

Oh, how we love acronyms, especially 3-letter acronyms .... SAP (Systemen Anwendungen und Produkte), HER (Higher Education and Research), HiM (HANA inMemory)

| ANALOGY                                     |   |         | HERUG 2016             |
|---|---|---------|------------------------|
| Analogy between personal ev                 | volution and evol                       | ution o | of SAP                 |
| • 1952: Baby boomer                         | HOEFAN                                  | 1972    | R/1 SAP                |
| • 1962: Maastricht                          | (10 km)                                 | 1973    | R/2                    |
| • 1971: Sittard                             | (30 km)                                 | 1992    | R/3 Application vendor |
| <ul> <li>1974: Amsterdam</li> </ul>         | (200 km)                                | 2001    | mySAP                  |
| <ul> <li>1983: Philadelphia</li> </ul>      | (6.000 km)                              | 2005    | NetWeaver              |
| • 1985: Honolulu                            | (12.000 km)                             | 2009    | ECC NW/HANA platform   |
| <ul> <li>1999: ISACA &amp; HERUG</li> </ul> | (Frequent flyer)                        | 2009    | HANA vendor            |
| <ul> <li>2006: VNSG &amp; SAP</li> </ul>    | (Million miler)                         | 2010    | SMP Mobile/Cloud       |
|   |   | 2013    | FIORI platform vendor  |
|   | Hard Hard Hard Hard Hard Hard Hard Hard | 2014    | Cloud (HCP, HCI)       |

Henny: from 'local farmer's boy' to 'million miler' SAP: from 'R1' to 'S4'



# AGENDA

#### 1. Where SAP is going

- Digital Transformation & SAP Digital Enterprise (referring to: Steve Lucas)
- Constantly evolving (need for ongoing actualization)

#### 2. Where Maastricht University is standing now

- Today's situation (need for ongoing actualization as well)
- View on future based on discovery workshop HANA & preparing for 2-speed IT

### 3. What we are doing in order to catch-up

Combine forces (e.g.: HERUG-NL started initiative for joint reference Roadmap)
 Recently decided to continue combined effort along the lines of Leiden initiative (referring to: Rob van den Wijngaard)

### 4. Challenge for SAP to keep customers onboard

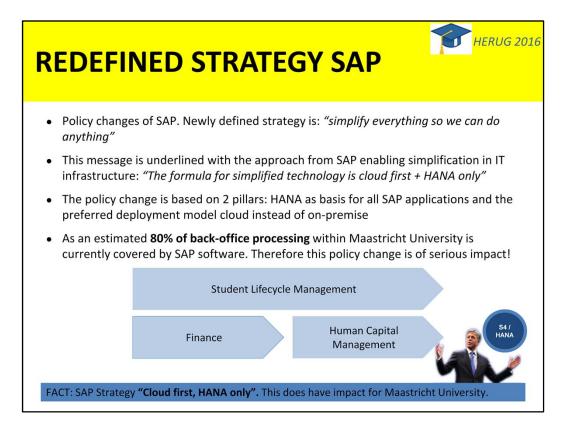
- Guide (HER) customers to find migration paths in the extensive portfolio mix
- 1. SAP's view on Digital Enterprise ultimately The Boardroom of the Future (referring to: e.g. to Steve Lucas)
- 2. Based on Polar Diagram 2015 (status update, change in CIO, question of future ICT at UM)
- 3. Following Leiden initiative HERUG-NL as initiated at Leiden University 1-2 years earlier (referring to: e.g. Rob van den Wijngaard)
- 4. Challenge for SAP: delivering GUIDANCE (please show us which ways we can go, the pro's and cons, in short: help and guidance)





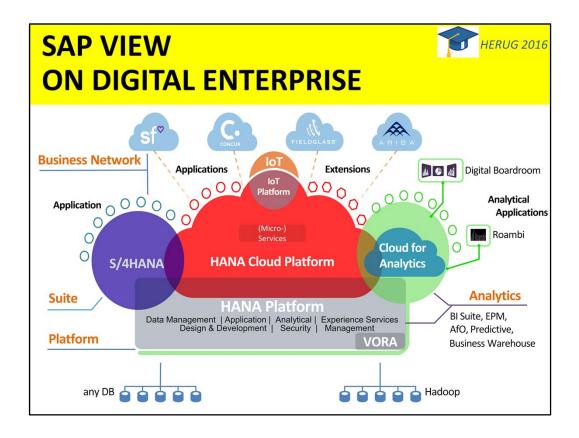
# WHY DOES SAP SWEAR ON HANA?

