New ICF Based Information System for Vocational Rehabilitation and Assessment

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### Introduction



- Spring 2015
  - Virk vocational rehabilitation fund decides to invest in a new Information system
  - At the same time there was a atmosphere of reevaluation at Virk
  - Opportunity to design a new information system based on Virk's experience



### Designing an Information System

- Winter 2015/2016: Need assessment together with an IT business consultant
- September 2016: Contract with OutSystems for buying a software platform
- December 2016: Contract with Advania, an Icelandic IT firm for development of an information system based on that platform
- April 2017: Programming begins
- May 15<sup>th</sup> 2018: A Information system named Yoda launched

# The designing process How to make an Information System for The 21st Century?



- Not a file organizing system
- Not a business process system

The information system should focus on the quality of the information itself

### Our Philosophy



- Quality of a service is dependent on the quality of decisions
- Quality of decisions in turn is dependent of the quality of the information and quality of the evaluation of that information
- Rehabilitation is management
  - Case management
  - Organizational management
- Information on content of the rehabilitation is essential for a successful management
  - Is ICF a gamechanger?





 To design a system that would deliver a high quality information of content to support high quality evaluation of that information

### High quality information



- Current
  - Up to date
  - The trajectory incorporated into the information

- Accessible
  - Easy to get oversight
  - Easy to modify





- Relevant
  - Volume appropriate
  - Related to function, activity and participation of the individual
  - Related to the purpose of service

- Comprehensive
  - Biopsychosocial
  - Multidisciplinary

### Hopes for ICF



- ICF should be useful in both case management and organizational management
  - ICF describes the of content in rehabilitation
    - Biopsychosocial-
    - Functional description of the individual.
  - ICF has an element of quantification that can be linked to specific purpose
  - ICF can be linked to measuring instruments that can measure change





- Designing team at Virk
- External Consultation
  - Vocational rehabilitation experts outside Virk
  - Reuben Escorpizio, USA and Switzerland
  - Monica Finger, Switzerland
- IT designing team

