

Kommer teknikutvecklingen att göra oss onödiga?

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Lärprojekt Regionalt kompetensbehov. Workshop 6 -
Regional kompetens i framtiden. November 2021



RATIO

Innehåll

- **Gör teknologin oss onödiga?**
- **Prognoser – svåra och viktiga**
- **Återindustrialisering av Sverige**

HEMMA HOS
SKALMAN.

IN I SKÅPET! DU ÄR EN
UPPFINNING SOM
INTE SKA GÖRAS.



DU TOG JOBBET FRÅN
FEM STÄDARE.

INTE BLEV DU
GLAD FÖR DET.

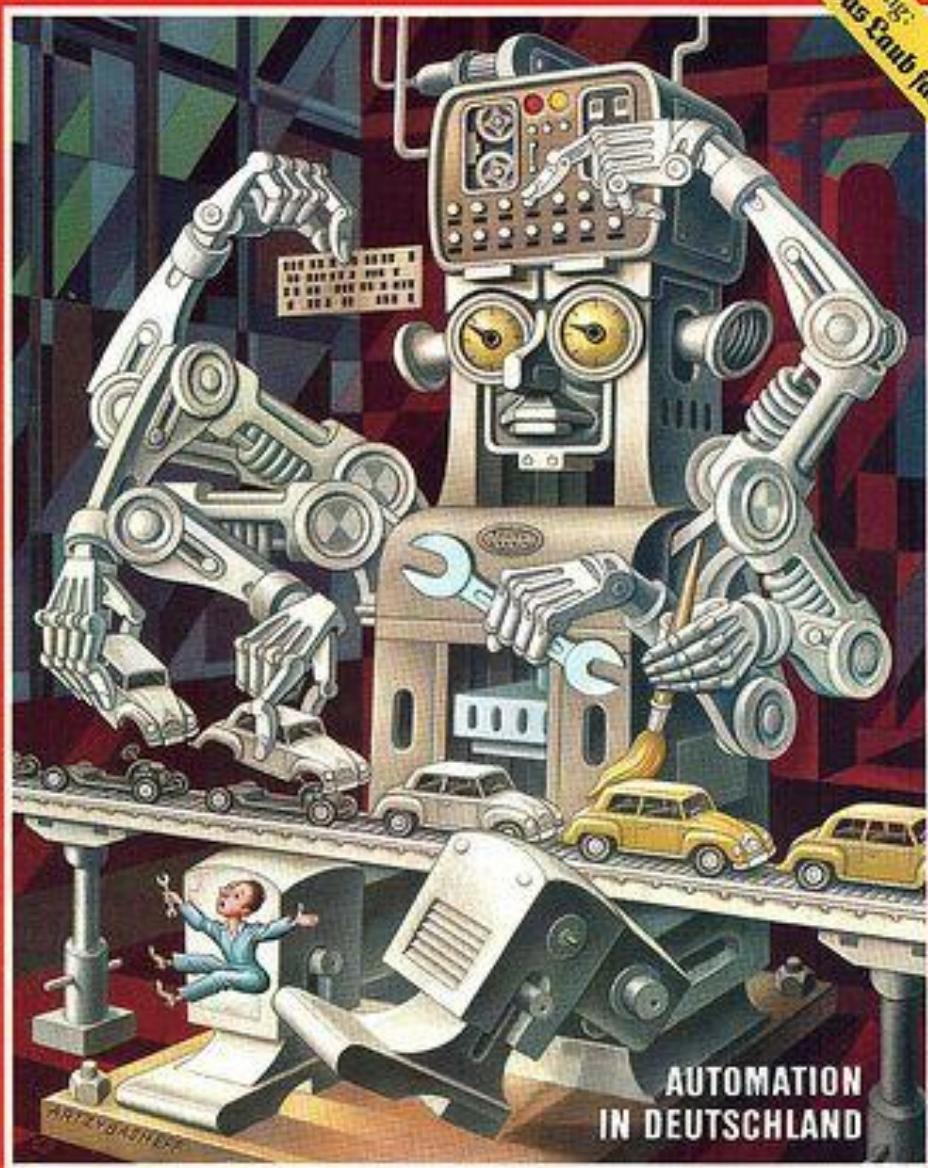


NÄ, EN ROBOT BLIR INTE GLAD FÖR
NÅGONTING.

