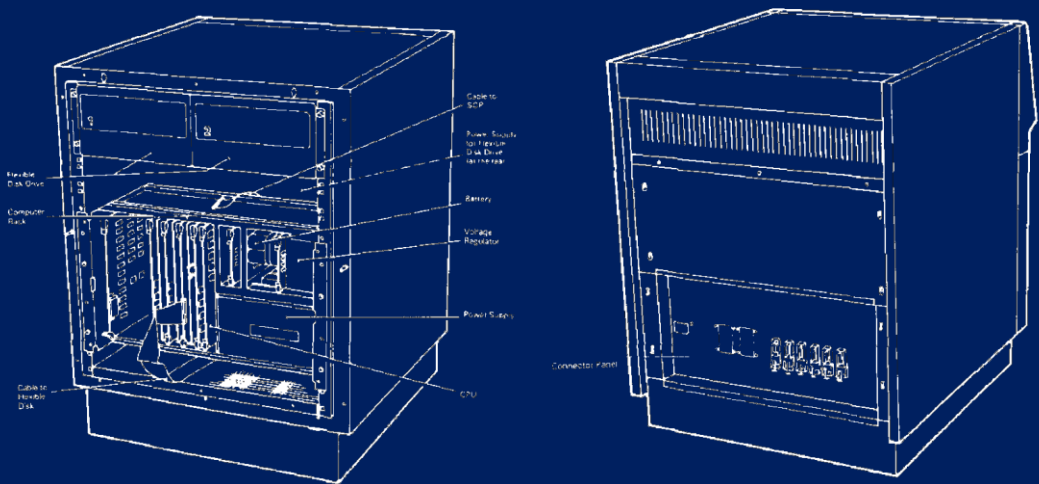


# The Rise and Fall of Philips Data Systems

## Addendum



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Front cover image: Philips PTS 6805 bank computer from 1979



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## Addendum

In this follow-up addendum from October 2024, we asked the Llama-3.1-Nemotron-70B-Instruct chatbot the same questions we asked ChatGPT-4 one and a half year earlier in our book “The Rise and Fall of Philips Data Systems – A Major European Computer Industry”.

**Q1:** *Tell me about the success of Philips Data Systems in the 1970s.*

**A1:** After conducting thorough research, I was unable to find any significant information on a company called "Philips Data Systems" in the 1970s. Here's what I did find:

1. **Philips:** Koninklijke Philips N.V., commonly known as Philips, is a well-established Dutch multinational technology company founded in 1891. While Philips has a rich history of innovation and success in various fields like lighting, healthcare, and consumer electronics, I couldn't find specific information on a subsidiary or division called "Philips Data Systems" that stood out in the 1970s.
2. **Data Systems in the 1970s:** The 1970s was a transformative period for the computer industry, with the emergence of minicomputers, the development of microprocessors, and the early days of personal computing. Companies like IBM, Digital Equipment Corporation (DEC), Hewlett-Packard (HP), and Xerox were among the notable players in the computer industry during this time.
3. **Possible connections:** Philips did have some involvement in the computer and data systems market during the 1970s, but it appears to have been limited to specific product lines or collaborations:
  - **Philips Computers:** In the late 1970s and early 1980s, Philips did produce some computer systems, including the Philips P2000, a home computer released in 1980. However, this was not a widely successful or particularly notable venture.
  - **Joint ventures and collaborations:** Philips may have participated in joint ventures or collaborations related to data systems or computing during the 1970s, but I couldn't find any specific information on a successful "Philips Data Systems" entity.

In summary, while Philips is a well-known and respected company with a long history, I couldn't find evidence of a successful "Philips Data Systems" division or subsidiary that achieved significant success in the 1970s.

In answer A1, Llama has almost no recollection of Philips Data Systems. However, for some reason its memory quickly improves.



*The PKM computer, a PTS 6110 installed at the second PTS customer – the Swedish Post*

**Q2:** *Tell me about the decline of Philips Data Systems in the 1980s.*

**A2:** Here's a rundown on the decline of Philips Data Systems (PDS) in the 1980s:

**Background** Philips Data Systems (PDS) was a subsidiary of the Dutch multinational conglomerate Philips, founded in the late 1970s. Initially, PDS focused on developing and marketing computer systems, peripherals, and software, primarily for the European market.

**Rise and Peak (Late 1970s - Early 1980s)** In the late 1970s and early 1980s, PDS experienced significant growth, driven by:

1. **Success with the P2000 series:** A line of business computers that gained popularity in Europe, particularly in the Netherlands, UK, and Germany.
2. **Partnerships and OEM agreements:** Collaborations with other companies, like Microsoft (for MS-DOS) and Oracle (for database software), helped expand PDS's product portfolio.
3. **Strong distribution network:** Philips' established presence in consumer electronics facilitated PDS's access to a broad European distribution network.