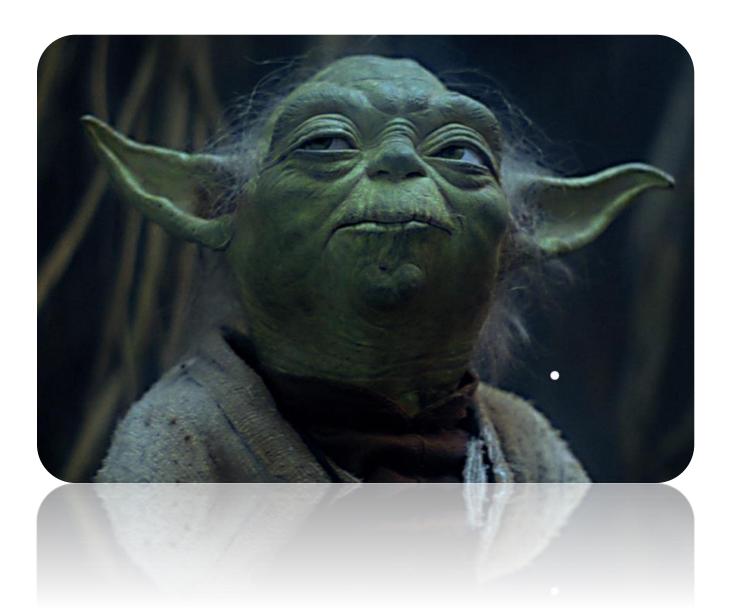
### Source of information



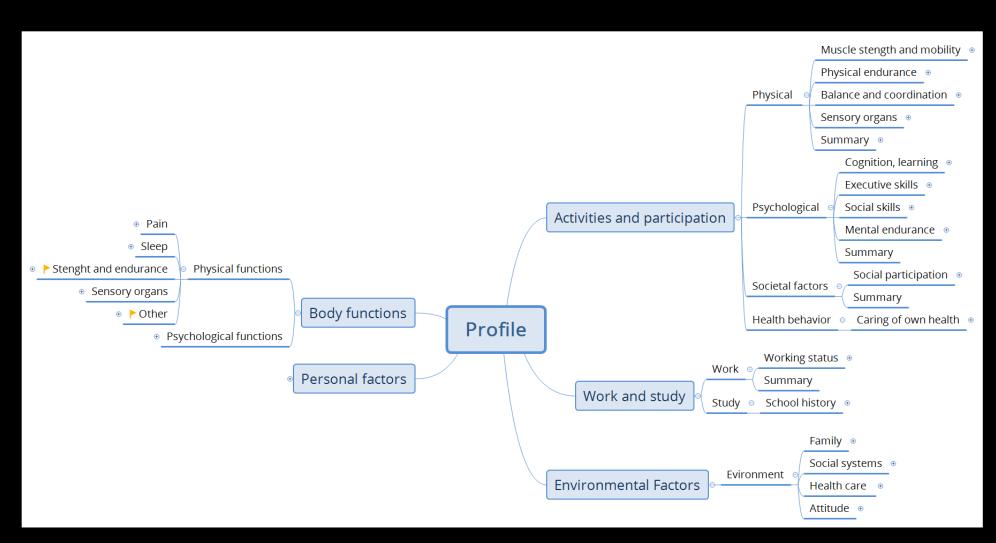
- Virk´s previous information system
  - Egenvurdering -Norway
  - Resorceprofilen- Denamark
  - SASSAM Sweden
- WORQ
  - Work Rehabilitation Questionnaire
  - https://www.myworq.com
- EUMASS core set
- Vocational rehabilitation core set
- Swedish workability assessment

### Yoda



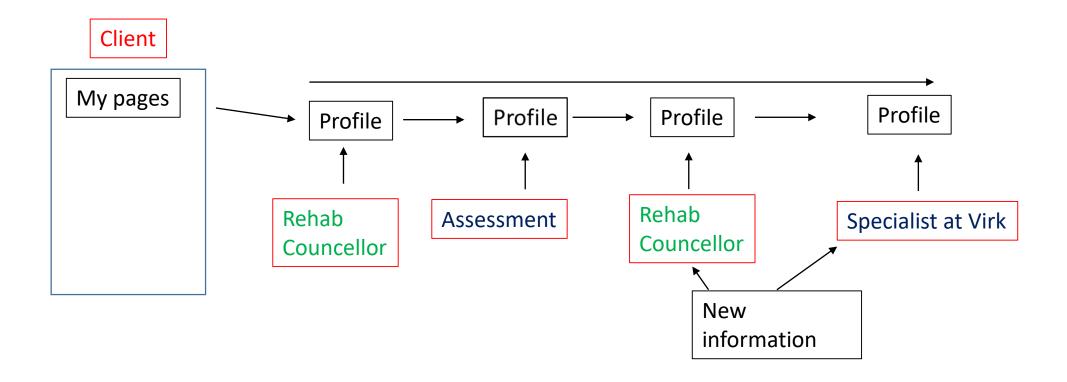








### Up to date information



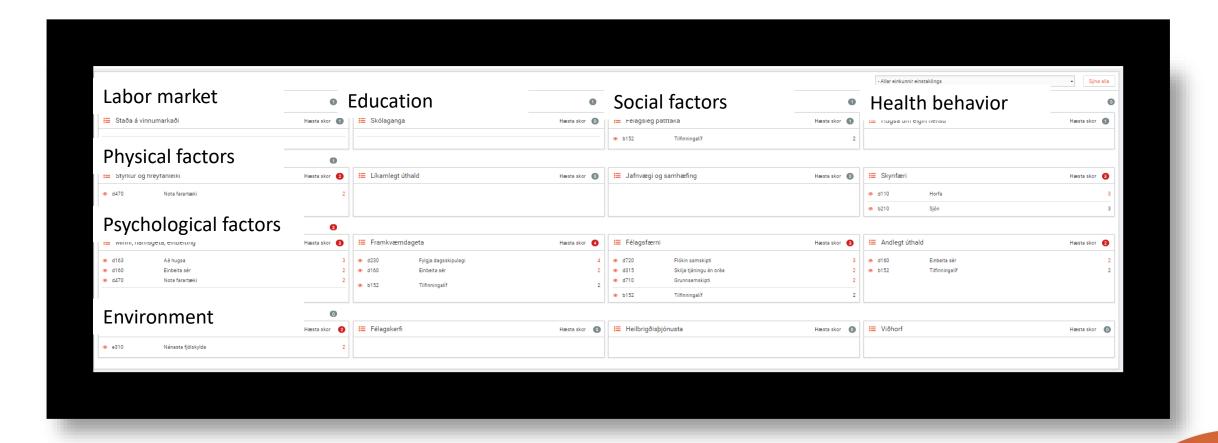
## The client has first to answer some questions on My Pages



