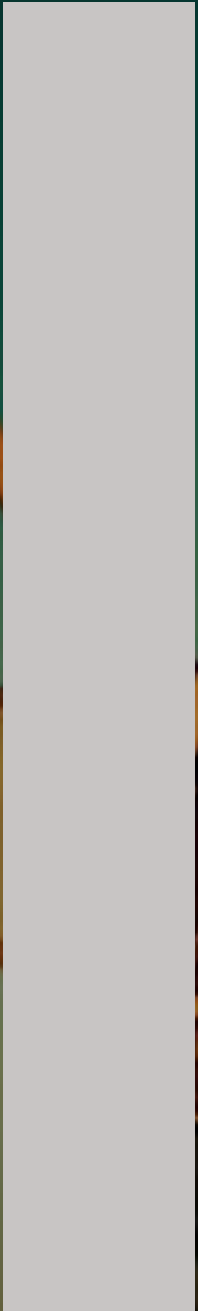


2 Börja enkelt





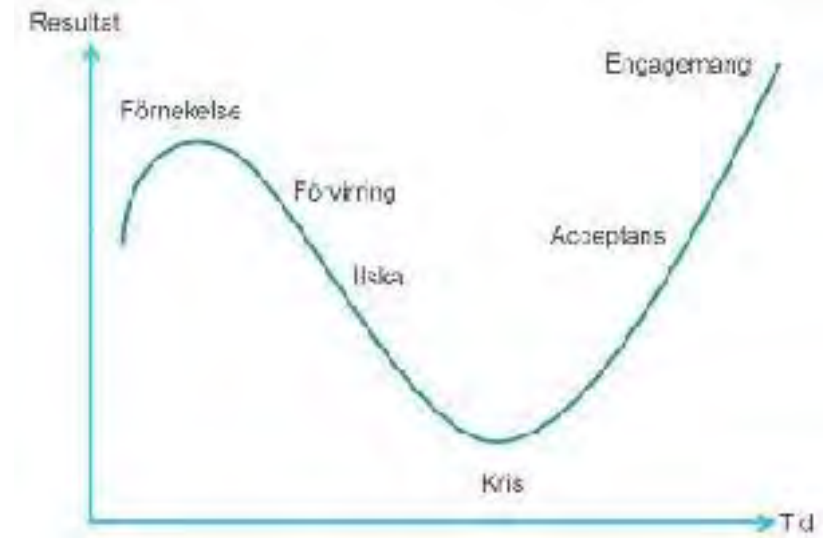
■ Nordamerika
■ Europa
■ Asien



Strategisk kompetens



Förändringsledning



AI-kompetens



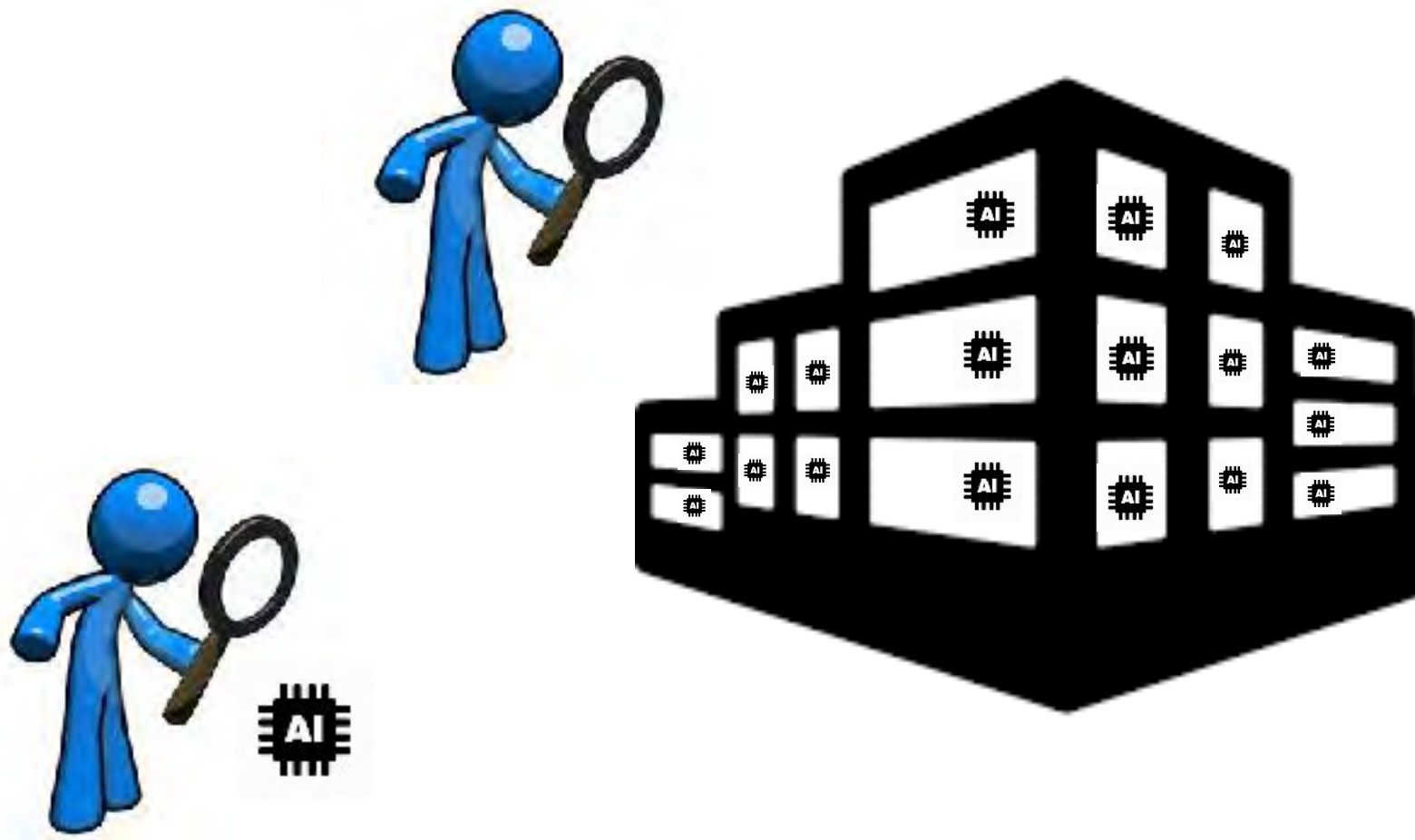
Hantera data strategiskt



AI-strategi



Strategi med AI ✨



AI inom samhällsbyggnad

An aerial night view of a city, likely Gothenburg, Sweden, showing a large body of water in the foreground and middle ground. The city lights are illuminated, and the sky is a deep blue with a hint of sunset or sunrise. The text is overlaid on the image.

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25 april 2019

Göran Lindsjö

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