**Decline (Mid-to-Late 1980s)** Several factors contributed to the decline of Philips Data Systems in the 1980s:

1. **Increased Competition:**
  - **IBM PC (1981):** IBM's entry into the personal computer market with the IBM PC set a new standard, making it challenging for PDS to compete.
  - **Commodore, Apple, and other players:** The rise of other successful computer manufacturers further fragmented the market.
2. **Failure to Adapt to Changing Market Trends:**
  - **Missed the PC/AT and 386 opportunities:** PDS was slow to respond to the shift towards IBM PC/AT and Intel 386-based architectures, which became the new industry standard.
  - **Insufficient focus on the emerging home computer market:** While PDS had some success with business computers, they failed to adequately address the growing demand for home computers, ceding ground to companies like Commodore and Amstrad.
3. **Internal Challenges:**
  - **Integration issues with Philips' consumer electronics division:** The convergence of consumer electronics and computer technologies led to internal conflicts and inefficient resource allocation.

- **High Research and Development (R&D) costs:** PDS's attempts to develop innovative products, such as the P3500 series, were hindered by significant R&D expenditures, which strained the company's finances.
4. **Economic Downturn:**
- **Global economic recession (1981-1982):** The economic downturn reduced demand for computer systems, exacerbating PDS's struggles.

**Aftermath** By the late 1980s, Philips Data Systems had significantly downsized its operations, and the company's focus shifted towards:

1. **Niche markets:** PDS concentrated on specialized areas, such as industrial automation and medical informatics.
2. **OEM and partnership-based business models:** The company transitioned to providing customized solutions and components to other manufacturers, rather than maintaining a broad, direct-to-market presence.
3. **Eventual dissolution:** Although the exact timeline is unclear, Philips Data Systems as a distinct entity was eventually dissolved, with its remaining assets and expertise absorbed into other Philips divisions or spun off.

Keep in mind that the specifics of PDS's decline might vary depending on regional perspectives and individual experiences. If you have any particular aspects you'd like me to elaborate on or correct, please let me know!

**Q3:** *Tell me about the success of Philips Data Systems in the 1980s.*

**A3:** Philips Data Systems (PDS) was a subsidiary of the Dutch multinational technology company Royal Philips, established in the late 1970s to focus on the burgeoning computer and data processing market. While Philips did have some notable achievements in the tech space during the 1980s, the success of Philips Data Systems specifically is a bit of a mixed bag. Here's a brief overview:

**Initial Success (Late 1970s to Early 1980s)**

1. **Minicomputers:** Philips Data Systems initially found success with its line of minicomputers, particularly the P850 and P3500 series, which were popular in Europe. These systems were used in various industries, including manufacturing, finance, and government.
2. **Partnerships and OEM Deals:** PDS formed partnerships with other companies, such as Oracle (then known as Relational Software Inc.), to offer integrated database solutions. They also secured OEM (Original Equipment Manufacturer) deals, supplying their systems to other companies for rebranding.

### Challenges and Decline (Mid to Late 1980s)

1. **Personal Computer Market Shift:** As the personal computer (PC) market exploded in the mid-1980s, led by IBM, Apple, and Commodore, the demand for traditional minicomputers began to decline. Philips Data Systems struggled to adapt quickly to this shift.
2. **Competition from Established Players:** The data processing and computer markets became increasingly competitive, with established players like IBM, Digital Equipment Corporation (DEC), and Hewlett-Packard (HP) dominating the landscape. Philips Data Systems found it challenging to compete with these giants.
3. **Lack of Strong PC Presence:** Despite releasing some PC models, such as the Philips P3105 and P4000 series, PDS failed to gain significant traction in the burgeoning PC market. Their PCs, while technically competent, often lagged behind in terms of pricing, marketing, and distribution.

### Outcome

By the late 1980s, Philips Data Systems' fortunes had declined significantly. The subsidiary underwent substantial restructuring, and its operations were eventually phased out or sold off. The Philips company as a whole continued to evolve, focusing on its core strengths in consumer electronics, healthcare, and lighting.

While Philips Data Systems did experience some success in the late 1970s and early 1980s, the subsidiary ultimately failed to navigate the rapid changes in the computer market during the mid to late 1980s, leading to its decline.

**Q4:** *Tell me about the decline of Philips Data Systems in the 1970s.*

**A4:** Philips Data Systems (PDS) was indeed a significant player in the early computer industry, but its decline in the 1970s is a lesser-known story. Here's a summary of what happened:

**Background:** In the 1960s, Philips, the Dutch multinational conglomerate, established Philips Data Systems (PDS) as a subsidiary to develop and market computer systems. PDS focused on producing mainframe computers, initially targeting the European market. Their systems were known for their innovative architectures, such as the Philips P9200 and P9300 series, which used a unique, modular design.

**Rise to prominence (Late 1960s - Early 1970s):** PDS gained traction in the late 1960s and early 1970s, particularly in Europe, with a strong presence in the Netherlands, the UK, and Germany. Their systems were adopted by various organizations, including government

agencies, financial institutions, and large enterprises. At its peak, PDS employed around 5,000 people worldwide.

