KNITS

Kuehne **N**agel **I**nformation **T**echnology **S**chool

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How to identify values in product

DATA

Where product data will come from?

i.e External systems, user entries, AI agents, IOT devices

SERVICES

What are the services that product will provide on top of those data?

i.e payment on line, reservation, analytics, sales, search

USERS

What value will those services provide to final users?

i.E monitor and audit processes, buy products, book services, find supplier?

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Where to search next idea

Working Experience

Business data and process you are familiar with.
How would your previous employer benefit from your product?

Personal Use:

Bring some of your passions into code.
Automation of manual activities. Tracking and present your data to get new insights.

Emulations

Reproduce existing product you are familiar with.
Reproduce users activity with AI agents.

Simulations:

Manage process, take decisions through product that simulates business processes.

Innovation

Circular Economy, Smart Cities, Green Logistics, IOT, JIT Supply Chain

Open data:

Provide new services on top of available open data from public and/or private sector.

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Working experience

What was bringing profit in the business**?**

What data were produced, shared, consumed to run the business?

What were main processes involving these data?

How these processes could be automated with a software ?

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Working experience

Some examples

Experience **as a shop keeper** could help to understand warehouse management, sales through ecommerce, supplier's order management, etc.

Experience **in hotel reception** could help to understand reservation management, additional services, check in and check out processes, etc.

Experience **in manufacturing** could help to understand material supply management, production schedule, human resources management, project management, etc.

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Personal Use

What data could you produce about your regular routines**?**

How could you improve your behavior or decisions with a better awareness of those data?

Could you automate through software something that is time consuming to do manually?

What added value is possible to build on the top of data collected over a reasonable time frame?

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Personal Use

Some examples

Time management system.

How you use your time? How many minutes you are spending on X? How much you would like to invest in Y? How much reality was matching with plans? How many hours you'd like to allocate to next goal?

Budget System:

How you spend your money? Track expenses and set a budget for different categories. See in the long run what is expected, and what you can change with your management.

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Emulators

How this system is built**?**

What are the data they need to collect in order to provide their services?

What processes are implemented to bring value to those data?

What could be the different type of behavior of the users of this system?

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Emulators

Some examples

Reservation Systems:
Airplane companies, accommodation, event at venues , transportations

Public Advertisement:
Real Estate, Second Hand, Ebay

Real time systems:
Betting systems, Games on line

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Simulators - Game

What are data and processes of this business?

How the availability of data is empowering better decision**?**

What are the possible decisions what management could take to react to actions of customers and suppliers?

How customers and suppliers could react to management actions?

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Simulators - Game

Some examples

Reproduce a business model as a game.
What are the agents? What are their goals? How can they achieve their goals?
What are the events they react to?

Example: https://tuleturg.ee/et

Business of wood for heating.
Different moment and ways to mine wood from forest.
Different wood products and qualities. (Dry, Semi Dry, Wet, Bricks, Logs, Type of tree, Energy for each type)
Customers react to changes in quality and price.
They probably value different wood in summer and winter.

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Simulators or Emulators in Logistics and Supply Chain

Some Products from Oracle Fusion for Supply Chain

Products and User manuals:

https://www.oracle.com/applications/supply-chain-management

https://docs.oracle.com/en/cloud/saas/supply-chain-management/20c/books.html

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Innovation – Areas of our main interest

Circular economy

Green Energy

Smart Cities

Automation in Supply Chain

JIT Supply Chain management

Green Supply Chain

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Open data – Some resources for api

Some links to api:

https://www.programmableweb.com/

https://rapidapi.com/

https://public-apis.io/

https://apis.guru/browse-apis/

http://apis.io/

https://apilist.fun/

https://explore.postman.com/

https://apiharmony-open.mybluemix.net/public

https://developers.google.com/apis-explorer/#p/

https://sdks.io/?

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Some Additional resources

World Open Data:
https://datacatalog.worldbank.org/search

Europe Open Data:
https://data.europa.eu/euodp/en/data/

Estonia Open Data:
https://opendata.riik.ee/en/andmehulgad/

Tallinn Open Data:
https://avaandmed.tallinn.ee/eng/

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Some Additional resources

One nice article on How to handle Side Projects:

https://dzone.com/articles/a-software-developers-guide-to-side-projects

Startup Projects:
https://www.producthunt.com/

Startup Estonia:
https://startupestonia.ee/startup-database

Startup and Hackatons:

http://garage48.org/