| Skref 1 Skref 2  | Skref 3 |   |   |   | Skref 4 |   |   |   |   | Skref 5 |   |     |
|--|---------|---|---|---|---------|---|---|---|---|---------|---|-----|
| Overall in the past week, to what extent did you have problems with  |         |   |   |   |         |   |   |   |   |         |   |     |
|  |         | 0 | 1 | 2 | 3       | 4 | 5 | 6 | 7 | 8       | 9 | 10  |
| not feeling rested and refreshed during the day?   |         |   |   |   |         |   |   |   |   |         |   |     |
| sleeping, such as falling asleep, waking up frequently during the night or waking up too early in the morning? |         |   | • | 0 | 0       | 0 |   |   |   | 0       | 0 |     |
| remembering to do important things?  |         |   |   |   |         |   |   |   |   |         |   |     |
| your usual daily activities because you felt sad or depressed?   |         |   | 0 |   |         | 0 |   | • |   |         |   |     |
| your usual daily activities because you felt worried or anxious?   |         | 0 |   | 0 | 0       |   |   | • |   |         |   |     |
| being irritable?   |         |   |   |   |         |   |   |   | • |         |   |     |
| your temper?   |         |   |   |   |         |   | 0 |   |   |         |   |     |
| your self-confidence?  |         |   |   | 0 |         |   |   |   |   | •       |   |     |
| thinking clearly   |         |   |   |   |         |   |   |   | 0 |         |   | •   |
| analyzing and finding solutions to problems in day to day life?  |         |   | • |   | 0       |   |   |   |   |         |   |     |
| Overall in the past week, to what extent did you have problems with  |         |   |   |   |         |   |   |   |   |         |   |     |
|  |         | 0 | 1 | 2 | 3       | 4 | 5 | 6 | 7 | 8       | 9 | 10  |
| hearing?   |         |   |   |   |         |   |   |   |   |         |   |     |
| keeping your balance while maintaining a position or during movement?  |         |   |   |   | •       |   |   |   |   |         |   |     |
| bodily aches or pains?   |         |   | 0 |   |         |   |   |   |   |         |   | 99+ |
| general endurance when performing physical activities?   |         |   |   |   |         | • |   |   |   |         |   |     |
| muscle strength?   |         |   |   |   | •       |   | 0 |   | 0 |         |   | 8   |
| skin problems, such as broken skin, ulcers, bedsores and thinning of skin?                                     |         |   |   | • |         |   |   |   |   |         |   |     |