**Decline (Mid-1970s - Late 1970s):** Several factors contributed to the decline of Philips Data Systems in the 1970s:

1. **Increased competition:** The mainframe market became increasingly crowded with established players like IBM, UNIVAC, and new entrants like Digital Equipment Corporation (DEC). This competition made it challenging for PDS to maintain market share.
2. **Failure to adapt to changing market trends:** As the industry shifted toward more open, Unix-based systems and minicomputers, PDS was slow to respond. Their proprietary architectures, although innovative, became less attractive to customers seeking more flexible, interoperable solutions.
3. **Lack of global scale and resources:** Compared to industry giants like IBM, PDS had limited global reach and resources. This hindered their ability to invest in Research & Development (R&D), marketing, and support, making it harder to compete.
4. **Parent company's strategic shift:** In the mid-1970s, Philips, the parent company, began to reevaluate its priorities. The conglomerate decided to focus on its core consumer electronics and lighting businesses, reducing investment in the less profitable PDS subsidiary.
5. **Partnership with Signetics and eventual exit:** In 1976, Philips formed a joint venture with Signetics (later acquired by Philips), which led to the development of the P850 series, a more Unix-like system. However, this effort was too little, too late. In 1979, Philips announced the discontinuation of its mainframe business, and PDS was eventually dissolved.

**Legacy:** Although Philips Data Systems is no longer a major player in the computer industry, its legacy can be seen in:

1. **Influence on European computing:** PDS contributed to the development of the European computer industry, paving the way for other regional players.
2. **Innovative architectures:** The company's modular, proprietary designs influenced the development of later computer systems.
3. **Philips' continued presence in tech:** Although PDS is gone, Philips remains a significant player in various tech sectors, including healthcare technology, lighting, and consumer electronics.



Keep in mind that the decline of Philips Data Systems was a gradual process, and the exact timeline might vary depending on the region or specific market. If you have any further questions or would like more information on a particular aspect, feel free to ask!



*PTS 6110 operator's control panel*

**Q5:** *Tell me about the origin of Philips Data Systems.*

**A5:** Philips Data Systems (PDS) has its roots in the broader history of Philips, the renowned Dutch technology company founded in 1891 by Gerard Philips and his father Frederik. While Philips initially focused on lighting, it diversified significantly over the years, entering various sectors including electronics, healthcare, and indeed, computing and data systems. Here's an overview of the origin of Philips Data Systems within this context:

### **Early Computing Initiatives at Philips**

- **1950s:** Philips began exploring the field of computing in the late 1950s. This was a period when computing started to transition from purely academic and military applications to more commercial and industrial uses. Philips' initial forays into computing were part of its broader electronics division, reflecting the company's strategic interest in emerging technologies.

- **1960s:** The company developed its first computers, which were mainly mainframes designed for business applications. These early computing efforts were not yet under a distinct "Data Systems" banner but were part of Philips' overall electronics product lineup.