- Because this technology platform enables <u>extreme high speed</u> computing. This is self-explanatory. HANA is containing an in-memory database. Disk-access and optimizing actions (indexes, intermediate totals) are no longer needed.
- Because this technology platform enables <u>simplification</u>. As HANA is fully columnbased there is no need for maintaining indices and summerizations anymore. Besides database technology HANA keeps on growing into a platform by offering more and more additional services that required addituonal tooling in the past
- Because this platform enables a higher <u>delivery speed</u> for innovations. As developers can focus on a single platform they are not restricted by limitations of different convential databases in ensuring delivery of database independent coding.



# POLICY CHANGES OF SAP IN PERUG 2016 CONTEXT OF MAASTRICHT UNIVERSITY

- A discovery workshop HANA is held to obtain insight in the policy changes of SAP and the impact this will have for Maastricht University
- Main focus of the workshop is the impact of transition to the HANA platform
- An optional migration to the cloud was not the primary point of focus of the workshop however this possible change in deployment policy was not totally excluded
- Future high-level deployment mindset is focusing on hybrid but without more details for the moment
- The discovery workshop should provide insights in:
  - transition path to HANA
  - the impact of migration to HANA
  - the potential benefits for end users that might come along with HANA.



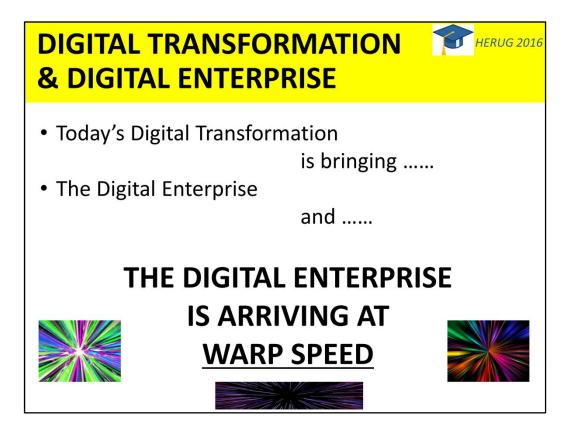
Basically the picture we have seen in the keynote from Steve Lucas with one single item added: AfO (Analysis for Office) as presented by Marlies van Roode.



# **SAP HANA VORA**

#### • Definition SAP HANA Vora

- is an in-memory computing engine that is designed to make big data from Hadoop more accessible and usable for enterprises. SAP developed Vora out of SAP HANA as a way to address specific business cases involving big data.
- Hadoop offers lower-cost storage for vast amounts of data, but adoption initially lagged in the enterprise because the **data in a data** lake is unstructured and can be hard to deal with.
- SAP HANA Vora builds structured data hierarchies for the Hadoop data and integrates it with data from HANA to enable OLAP-style inmemory analysis on the combined data through an Apache Spark structured query language (SQL) interface.



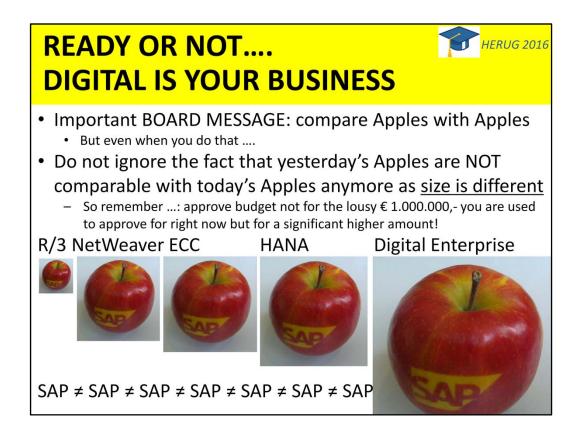
Digital Transformation is arriving. With the speed of lightning; causing imaginary break; sudden change ...... That is in my opinion the main message broadcasted in the keynote HERUG 2016.