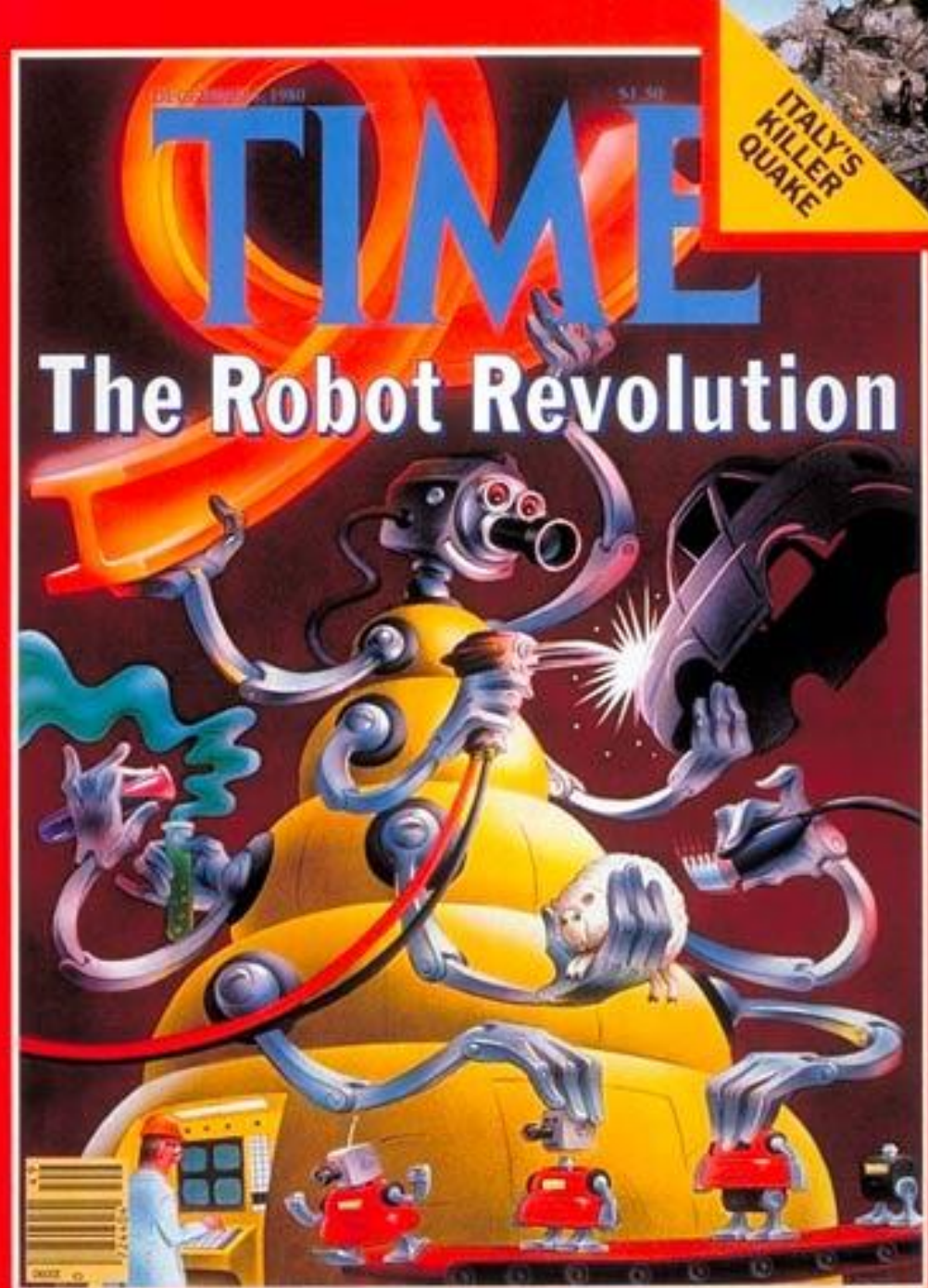
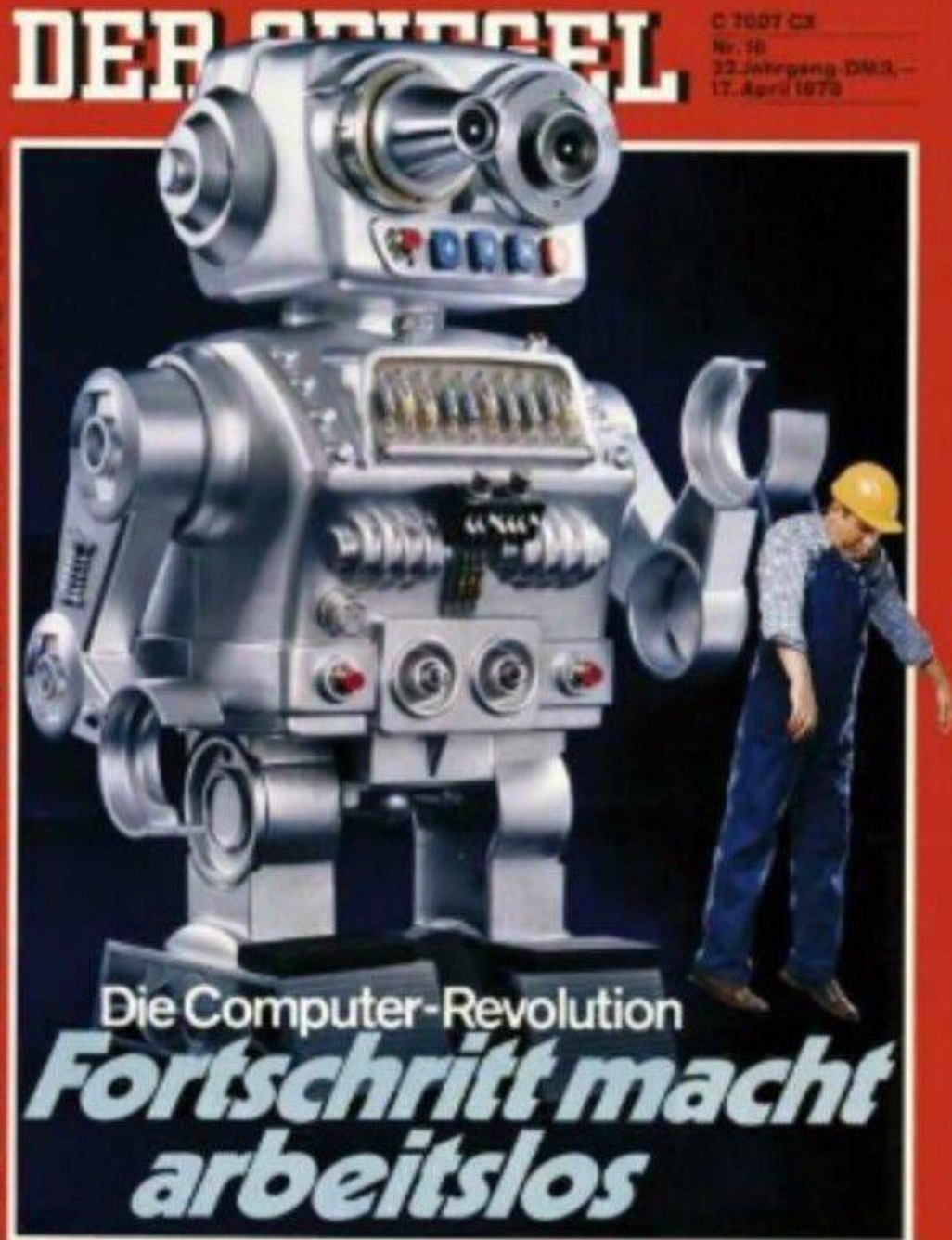
1964
1965

DER SPIEGEL

1964 - NR. 14
DANK - TOM
SCHENK
C 1964 C
3 Fortsetzung:
Dahleim nennt das Laub fällt



1978
1980



Sie sind entlassen!

Wie uns Computer und Roboter die Arbeit wegnehmen –
und welche Berufe morgen noch sicher sind



Sportarzt Müller-Wohlfahrt
Heilende Hände, aber
Probleme mit den Finanzen

Eine ukrainische Karriere
Erst Gefängnis, dann
Präsidentenpalast?