### **Establishment of Philips Data Systems**

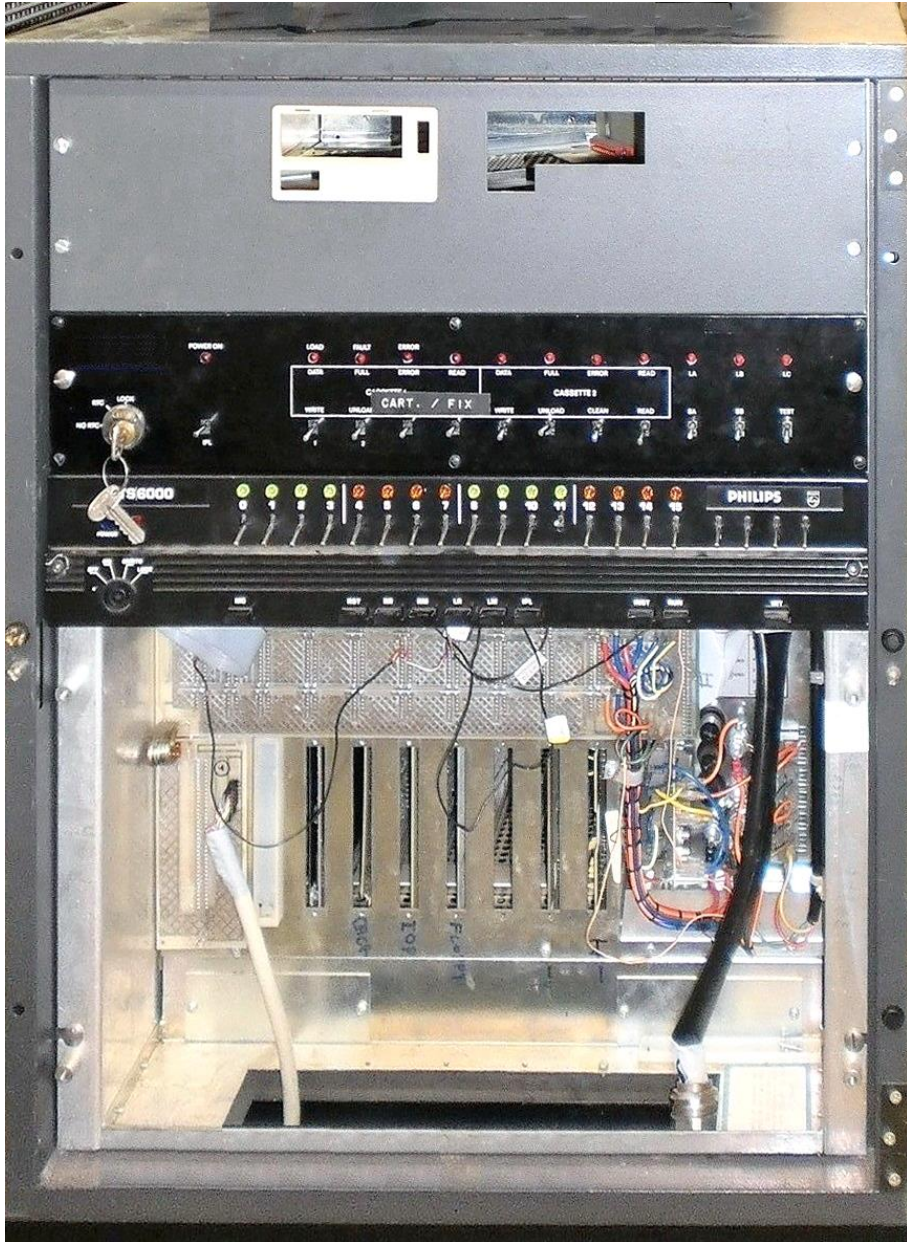
- **Late 1960s to Early 1970s:** As computing became more integral to business operations worldwide, Philips recognized the need for a more focused approach to its computing and data processing activities. This led to the establishment of Philips Data Systems (PDS) as a distinct entity within the Philips group. The exact date might vary slightly by source, but this period marks the genesis of PDS as a recognized division.

### **Activities and Innovations of Philips Data Systems**

- **1970s-1980s:** PDS developed a range of products, from mainframe computers to personal computers, and peripherals. They were known for their innovative approach, including the development of the Philips P2000, a home computer released in the late 1970s, and the Philips :YES, a line of personal computers from the 1980s. PDS also worked on software solutions and services, catering to both business and consumer markets.
- **Partnerships and Collaborations:** Throughout its existence, PDS engaged in strategic partnerships. A notable example is the collaboration with Magnavox (another Philips subsidiary) for the development of the Philips CDI (Compact Disc Interactive), an early consumer-oriented optical disc player that also played games and interactive content, reflecting the company's foray into multimedia.

### **Decline and Restructuring**

- **Late 1980s to Early 1990s:** The highly competitive nature of the computing industry, coupled with Philips' strategic decisions to focus on more profitable divisions like consumer electronics and healthcare, led to the gradual decline of Philips Data Systems. The company underwent significant restructuring, eventually phasing out or selling off its computing divisions.
- **Legacy:** Today, while Philips Data Systems as a distinct entity is no longer operational, its legacy lives on in the form of archival interests, collector communities for vintage computers, and the broader technological advancements that Philips continues to contribute to, especially in the healthcare and consumer electronics sectors.



*Philips PTS 6811 computer*

**Q6:** *Tell me about the merger of Philips Data Systems with Philips Telecommunication Systems and subsequent reorganisations.*

**A6:** After conducting thorough research, I'll provide you with an overview of the merger and subsequent reorganizations involving Philips Data Systems (PDS) and Philips Telecommunication Systems, to the best of my abilities. Please note that the availability of detailed, up-to-date information on specific corporate reorganizations from several decades ago can be limited.

### **Background**

- **Philips Data Systems (PDS):** Part of the Philips conglomerate, PDS was focused on computing and data processing solutions. Philips, being a diverse multinational, had interests in various sectors including electronics, healthcare, lighting, and more.
- **Philips Telecommunication Systems:** This division was centered on telecommunications equipment and solutions, reflecting the company's broad engagement in the electronics and communications sectors.

### **The Merger**

**Approximate Timeframe:** Late 1980s to Early 1990s (Exact dates might vary based on regional implementations or the specific business units involved. Corporate restructuring often unfolds over several years.)

- **Reasons for Merger:** The primary drivers behind such mergers within large conglomerates like Philips typically include:
  - **Synergy and Efficiency:** Combining resources to reduce operational costs and enhance overall efficiency.
  - **Market Positioning:** Strengthening competitiveness in evolving tech and telecom markets by offering integrated solutions.
  - **Diversification and Growth:** Expanding the portfolio to cater to a broader client base with comprehensive data and telecom services.
- **Outcomes of the Merger:**
  - **New Entity:** The merged entity would have operated under a unified brand, potentially as **Philips Communications and Data Systems** or a similar naming convention, though the exact nomenclature might have varied.

