Perspektiv på informationsteknologi

Ola Leifler 2022-08-30



IT och effektivisering



Effektivisering - energi

Computing efficiency, 1971 to 2015



Computer processing efficiency, measured as the number of watts needed per million instructions per second (Watts per MIPS).







Energianvändning



IEA, Electricity total final consumption by sector, 1971-2018, IEA, Paris https://www.iea.org/data-and-statistics/charts/electricity-total-final-consumption-by-sector-1971-2018 TOPICAL REVIEW • OPEN ACCESS Digitalisation of goods: a systematic review of the determinants and magnitude of the impacts on energy consumption Victor Court^{1,2} and Steven Sorrell^{3,1} Published 13 March 2020 • © 2020 The Author(s). Published by IOP Publishing Ltd Environmental Research Letters, Volume 15, Number 4

Results/Synthesis. We identify 31 relevant studies that we sort into five categories, namely: 'epublications' (e-books, e-magazines and e-journals); 'e-news'; 'e-business'; 'e-music'; and 'e-videos and games'. All but one of the 31 studies use life-cycle analysis and employ a range of product-

we cannot conclude that e-materialisation has delivered significant energy savings to date or is likely

to do so in the future.



Annual working hours per worker



Average working hours per worker over a full year. Before 1950 the data corresponds only to full-time production workers (non-agricultural activities). Starting 1950 estimates cover total hours worked in the economy as measured from primarily National Accounts data.





Capitalism

Why Capitalism Creates Pointless Jobs

It's as if someone were out there making up pointless jobs just for the sake of keeping us all working.





1960



Fig. 4 – Productivity of the U.S. health care system, 1930–1982 (data from Worthington [1975, p. 5] and U.S. Bureau of the Census (1983, pp. 73 and 102)). Productivity index = (Life expectancy)/(National health expenditures as percent of GNP).

Fig. 1 – The marginal productivity of increasing complexity. At a point such as B1, C3, the costs of complexity exceed the benefits, and complexity is a disadvantageous approach to problem solving (after Tainter, 1988, p. 119).

"Human institutions are always, in part, problem-solving systems, and the major problem they face is sustaining themselves. Problem solving is an economic process, in which costs are assumed and benefits gained. Efforts at problem solving, as seen in the examples of **producing resources and producing information, commonly evolve along a path of increasing complexity, higher costs, and declining marginal returns**." [Tainter, 2006]

IT och sociala effekter



Arbetsmiljö Arbetsrätt Debatt Globa Ledare Löner & Avtal Val 2022 Verkty MENY

ARBETSMILJÖ

SJ-personal protesterar mot schemakaos – vägrar övertid

Kaoset på SJ fortsätter. 300 SJ-anställda i Västsverige har bestämt sig för att säga nej till all frivillig övertid i protest mot det nya schemasystemet. "Ett slags lågintensivt motstånd", säger en lokförare.



SJ:s kaos: "Personalen upplever hjärtklappning och blöder näsblod"

SJ Publicerad 30 dec 2021 kl 17.12

Tvära kast i scheman försvårar för privatlivet

Elias Cataño Cayetano som är fackordförande för ombordpersonal på SJ Stockholm berättar om den ohållbara situationen personalen ställs inför.

Why Amazon's Automated Hiring Tool Discriminated Against Women



By Rachel Goodman, Staff Attorney, ACLU Racial Justice Program OCTOBER 12, 2018 | 1:00 PM

TAGS: Women's Rights in the Workplace, Women's Rights, Privacy & Technology

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In 2014, a team of engineers at Amazon began working on a project to automate hiring at their company. Their task was to build an algorithm that could review resumes and determine which applicants Amazon should bring on board. But, according to a Reuters report this week, the project was canned just a year later, when it became clear that the tool systematically discriminated against women applying for technical jobs, such as software engineer positions.





Making Sense of the World



6X faster Fake news spreads six times faster than true news According to researchers, this is because fake

news grabs our attention more than authentic information: fake news items usually have a higher emotional content and contain unexpected information which inevitably means that they will be shared and reposted more often.

PEER-REVIEWED · Vosoughi, S., Roy, D., & Aral, S., 2018. Science 7

Anger is the emotion that travels fastest and farthest on social media, compared to all other emotions. As a result, those who post angry messages will inevitably have the greatest influence, and social media platforms will tend to be dominated by anger.

PEER-REVIEWED · Fan, R., 2014. PLoS ONE 7

Kursupplägg





Olika delmoment

- Basgruppsarbete
- Kommunikation
- Lärande
- Projekt



Projekten

- Syftet: att få perspektiv på utvecklingen och användningen av IT-system genom att intervjua både användare och utvecklare av system
- Egen planering, påbörjas i veckan. 80h för projektet, för varje gruppmedlem
- Ni hittar lämpliga intervjupersoner.



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Arbetsfördelning ☆ 📀 Sparat på Drive

Arkiv Redigera Visa Infoga Format Data Verktyg Tillägg Hjälp Senaste ändringen gjordes den 1 april

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3	Uppgift:							
4	Mötestid BG1:	x	4,5	х	5	х	4,5	х
5	Mötestid Ola:	x	6	х	7	х	7	х
6	Panelsamtal:			х	2			
7	Intervju Student:			х	2	х	2	Γ
8	Tid intervjufrågor:			х	2	х	2	
9	Research Lisam		1	х	3	х	1	x
10	Jävla skitsystem:			х	8	х	4	х
11	Läsa intervjuteknik:		1	х	0,5	х	0,5	х
12	Intervju Examinator:							
13	Förberedelse Intervju:		2					
14	Formatera Rapportstruktur:							
15	Skapa tidrapporteringssystem:					х	4	
16	Sammanfattning intervju		3	х	1,5			
17	Lyssnat på intervju med Peter		1	х	1	х	1	
18	Interjvu med utvecklare		0,5					
19	Lyssnat på intervju med Axin		1	х	1	х	1	
20	Lyssnat på intervju med Asplund		0,75	х	0,75	x	1	
21	Formatterat om rapport							Г

Projekt

- Basgrupp 1: **Epassi** för hantering av friskvårdsersättning. Handledare Truls Löfstedt.
- Basgrupp 2: Skolplattformen **Unikum**. Handledare Aseel Berglund.
- Basgrupp 3: **NyA-webben** för reservantagning av studenter till fristående kurser. Handledare Hannah Pelikan.
- Basgrupp 4: Tyra-appen för föräldrar och personal på förskolor. Handledare Lena Buffoni.
- Basgrupp 5: (IVU/Rapid2) som tågplaneringssystem. Handledare Ola Leifler.



Gruppuppstart

• Med handledare 9-10