Steinzeit-Drama
Warum Neandertaler
zu Kannibalen wurden

2016
2016



DELLIA'S CLASSIC XMAS

Delicious recipe pullout inside
CENTRE PAGES

BANK CHIEF: ROBOTS TO STEAL 15M OF YOUR JOBS

Doom-laden Carney warns middle classes will be 'hollowed out' by new technology

ROBOTS could put 15million Britons out of work, the Bank of England Governor declared last night.
In an alarming vision for workers, Mark Carney warned many jobs would be 'hollowed out' as huge technological advances meant roles could be automated instead.
The Bank has said the march of the

By **Hugo Duncan**
Deputy Finance Editor
machines in the workplace puts administrative, clerical and production staff most under threat.
And it has even predicted that entire professions, such as accountancy, could be pushed to the brink of extinction as developments in computers make their roles redundant.
Mr Carney claimed that 'up to 15mil-

lion of the current jobs in Britain' – almost half of the 31.8million workforce – could be replaced by robots over the coming years as livelihoods were 'mercilessly destroyed' by the technological revolution.
Deeply worrying forecasts from the Bank say that a new 'machine age' would be particularly devastating for those on lower incomes.
The Governor said: 'The fundamental
Turn to Page 2



Naomi and a night of fashion faux pas

Naomi Campbell at The Fashion Awards last night
PAGES 2 & 3

Svårt att göra prognoser

- **14.** “The cinema is little more than a fad. It’s canned drama. What audiences really want to see is flesh and blood on the stage.” — **Charlie Chaplin, actor, producer, director, and studio founder, 1916**
- **16.** “The Americans have need of the telephone, but we do not. We have plenty of messenger boys.” — **Sir William Preece, Chief Engineer, British Post Office, 1878.**
- **21.** “The idea that cavalry will be replaced by these iron coaches is absurd. It is little short of treasonous.” — **Comment of Aide-de-camp to Field Marshal Haig, at tank demonstration, 1916.**

'It's awful - Why did nobody see it coming?': The Queen gives her verdict on global credit crunch

By SAM GREENHILL FOR THE DAILY MAIL
UPDATED: 00:23 GMT, 6 November 2008



The Queen spoke for the nation yesterday when she asked how the credit crunch could have taken so many economics experts by surprise.

She described the financial crisis as 'awful' and inquired that, since the meltdown was so massive, 'Why did nobody notice it?'

The royal concern was revealed at the London School of Economics, where she opened its £71 million New Academic Building.

Professor Luis Garicano, director of research at the LSE's management department, said: 'The Queen asked me, "If these things were so large, how come everyone missed them?''

It is a question which will resonate with ordinary families baffled at why politicians, bankers and City



© PA
The Queen at the LSE. After a briefing on the origins of the credit crunch, she said the situation was

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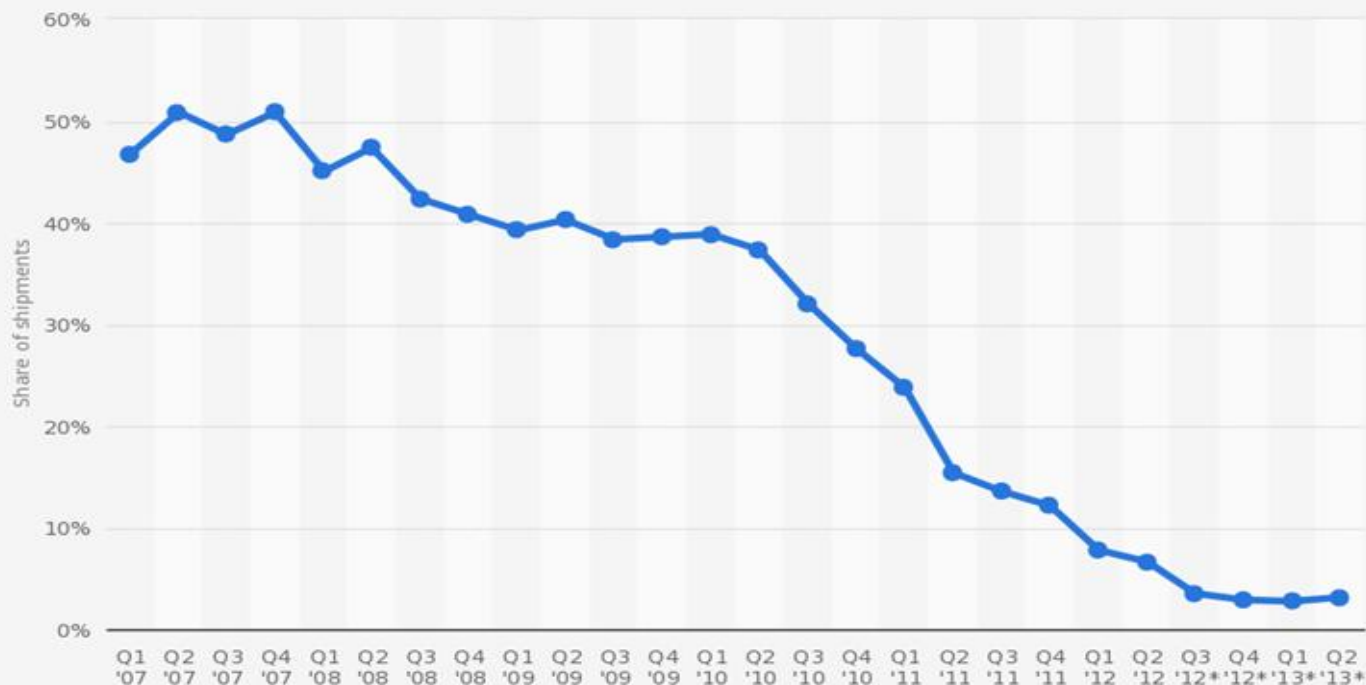
Prognoser för framtiden



Daniel Carlberg & Elisabet Engström



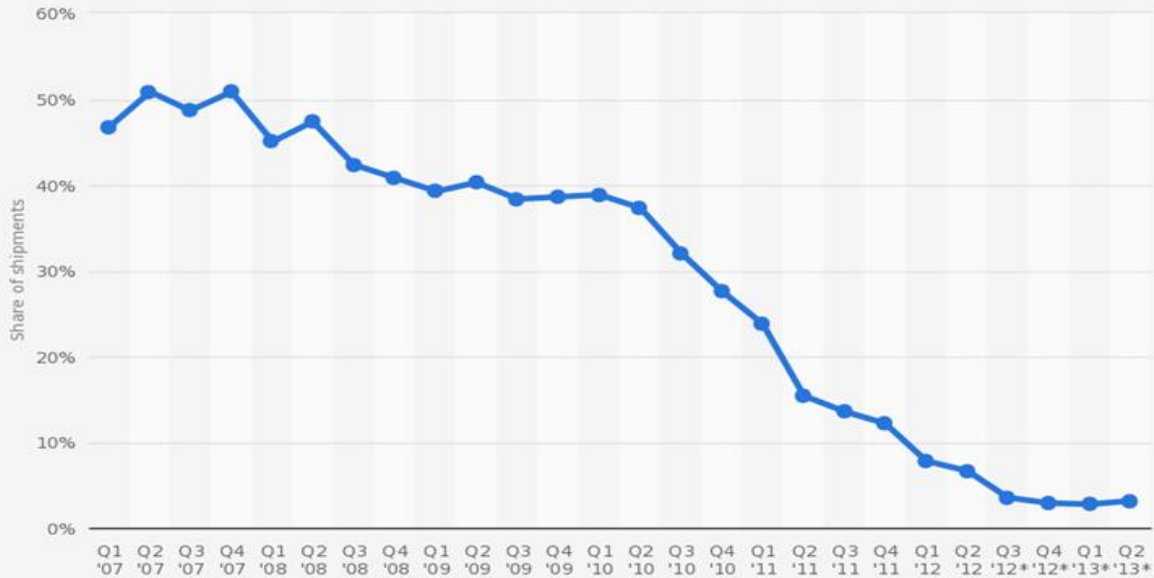
Global market share held by Nokia smartphones from 1st quarter 2007 to 2nd quarter 2013



Sources:
IDC; Nokia; Gartner
© Statista 2014

Additional Information
Worldwide; Gartner, IDC, Nokia

Global market share held by Nokia smartphones from 1st quarter 2007 to 2nd quarter 2013



Sources:
IDC, Nokia; Gartner
© Statista 2014

Additional Information
Worldwide; Gartner, IDC, Nokia

I don't think that what we have seen so far [from Apple] is something that would any way necessitate us changing our thinking when it comes to openness, our software and business approach.