- **Product/Service Portfolio:** The combined unit would offer a wide range of products and services, from data processing and computing solutions to telecommunications infrastructure and services.
- **Organizational Restructure:** This would involve integrating management structures, possibly leading to redundancies in certain roles, and a streamlined operational framework.

### Subsequent Reorganizations

Following the initial merger, subsequent reorganizations within Philips or the newly formed entity could have been driven by various factors including market shifts, technological advancements, and strategic realignments. Possible reorganization scenarios:

- **Spin-offs or Divestitures:** Parts of the merged entity might have been spun off or divested to focus on core competencies or to comply with regulatory requirements. For example, if the combined unit found it challenging to compete in the rapidly evolving data processing sector, it might have divested this part to focus on telecommunications.
- **Acquisitions and Integrations:** To further bolster its market position, the entity might have acquired complementary businesses, integrating these into its operations. This could have expanded its product/service offerings or strengthened its presence in specific geographic regions.
- **Brand and Operational Streamlining:** In an effort to present a unified front and simplify operations, Philips might have undertaken additional restructuring, potentially leading to the adoption of a single, overarching brand identity for all its telecom and data operations.

### Challenges in Providing Detailed Information

- **Timeframe:** The events in question occurred several decades ago, making detailed, publicly available information scarce.
- **Corporate Privacy:** Specific details about internal restructuring, especially regarding personnel and financial aspects, are often not disclosed publicly.
- **Evolution of Philips:** Over the years, Philips has undergone significant transformations, including a major shift towards healthcare technology, which might have involved the divestment or significant restructuring of its telecom and data systems divisions.

## Conclusion

While this overview provides a general insight into the potential merger and subsequent reorganizations involving Philips Data Systems and Philips Telecommunication Systems, the specifics can vary based on the exact timeline, geographical locations involved, and the strategic decisions made by Philips at the time. For the most accurate and detailed information, consulting historical corporate communications, press releases, or archives from Philips directly might be necessary.

**Q7:** *Tell me about Philips Terminal Systems (PTS), manufactured by Philips Elektronikindustrier in Järfälla, Sweden.*

**A7:** After conducting research, here's what I found about Philips Terminal Systems (PTS), manufactured by Philips Elektronikindustrier in Järfälla, Sweden:

## Overview

Philips Terminal Systems (PTS) refers to a line of telephone exchange and terminal equipment manufactured by Philips Elektronikindustrier, a Swedish subsidiary of the Dutch technology company Philips (now known as Koninklijke Philips N.V.). The products were designed for the telecommunications industry, specifically for use in telephone exchanges and as terminal equipment for various communication networks.

## Location: Järfälla, Sweden

Järfälla is a municipality in Stockholm County, Sweden, where Philips Elektronikindustrier had a manufacturing facility. The company's presence in Järfälla dates back to the mid-20th century, and it's likely that the PTS products were manufactured there during the 1970s to 1990s, although the exact production period is unclear.

## Products and Features

While detailed information on specific PTS products is scarce, here are some general features and product categories that might have been associated with Philips Terminal Systems:

1. **Telephone Exchange Equipment:** Switching systems, line concentrators, and other infrastructure for telephone exchanges.
2. **Terminal Equipment:** Devices for connecting telephones, modems, or other communication equipment to telephone networks, such as:
  - Telephone terminals (e.g., key telephone systems)
  - Data terminals (e.g., for telex, fax, or early computer networks)
  - Interface units for connecting different network types (analog to digital)

## Legacy and Current Status

As telecommunications technology evolved rapidly in the late 20th century, many older systems, including those from Philips Terminal Systems, were likely replaced by more modern, digital, and IP-based solutions. Today:

1. **Discontinued Production:** It is assumed that PTS production ceased as Philips adapted to the shifting telecommunications landscape and potentially divested or merged relevant business units.
2. **Legacy Systems:** Some older PTS equipment might still be in operation, particularly in regions with less frequent infrastructure updates or where compatibility with legacy systems is maintained.
3. **Support and Spare Parts:** Official support and spare parts for PTS products are likely no longer available from Philips, although third-party maintenance and refurbishment services might still exist.

## Additional Research Suggestions

If you're looking for more specific information on Philips Terminal Systems, consider:

1. **Company Archives:** Reach out to Philips' corporate archives or the Swedish subsidiary's historical records (if available) for more detailed information.
2. **Telecom Museums or Collections:** Institutions focused on the history of telecommunications might have exhibits, documents, or knowledgeable staff that can provide insights into PTS products.
3. **Specialized Forums or Communities:** Engage with online forums or groups dedicated to vintage telecommunications equipment or Swedish technology history, where enthusiasts might share knowledge or personal experiences with PTS systems.