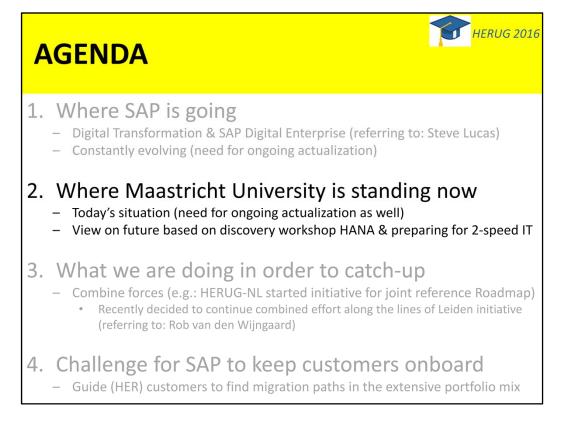


## READY OR NOT.... DIGITAL IS YOUR BUSINESS

#### · Conversation with responsible Board member for IT

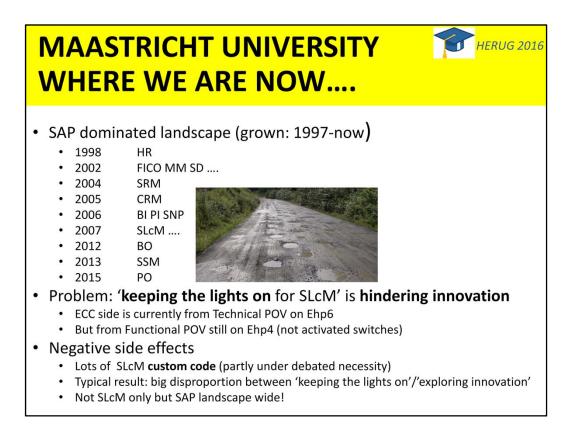
- Please take a seat I don't want you to fall down to earth hurting yourself!
- Are your seatbelts fastened?
- You're sure?
- Please listen to me!
- The digital enterprise is arriving right now
- The new kind of enterprise does not have any borders and seemingly no limits
- This digital makeover will not happen for free, this will bring additional costs
- Just add one zero to the budget
- Not at the left side of the amount
- No, at the utmost **<u>right side</u>** of the amount
- So approve budget not for the lousy € 1.000.000,- you are used to approve for right now
- But for a serious € 10.000.000,-
- Are you still alive and awake? No heart-attack whatsoever?
- Message understood?
- Oh, by the way: don't shoot the messenger!





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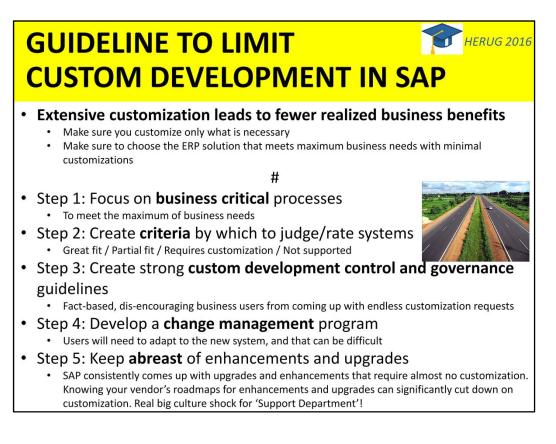




No strong 'custom development control & governance' in place  $\rightarrow$  pothole road experience!

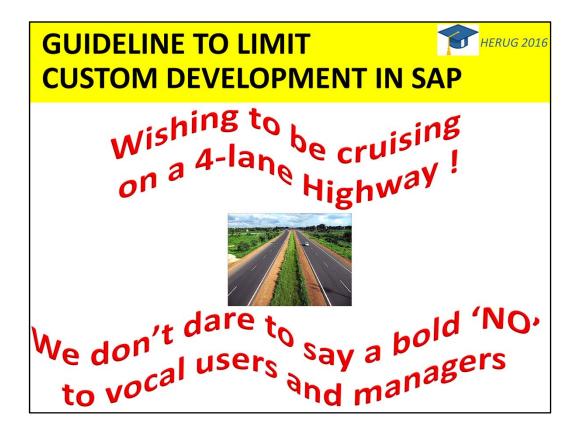


No strong 'custom development control & governance' in place  $\rightarrow$  pothole road experience!



Limiting custom development enhances 'stick to the standard' (future: cloud) and brings convenient 'cruising 4-lane Highway' experience.

Also: daring to say a bold 'NO' to vocal users and managers (in particular academic 'know it all's to be best characterized as self-proclaimed experts in everything).