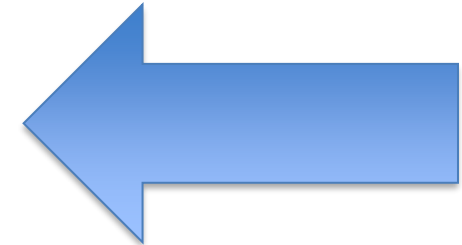
But the fact that Apple is entering the market, in general, I think will stimulate this market, it's very clear. I think it will be good for the industry and I very much welcome that.

Olli-Pekka Kallasvuo

Titcomb, J. (2017). How the world reacted to the first iPhone 10 years ago. The Telegraph 2017-09-12. <https://www.telegraph.co.uk/technology/2017/01/09/world-reacted-first-iphone-10-years-ago/>



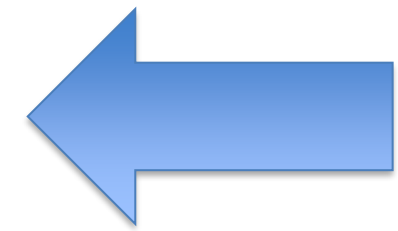
2007 -
Iphone



Teknikutvecklingen går fort



2008 -
Första Tesla



RATIO

Produktion



Produktion 2.0



MODERNA TIDER 4.0

Från kugge i maskineriet till vinnare bland algoritmerna

JONAS GRAFSTRÖM

18 NOVEMBER 2021

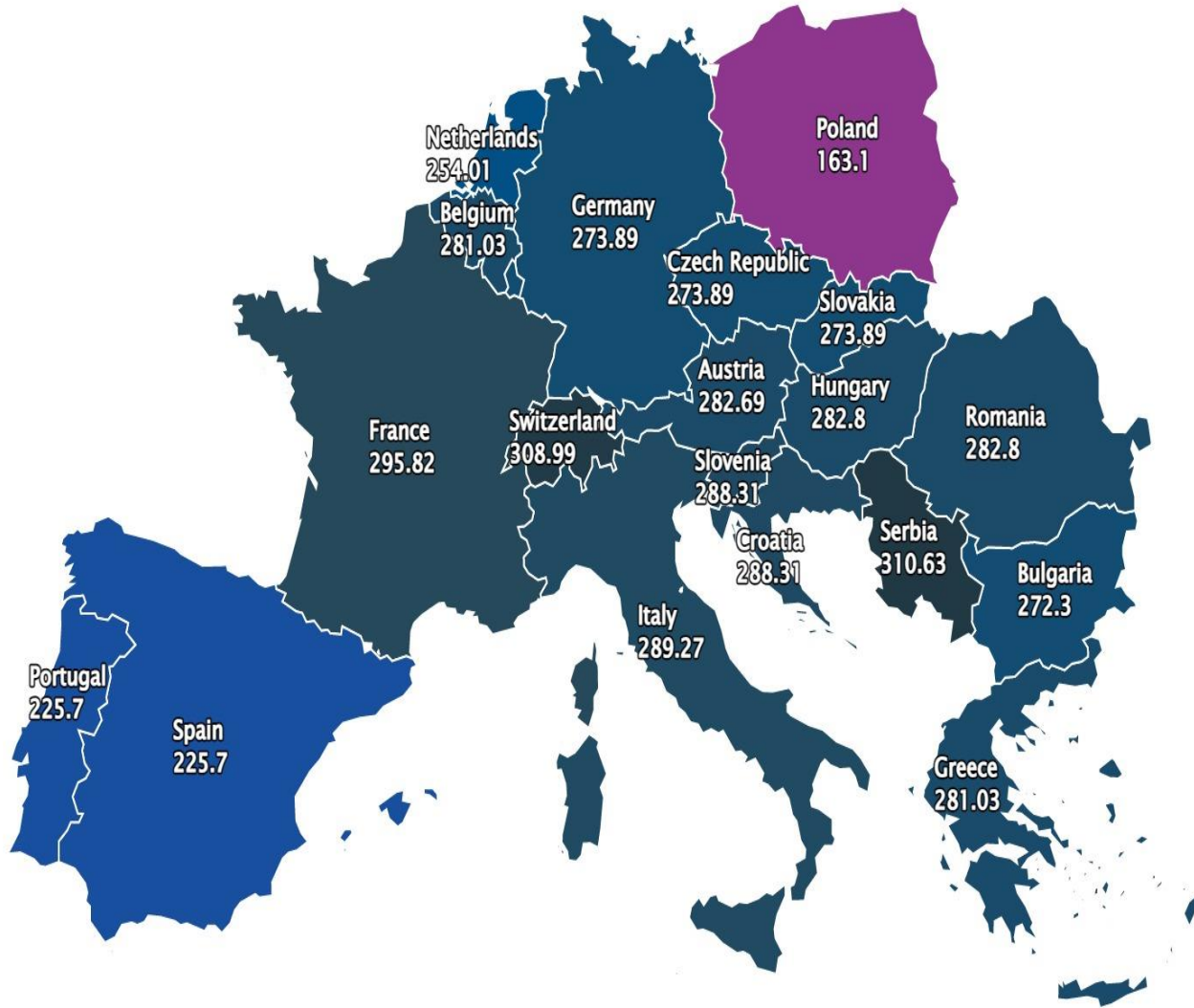
Återindustrialisering

System price:

55.05



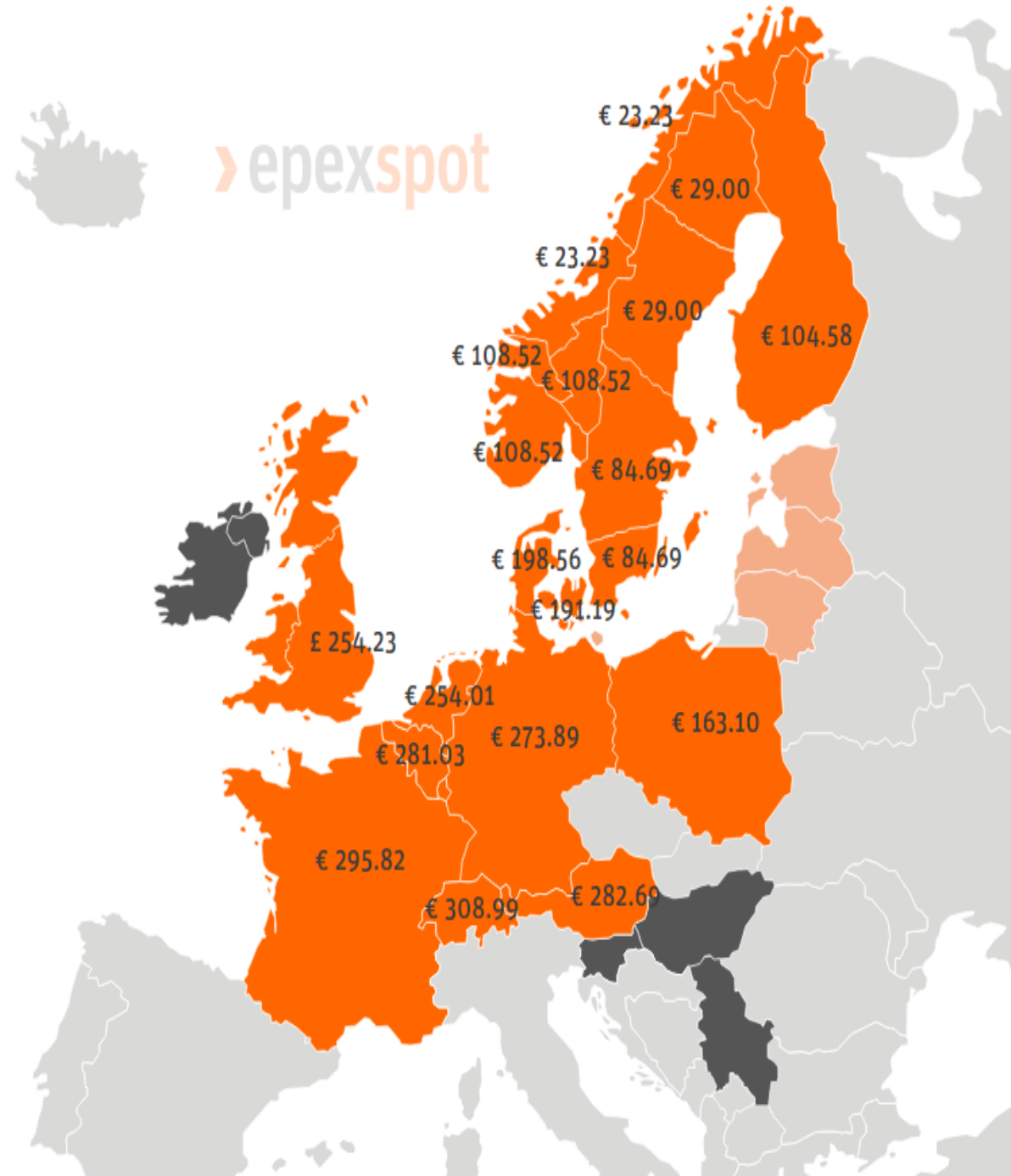
Day-ahead average prices for 2021-11-24



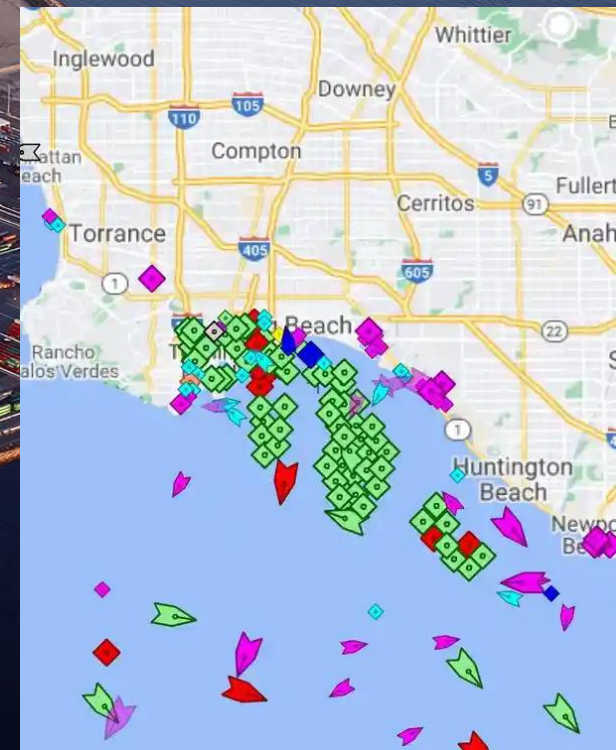
EUR/MWh



150 200 250 300 350



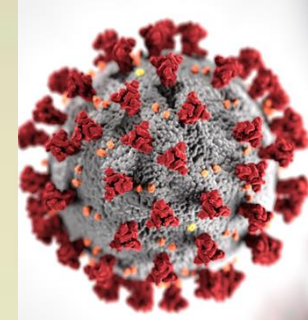
epexspot



Osäker handel

- Fraktpris upp 570% på tolv månader (Shanghai- Rotterdam).
- Osäkra fraktkedjor i och med pandemin.
- Går det att lita på/kritisera Kina? (ex H&M tappade 28% av försäljningen).
- Gränsjusteringsmekanism för koldioxid (CBAM)
- Robotiserade fabriker och 3D utskrift.
- Negativ befolkningstillväxt i Stockholm, Göteborg och Malmö