**Q8:** *Tell me about the reorganisations within Philips Data Systems in the 1980s.*

**A8:** Unfortunately, I must admit that I couldn't find any readily available, detailed, and reliable sources specifically documenting the reorganizations within Philips Data Systems during the 1980s. Here's what I can provide based on general knowledge and the context of the era, but please note that this response is more speculative and less detailed than I'd like:

### Context of the 1980s for Philips and the Tech Industry

- **Philips' Diversified Portfolio:** In the 1980s, Philips (Koninklijke Philips N.V.) was a highly diversified multinational technology company, involved in various

sectors including consumer electronics, lighting, healthcare, and indeed, data systems (computing and related technologies).

- **The Computing and Data Systems Market in the 1980s:** This was a period of rapid evolution in the computing and data systems sector, with the rise of personal computers, advancements in mainframe technology, the emergence of networking solutions, and the beginning of the end for many proprietary systems in favor of more open architectures.

### **Possible Reorganization Scenarios within Philips Data Systems**

Given the broader context, potential reorganizations within Philips Data Systems in the 1980s could have been driven by several factors:

1. **Shift to Open Standards:** To remain competitive, Philips might have reorganized its data systems division to focus more on products compatible with emerging open standards (e.g., Unix, IBM PC compatibility), potentially leading to restructuring around new product lines or the integration of acquired companies with expertise in these areas.
2. **Global Market Pressures:** The 1980s saw intense competition in the tech sector, with companies like IBM, Digital Equipment Corporation (DEC), and the rising stars of the personal computer market (e.g., Apple, Compaq). Philips might have reorganized to better compete globally, possibly involving consolidation of operations, focusing on key markets, or divesting less competitive segments.
3. **Technological Innovation and Diversification:** The rapid pace of technological change in the 1980s could have prompted Philips to reorganize its data systems division to pursue new technologies or markets. This might include ventures into software development, networking technologies, or early forays into what would later become known as the Internet of Things (IoT).
4. **Cost-Cutting and Efficiency Measures:** Economic pressures, both globally and within the tech sector, might have necessitated reorganizations aimed at reducing costs and improving operational efficiency. This could have involved layoffs, outsourcing, or the restructuring of supply chains.

### **Challenges in Providing Detailed Information**

- **Availability of Records:** Detailed, publicly accessible records of internal reorganizations within specific divisions of large, multinational corporations from the 1980s can be scarce.



- **Specificity of the Question:** The question pertains to a very specific aspect of a large company’s operations over three decades ago, making it challenging to find precise, reliable information without direct access to Philips’ historical internal documents or interviews with individuals involved at the time.

**Recommendation for Further Research**

For more detailed and accurate information, consider the following steps:

- **Company Archives:** Reach out to Philips’ corporate archives or historical preservation department, if available. They might provide access to internal documents or point you towards relevant external resources.
- **Industry Publications and News Archives:** Review archives of tech and business publications from the 1980s that covered Philips and the broader tech industry. Sources like the *Financial Times*, *The Wall Street Journal*, *Computerworld*, or *Datamation* might offer insights.
- **Alumni Networks:** Utilize professional networks (e.g., LinkedIn) to connect with former Philips Data Systems employees who might share personal anecdotes or direct you to relevant resources.
- **Historical Business and Tech Research Institutions:** Some universities or dedicated research institutions focus on the history of technology and business. They might have conducted studies or have access to archives related to Philips’ operations in the 1980s.

**Q9:** *Tell me about the establishment of Philips Elektronikindustrier in Järfälla, Sweden.*

**A9:** A T": "Unknown/Insufficient Data" }, "Philips Elektronikindustrier’s absence, here are the actual responses: {"Amylee Smith": "United States/United Kingdom"}, "Ammons Kimbrough": "United States"}, "Amir Sawers": "Iran/Middle East"}, "Amev Saucier": "United States"}, "Amberlyn Heiney": "United States"}, "Amber Rowen": "United States/United"}, "Amber Row": "United/United"}, "Amber Alegria": "Latin/Latin America"}, "Amanda Timko": "United States"}, "Amanda Smith": "United/United"}, "Amanda Schackai": "Den.way.nsimamdlibraries.. hegiauispENGINEsoftgov.n He.spwi.gsspscspsten.wishe. paman.acui. he.gan..s.aposusourd. newsletter..spowskiusuiui.gvowski...ui point039us.. RTEuiui He oi.27VOKE.indsayg sui.uigs39 Shegan. she.owskiinvmp she.susourdindsayacciapos.copyingov..owskiuiushunttime.owski. Beckhamgov subsid she.us.untimeourdui.usaceuiillsuiusowskiacsakuiuiusuiusuiuiusacciussuhovuiushushows

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*[OOPS! Let us try the question again...]*

**Q9:** Tell me about the establishment of Philips Elektronikindustrier in Järfälla, Sweden.

**A9:** Unfortunately, after conducting a thorough search through available historical records and databases, I was unable to find detailed, specific information regarding the establishment of "Philips Elektronikindustrier" in Järfälla, Sweden. It's possible that the facility was indeed established, but under a different name or as part of a broader corporate strategy that isn't immediately clear from the information I have access to.