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# CASCADING PROBLEM OF NOT ACTIVATED SWITCHES

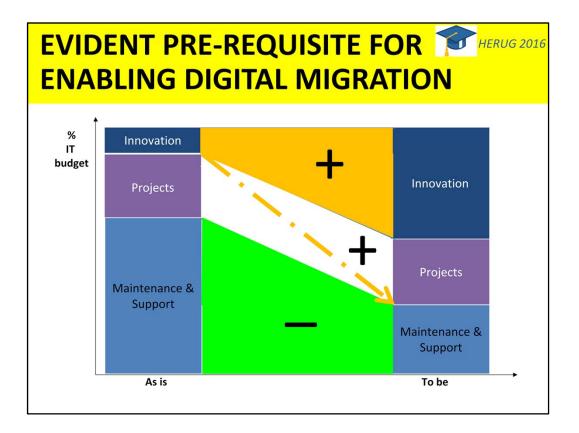


#### Problems

- Frozen functionality (status 2009: Ehp4)
- Currently Ehp6 is running (and Ehp8 planned) seen from technical POV
- Unfortunately barely with activated additional switches
- Huge number of custom development mimicking standard solutions?
  - Available SLcM FIORI Apps are basically designed for Ehp7
  - Professor (Enter grades)
  - Student (My courses, My results, My timetable, Track my degree requirements
  - Faculty/Staff (Student File)
  - 'New' standard functionality launched in Ehp5, Ehp6, Ehp7is not implemented
  - This situation is requiring fundamental reconsideration from scratch, incl. the urgency of custom developments which might have unwanted side-effects

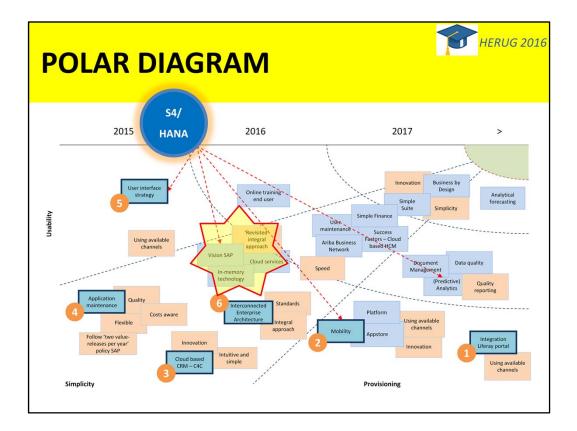
#### Conclusion

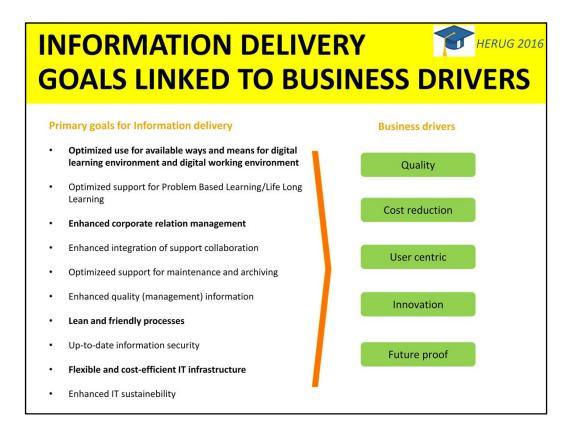
- Cleaning-up/sanitizing effort necessary before migration to HANA
  - Reducing unnecessary custom developments
  - Enabling 'back to the standard' ambition
  - Next step: Ehp8 under extreme low risk-appetite (classic db instead of HANA)



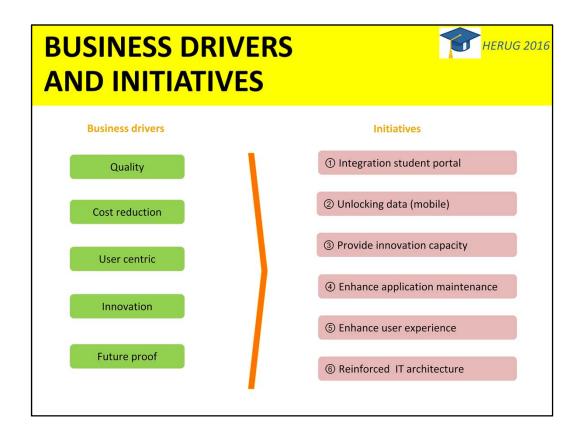
Support and projects should be minimized to 'absolute essentials' in order to maximize innovation.

Absolute essentials are: 1. upcoming legal requirements; 2. crucial defects.





The POLAR DIAGRAM led to the request for explicitly matching with primary information delivery goals at the university and the derived Business drivers. Most important goals are highlighted.