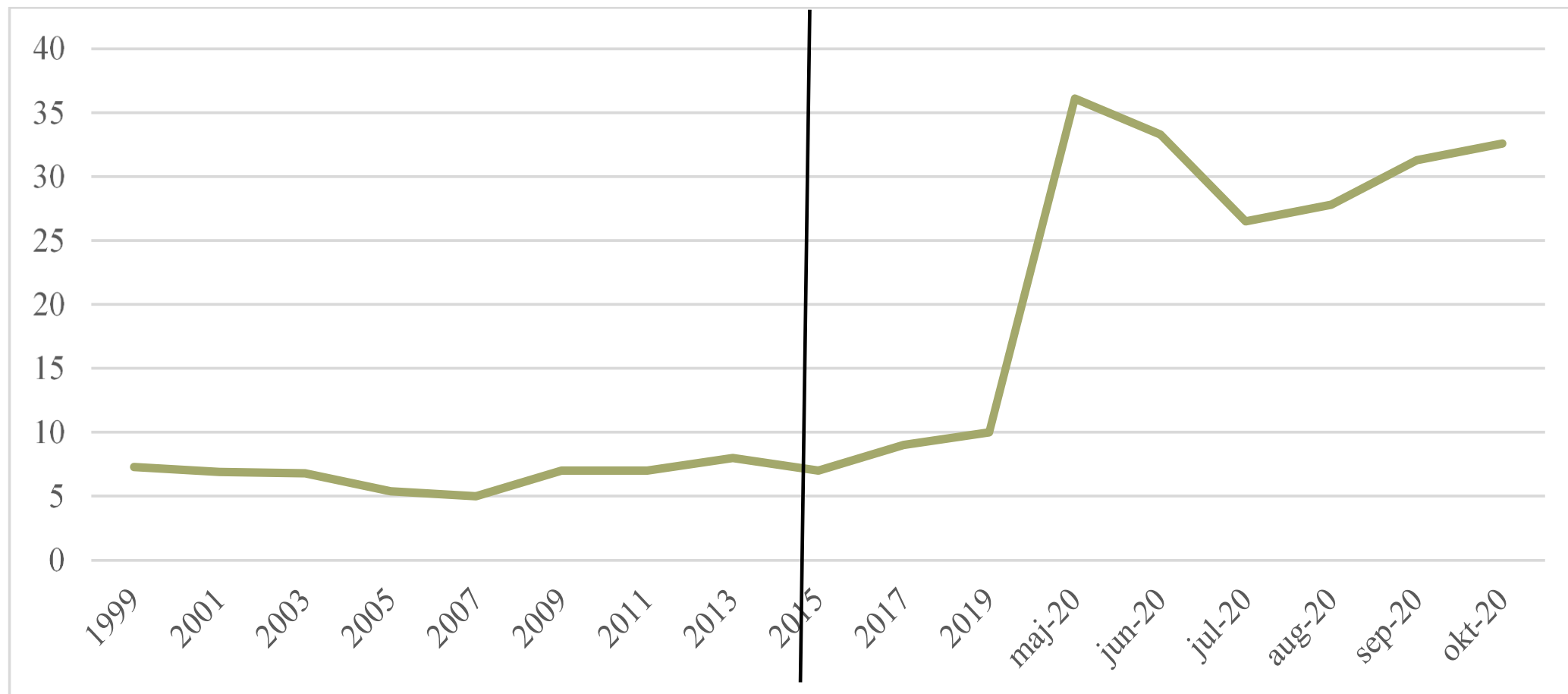
Global Trade Review. September 2021
<https://www.gtreview.com/news/global/freight-costs-keep-surgin-despite-shipping-giants-freezing-prices/>



COVID-19
CORONAVIRUS DISEASE 2019



Diagram 2.1 Omfattningen av arbete hemifrån 1999–2020



Källa: SCB Arbetsmiljöundersökningen (1999-2019). SCB AKU 2020 (maj-okt).

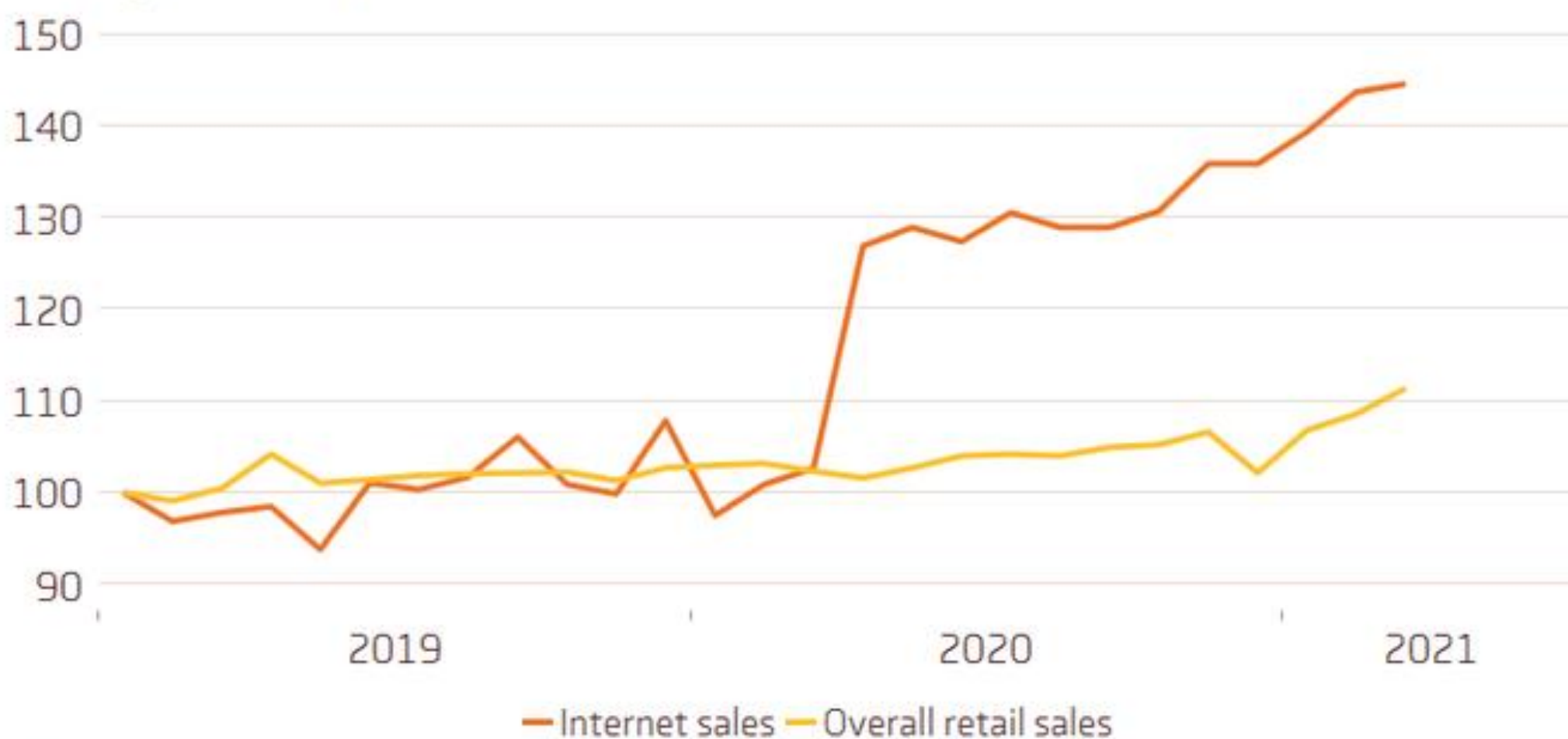
Undersökare	Tid	Positiva effekter	Negativa effekter
Akavia	Juni 2021	Hälften mer produktiva , 73 procent vill fortsätta på distans 2-4 dagar	Ledarskap. Kreativitet, innovationsförmåga. Brist på social kontakt. 2 av 10 har inte fått hjälp att förbättra sin arbetsmiljö.
Vision	Okt 2020	Mer produktiva, nöjda	Arbetsmiljö, kultur. Unga (18-30 år) var mindre nöjda.
ST	Maj 2020	46 procent är mer eller mycket mer produktiva. 7 av 10 vill arbeta mer på distans än innan pandemin. Kvinnor är mer positiva. Chefer kan stötta, men yngre chefer vill ha kontroll.	Saknar socialt samspel.
SIFO	Apr 2021	Påverkar arbetet positivt enligt 34 procent. Kvinnor mer positiva. 82 procent tycker att de digitala mötena fungerar bra och 63 procent tycker att de har bibehållit sitt engagemang.	Påverkar arbetet negativt enligt 33 procent.
Tele2 (SIFO)	Feb 2020 Apr 2020 Nov 2020	Unga och kvinnor trivs bäst. 6 av 10 vill arbeta mer på distans än innan pandemin. Lika många upplever att de är lika effektiva som innan.	Tillfredsställelsen minskar över tid , särskilt hos unga. Många saknar det sociala. Svårt med gränsdragning arbete-fritid. Ökad stress.
Internetstiftelsen	2019 Kv.1 2020 Kv.3 2020	80 procent upplever att distansarbetet fungerat bra, hälften hade ingen tidigare erfarenhet. Många vill arbeta mer på distans än innan pandemin.	Skillnader i befolkningen där resursstarka har större möjligheter till distansarbete. Har fungerat sämre för unga (16-25 år).
TCO	Sep 2020 April 2021	9 av 10 vill arbeta mer på distans än innan pandemin. 7 av 10 är nöjda och har fått det lättare att få ihop livspusslet. Slopade pendlingsresor.	8 av 10 saknar social kontakt med kollegor. 3 av 10 har ergonomiska problem.