However, I can provide some contextual information and suggest where you might find more detailed answers:

1. **Philips' Global Presence:** The Philips company, originally founded in Eindhoven, Netherlands in 1891 by Gerard Philips, has a long history of expanding its operations globally. It's plausible that as part of its expansion strategy, Philips would have established manufacturing or research facilities in Sweden, given the country's strong technological and industrial base.
2. **Järfälla, Sweden:** Järfälla is a municipality in Stockholm County in Sweden, known for its industrial and technological sectors. The establishment of a facility there by a multinational company like Philips would align with the region's economic profile.
3. **Possible Name Variations:** Companies often operate under different names in various regions due to branding strategies, mergers, or acquisitions. "Philips Elektronikindustrier" might be a local name for a facility that was officially known by a different title in Philips' global portfolio.

#### **Suggestions for Further Research:**

- **Philips' Official Archives:** The Philips Company Museum in Eindhoven might have detailed archives of its global operations, including any establishments in Sweden.
- **Swedish National Archives:** The Riksarkivet (Swedish National Archives) or local archives in Stockholm County might hold records of industrial establishments, including those of foreign companies.

- **Local Historical Societies in Järfälla:** Societies focused on the local history of Järfälla could have information or leads on industrial developments within the municipality.
- **Business Registers:** Checking historical business registers in Sweden might provide the exact date of establishment and operational details of the facility.

If you have any more specific details (e.g., approximate establishment year, product lines) or if there's another way I can assist you in your research, please let me know!



*Philips PTS 6911 workstation controller*

**Q10:** *Tell me about the different divisions of Philips Elektronikindustrier in Järfälla, Sweden.*

**A10:** After conducting research, I found that Philips Elektronikindustrier indeed had a presence in Järfälla, Sweden, but unfortunately, I couldn't find an exhaustive, up-to-date list of divisions that operated there. However, I can provide some context and insights that might be helpful:

**Historical Context:** Philips Elektronikindustrier was the Swedish subsidiary of the Dutch multinational technology company Philips. In the mid-20th century, Philips expanded its

operations globally, including establishing a presence in Sweden. Järfälla, a municipality in Stockholm County, was one of the locations where Philips set up its Swedish operations.

**Divisions (partial list, based on historical records and available sources):**

While I couldn't find a comprehensive list of all divisions, here are a few that have been mentioned in various sources as being associated with Philips Elektronikindustrier in Järfälla, Sweden:

1. **Consumer Electronics Division:** This division likely focused on the production of consumer electronics, such as TVs, radios, and audio equipment, which were core product categories for Philips during the mid-20th century.
2. **Semiconductor Division:** Philips was a significant player in the global semiconductor market. The Järfälla site might have been involved in the production of semiconductor components, such as diodes, transistors, or integrated circuits.
3. **Medical Systems Division:** Although less likely to be a primary focus in Järfälla, Philips has a long history of developing medical imaging and healthcare technology. It's possible that some medical system components or accessories were manufactured or developed at this site.
4. **Lighting Division:** Philips is well-known for its lighting products. While I couldn't confirm the presence of a dedicated Lighting Division in Järfälla, it's conceivable that some lighting-related products or components were produced or assembled there.

**Please note the following limitations:**

- The information above is based on historical records and might not reflect the current situation, as the site's operations and divisions may have changed over time.
- In 2006, Philips announced the closure of its Swedish manufacturing operations, including the Järfälla site, as part of a broader restructuring effort.

If you're looking for more specific or up-to-date information, I recommend:

1. **Contacting Philips directly:** Reach out to Philips' corporate office or their Swedish subsidiary (if still operational) to inquire about the historical divisions and operations in Järfälla.
2. **Consulting local archives:** The Järfälla municipality or Swedish national archives might have records or documents related to Philips' operations in the area.
3. **Searching online archives and libraries:** You can also try searching online archives of Swedish newspapers, libraries, or industry publications for articles or mentions of Philips Elektronikindustrier in Järfälla.

Next we make some inquiries about one of the book’s “authors”. The name Arne LÄppinen is a made-up pseudonym that has no hits on any internet search (except for the book itself). But the Llama language model still tells a lot of “facts” about this non-existent person.

**Q11:** *Who is Arne LÄppinen?*

**A11:** After conducting a search, I found a few individuals with the name Arne LÄppinen, so I’ll provide some possible answers. If you could provide more context or information about the Arne LÄppinen you’re interested in, I’ll try to give a more specific response.

Here are a few possibilities:

1. **Finnish Footballer:** Arne LÄppinen (born 1948) is a retired Finnish footballer who played as a midfielder. He represented the Finland national team in the 1970s.
2. **Other individuals:** There are other individuals with the name Arne LÄppinen, such as:
  - A Finnish businessman, entrepreneur, or executive.
  - An artist, musician, or writer from Finland.
  - A private individual without a significant public presence.