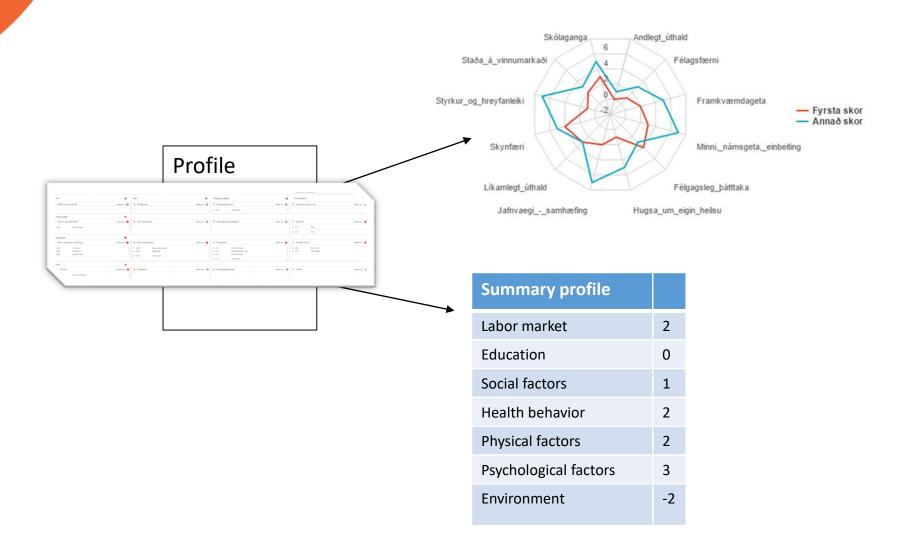


### Yoda – the profile



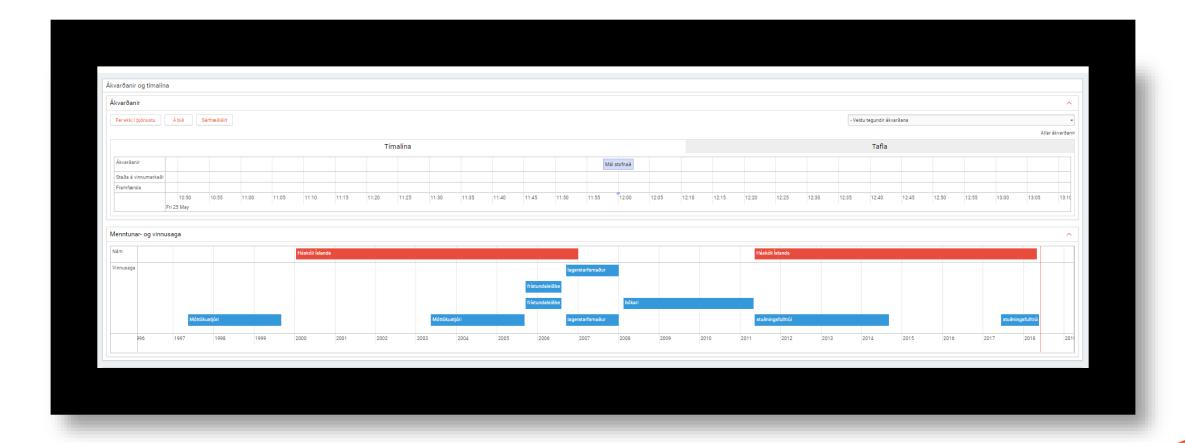


### Oversight of functional information



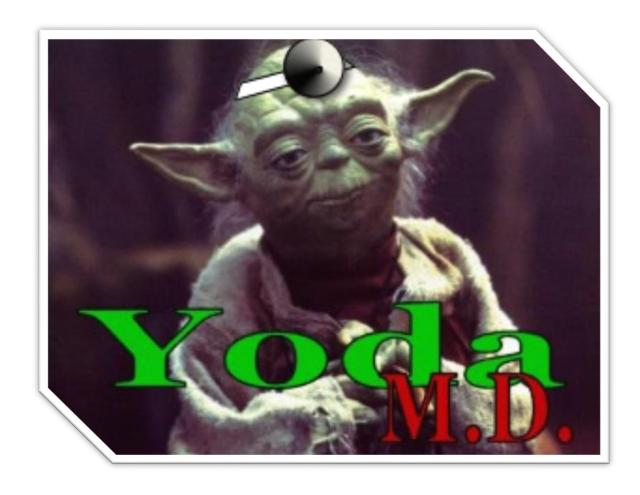