Handeln



Retail Sales in Sweden (volumes)

Index, jan 2019=100



Internet sales as a percentage of total retail sales (ratio) (%)



— Internet sales as a percentage of total retail sales (ratio) (%)

Source:

Handeln 2.0



Logistik och transport

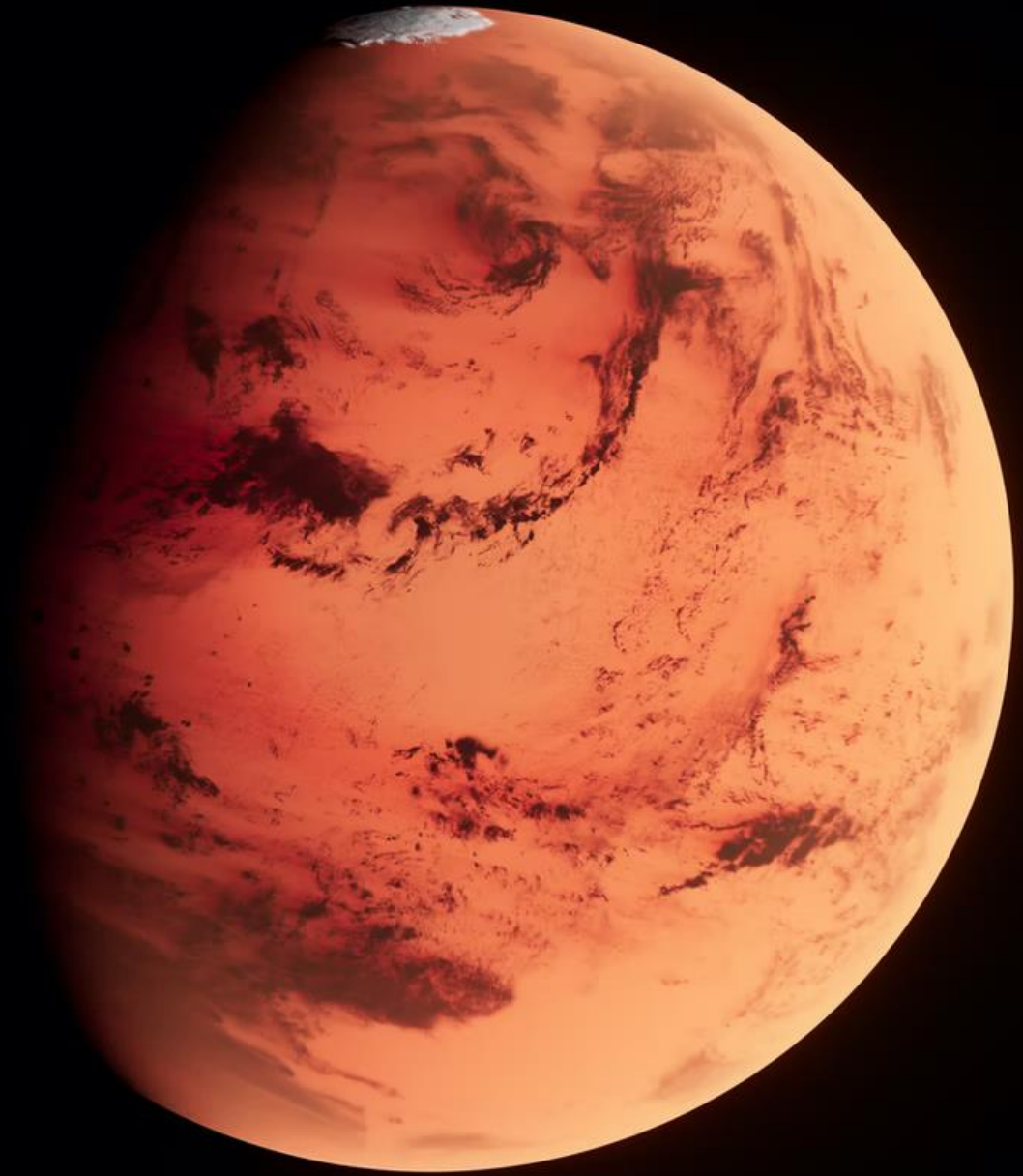
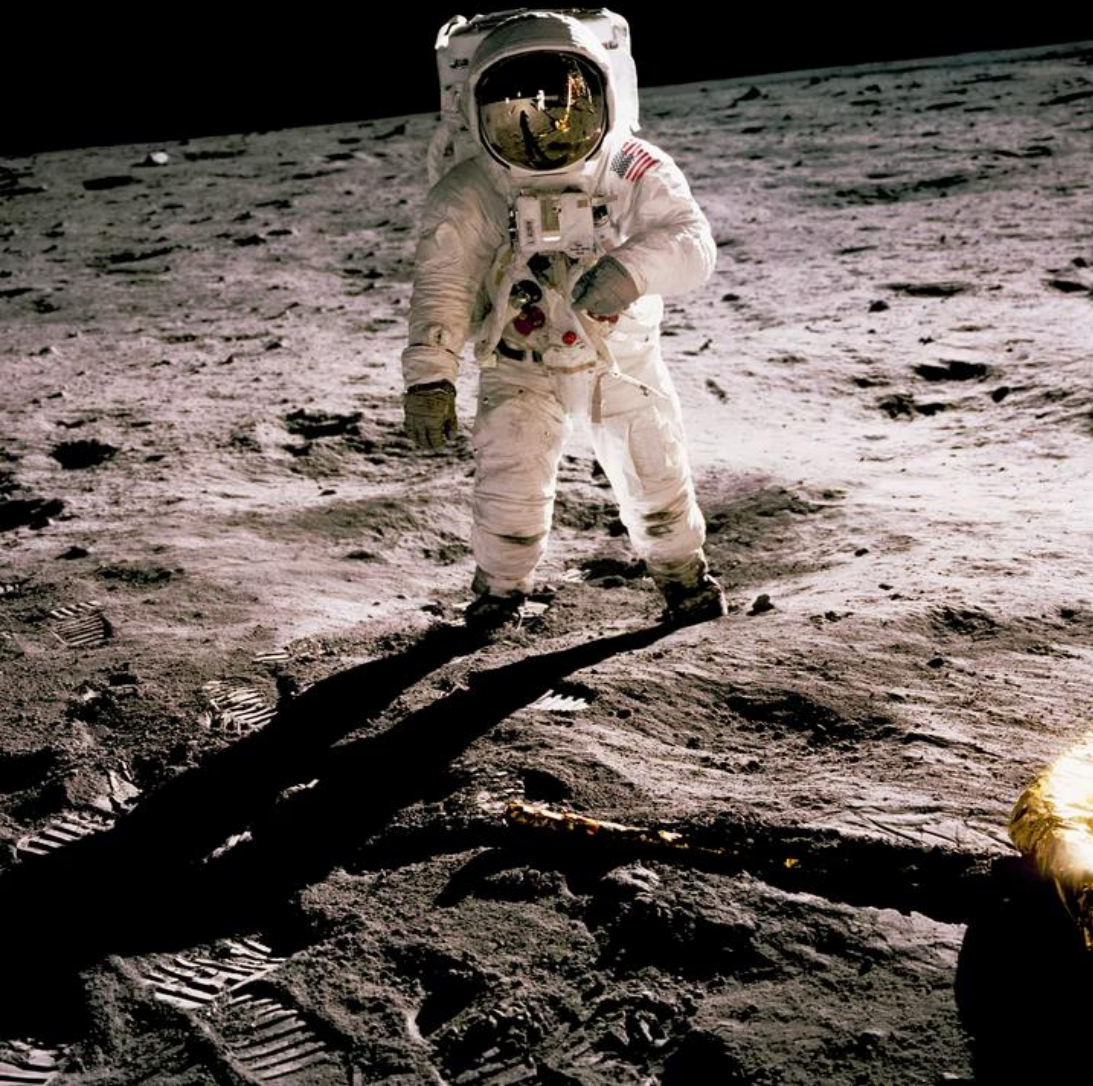