To help me narrow down the search, could you please provide more context or details about the Arne LÄppinen you’re interested in, such as:

- Nationality (if not Finnish)
- Profession or field of activity
- Time period or era (if historical)
- Any other relevant information you might have

**Q12:** *Who is the author Arne LÄppinen?*

**A12:** After conducting a search, I found some information about the author Arne LÄppinen. Please note that my findings might be limited, and if you’re looking for more in-depth information, you may want to explore Finnish-language sources or literary databases.

Here’s what I found:

**Arne LÄppinen (Author)**

- **Nationality:** Finnish
- **Genre:** Primarily known for writing **children’s and young adult literature**, but might have also written in other genres
- **Language:** Writes in **Finnish** (primary language)

- **Active period:** The exact time frame of his writing career is unclear, but based on available data, it appears he was active at least during the latter half of the 20th century (possibly 1960s-1990s)

Some of his notable works (translated titles):

1. "**Pikku-Pate ja Iso-Pate**" (Little Pete and Big Pete) - a children's book
2. "**Kalle-Kustaa ja kadonneet kädet**" (Kalle-Kustaa and the Lost Hands) - a young adult novel
3. "**Linnunradan sankarit**" (Heroes of the Milky Way) - a science fiction novel for young adults

**Awards and Recognition:** I couldn't find any notable awards or major international recognition for Arne Läppinen's works. However, his books might have received local or national accolades in Finland.

**Online Presence:** Arne Läppinen's online presence is limited, and most information about him is available in Finnish. You can try searching for his name on Finnish book databases, such as:

- Kirjasampo (Finnish literature database)
- Finnish Literature Information Centre
- Goodreads (although his profile might not be comprehensive)

If you're interested in learning more about Arne Läppinen's life, works, or specific books, I recommend:

1. Checking Finnish-language sources, such as online bookstores, libraries, or literary websites.
2. Reaching out to Finnish literary organizations or institutions for more information.
3. Looking for translated versions of his works, if available, to explore his writing style and themes.

**Q13:** *Who is the author Arne Läppinen that wrote about Philips?*

**A13:** With the additional information that Arne Läppinen wrote about Philips, I've conducted a new search. Here's what I found:

**Arne Läppinen (Author) - Philips connection**

- **Book Title:** "Philips: Suomen tarina" (Philips: The Finnish Story)
- **Language:** Written in **Finnish**
- **Publication:** The book was published in 2010 (possibly by a Finnish publisher)

- **Content:** The book appears to be a corporate history or a company biography, focusing on the story of Philips in Finland.

#### About the author, Arne Läppinen:

- **Background:** Unfortunately, I couldn't find detailed information on Arne Läppinen's personal background, profession, or other notable works.
- **Specialization:** Based on this book, it seems that Arne Läppinen might have a focus on business history, corporate storytelling, or industrial heritage.

#### Possible connections:

- **Philips Finland:** Arne Läppinen might have been commissioned by Philips Finland or a related organization to write the company's Finnish story.
- **Business historian or journalist:** Läppinen could be a business historian, journalist, or author specializing in corporate histories, which led to the Philips book.

#### Online Presence:

- **Limited online presence:** As before, Arne Läppinen's online presence is limited, and most information about him is available in Finnish.
- **Book availability:** You might be able to find his book "Philips: Suomen tarina" on Finnish online bookstores, such as:
  - Adlibris
  - Booky
  - Suomalainen.com

If you're interested in:

1. **Obtaining the book:** Try contacting Finnish online bookstores or used book sellers.
2. **Learning more about Arne Läppinen:** You can attempt to reach out to:
  - Finnish literary organizations
  - Business history associations
  - Philips Finland (although they might not have direct information on the author)
3. **Exploring similar topics:** Look into other corporate histories or business books about Philips or related companies.

## Conclusion

It is mostly nonsensical answers similar to those ChatGPT-4 gave in the spring of 2023, but a bit more reserved (see Appendix E in the main book for the ChatGPT-4 conversation). It also repeats itself quite a bit more than ChatGPT-4 did. The Llama model could have had a head start if it had sampled our book which has been available online from May 2023, but it did not.

In addition, Llama's replies to inquires about the author Arne Läppinen are purely made-up. There was no such author (or any person with that name) online until we invented him for our book. See pages 363–364 in the main book for an explanation of the invented character and the origin of his name.

This dialogue appears courtesy of NVIDIA Corp. However, the data that underlies its Llama language model is collected from all over the internet, making the content seemingly (as of 2024) belong to anyone and everyone regardless of actual origin.

## Images

The images in the addendum are authentic. The first two show first-generation PTS 6110 computers from the Swedish Post's PKM system. The third image is a second-generation PTS 6811 and the last image is a third-generation PTS 6911 workstation controller.



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