### Trajectory – the timeline







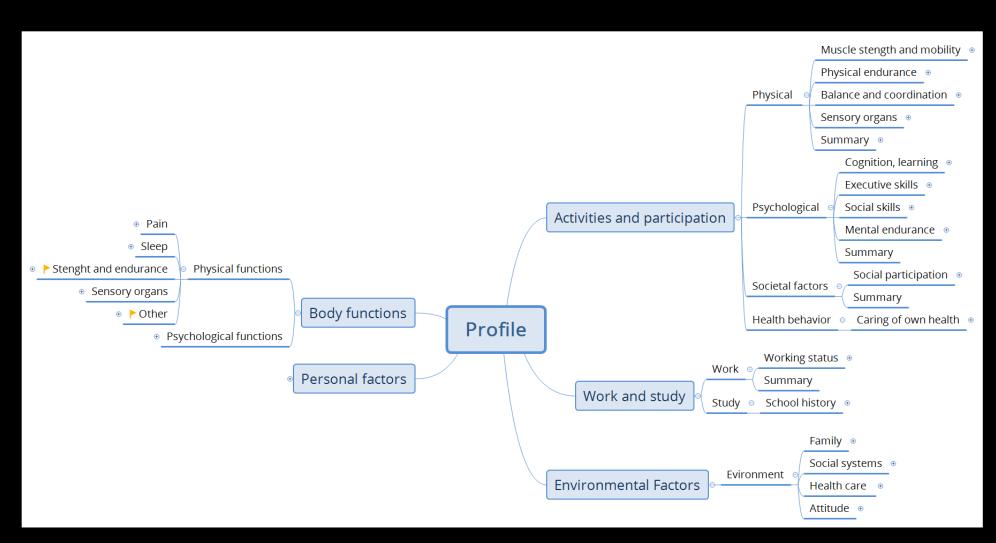


### Medical assessment



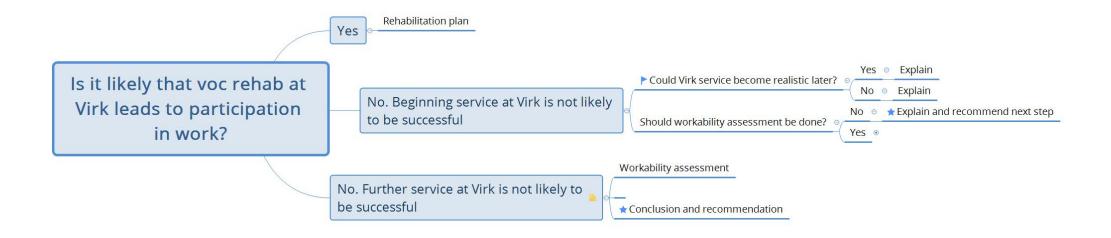
- Descriptive data
- Evaluations and interpretation of data
- Recommendations
- Decisions