Logistik 2.0



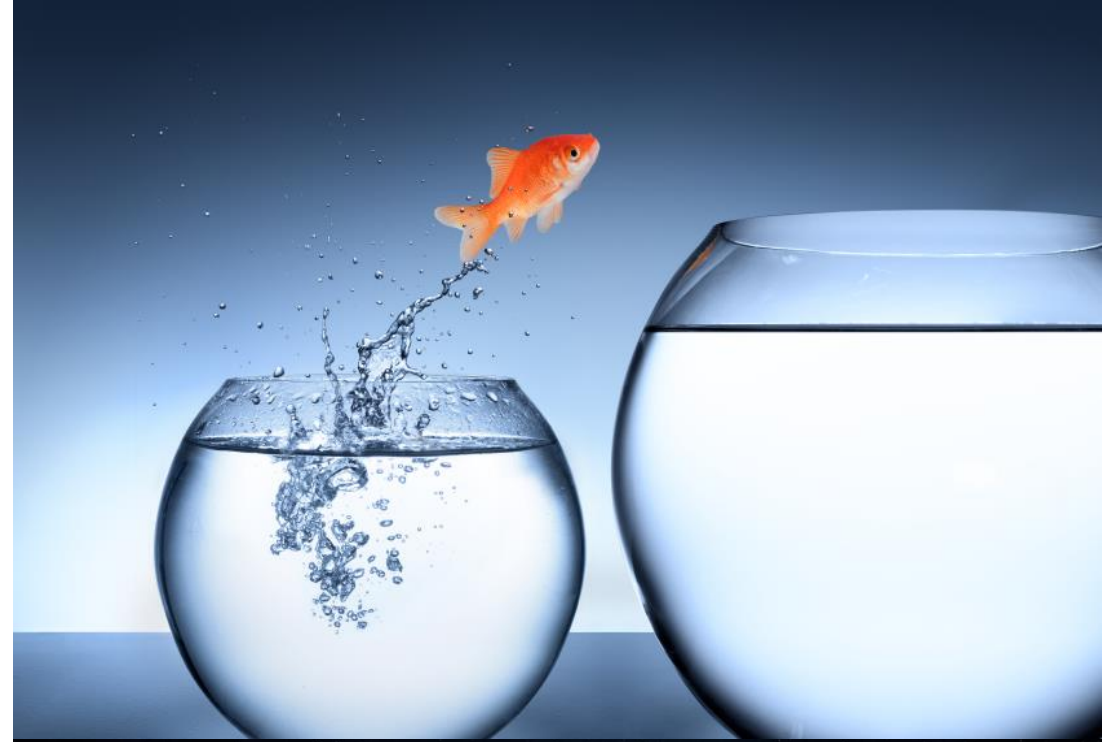
Framtidens kompetens

Ett normalt arbetsliv? 1969-2026



Framtidens kompetens

- ”I slutet av september 2021 var närmare 388 000 personer inskrivna arbetslösa. *Samtidigt råder det brist på arbetskraft i hela landet.* I september annonserades närmare 124 000 lediga jobb i Platsbanken (Arbetsförmedlingen, 2021).”
- Längre arbetsliv (Månlandning 1969 till Marslandning 2026?)
- Lära sig att lära om
- Nätverkande
- Byt jobb



**It's Difficult to Make Predictions, Especially About the Future -
Nils Bohr**

That's all Folks!