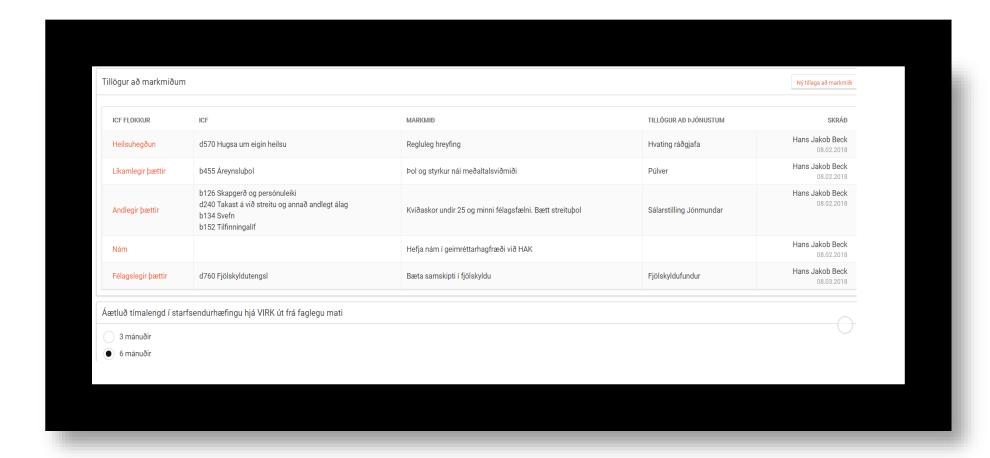


### Information relevant to purpose Evaluation and recommendations



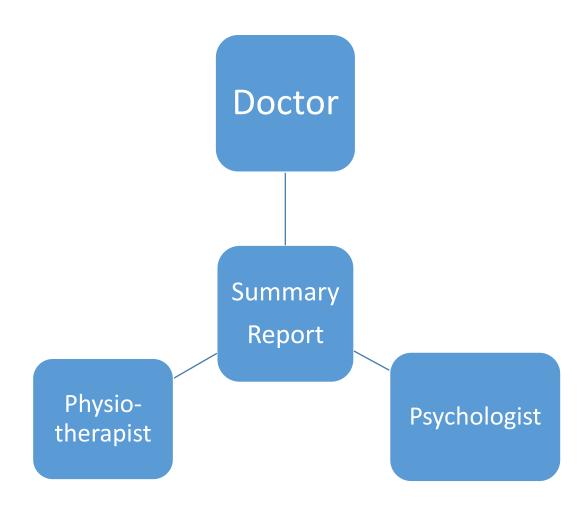


### Decisions







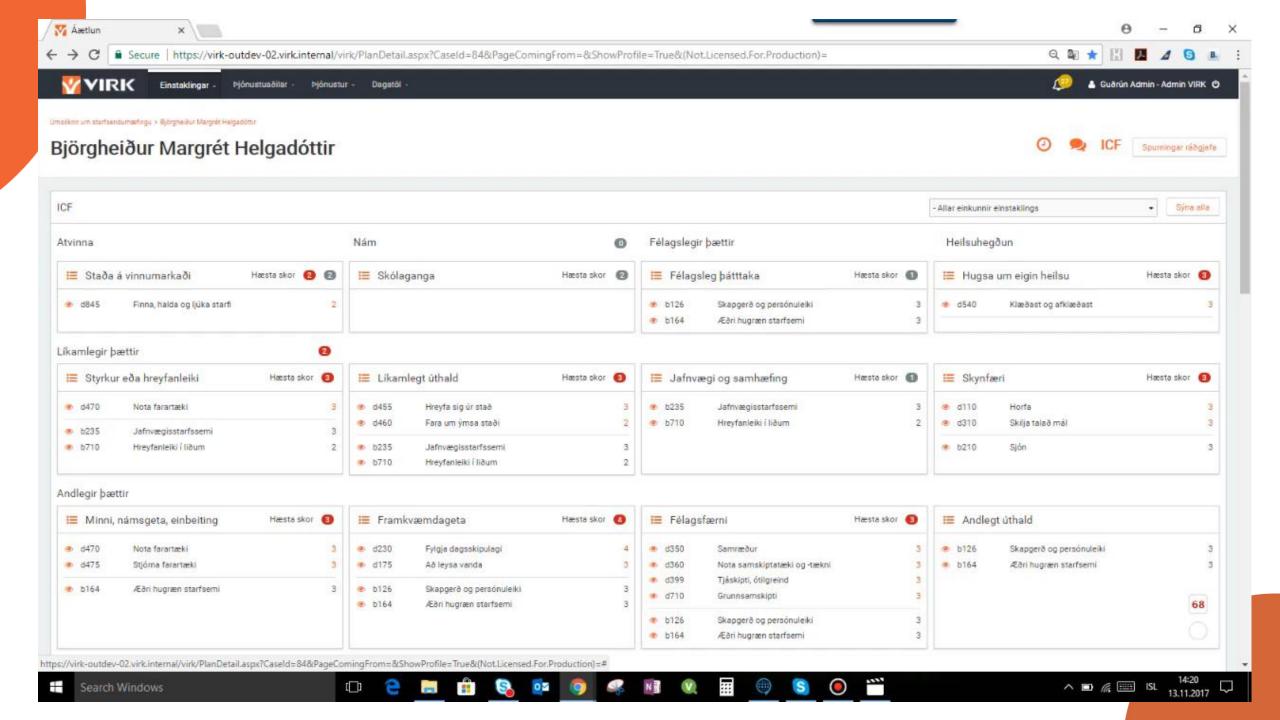






#### **ICF**

| Leitaðu eftir númeri eða heiti |                           |
|--------------------------------|---------------------------|
|                                |                           |
| NÚMER                          | HETTI                     |
| b126                           | Skapgerð og persónuleiki  |
| b1300                          | Orkustig                  |
| b1301                          | Áhugahvöt                 |
| b1303                          | Fýsn (fíkn)               |
| b134                           | Svefn                     |
| b140                           | Athygli                   |
| b144                           | Minni                     |
| b152                           | Tilfinningalif            |
| b160                           | Hugsun                    |
| b164                           | Æðri hugræn starfsemi     |
| b210                           | Sjón                      |
| b230                           | Heyrn                     |
| b235                           | Jafnvægisstarfssemi       |
| b280                           | Verkjatilfinning          |
| b455                           | Áreynsluþol               |
| b710                           | Hreyfanleiki í liðum      |
| b730                           | Vöðvastyrkur              |
| b810                           | Varnarstarf húðar         |
| d110                           | Horfa                     |
| d115                           | Hlusta                    |
| d155                           | Ávinna sér færni (leikni) |
| d160                           | Einbeita sér              |



### The experience?