The business drivers (once defined) were a trigger for tweaking some (3 and 6) of the initiatives in the polar diagram into a more fundamental and strategic direction. - Innovation capacity is extremely poor – even a low-capacity need for C4C was not to be made available (3)

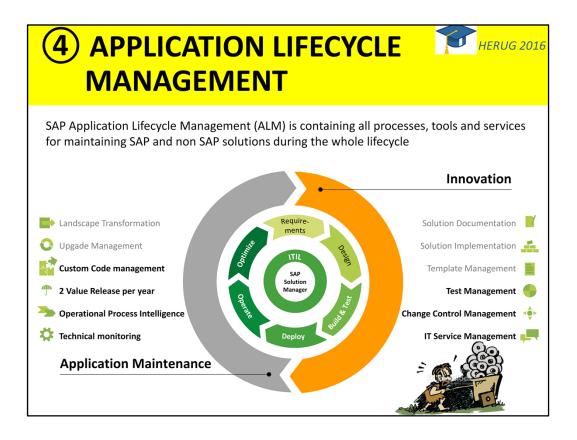
- IT architecture is written down, although somewhat outdated but NOT enforced. This is a huge problem (6).

|                                       | EGRAT                           | ION S            | TUDEN <sup>.</sup>  |                | HERUG 2016<br>AL |
|---------------------------------------|---------------------------------|------------------|---------------------|----------------|------------------|
| Objectives                            | User central                    | Innovation       |                     |                |                  |
| Improve infor                         | mation provisi                  | oning towards    | students (B2C).     |                |                  |
| Principles                            | Security                        | Integration      | User experience     | Maintenance    |                  |
| through Li<br>• Provided s<br>Results | feray Portal)<br>upporting tool | ing for executir | ration and providi  | maintenance    |                  |
| Fully prepared<br>portal (Liferay     |                                 | cture for integ  | ration/linking with | the new studer | nt               |

| <b>2</b> UN                         | LOCI                                 | KING                                   | DATA            | (MOBII   | _E)             | UG 2016 |
|-------------------------------------|--------------------------------------|--|-----------------|--|-----------------|---------|
| Objectives                          | User ce                              | entral                                 | Innovation      |  |                 |         |
| Enhancing in<br>standard app        |                                      |  | •               | employees (B2E) an                                     | d students (B2C | ). Both |
| Principles                          | BYOD                                 | Security                               | Scalability     | User experience  | Maintenance     |         |
| Appshop, One-time Organizat Results | API Mana<br>create dev<br>ion and ro | gement)<br>velopment p<br>le structurr | olatform (custo | e platform, mobile<br>om apps)<br>er mobility platforn |                 | ment,   |

| 3 INN         | OVA          |                | CAPACIT  | Υ                 | HERUG 2016 |
|---------------|--------------|----------------|--|-------------------|------------|
| Objectives    | Innovation   |                |  |                   |            |
| available inr | novations. O | ptimal solutio | quickly by using ne<br>ns for subdomains<br>rely on relation mar | with optimal link | to the     |
| Principles    | Speed        | Integration    | Standardization  | Maintenance       | Costs      |
| integratio    | on, security | and maintena   | specific characteris<br>nce<br>product portfolio c               |                   | :0         |
| Start of F    |              | gard to Cloud  | for Customer (C4C)<br>Advisory Services.                         |                   |            |

| <b>4 APPLICATION MAINTENANCE</b>      |  |                |           |  |          |  |  |
|---------------------------------------|--|----------------|-----------|--|----------|--|--|
| Objectives                            | Quality  | Future pro     | oof       | Cost reduction   |          |  |  |
| not applied.                          | Main goal is t                                   |                | entually  | and guidelines are ava<br>actualized when need<br>le of conduct. |          |  |  |
| Principles                            | Standard   | Overarching    | Access    | sible and transparant  | Flexibel |  |  |
| <ul> <li>Methods</li> </ul>           | s<br>ion and roles<br>and Tools<br>hip and budge |                |           |  |          |  |  |
| Results <ul> <li>Reinforce</li> </ul> | d IT architect                                   | ure within Maa | stricht U | niversity  |          |  |  |

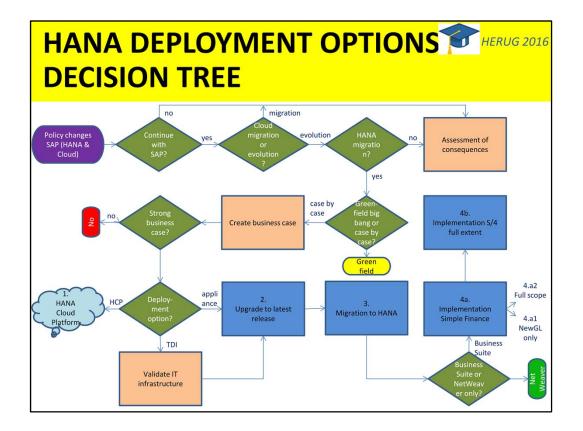


When the ALM circle is not closed chances are good to end up as the poor Caveman pushing a wagon with square wheels that is fully loaded with round wheels. That is hard, hard, really hard and contra-productive work!

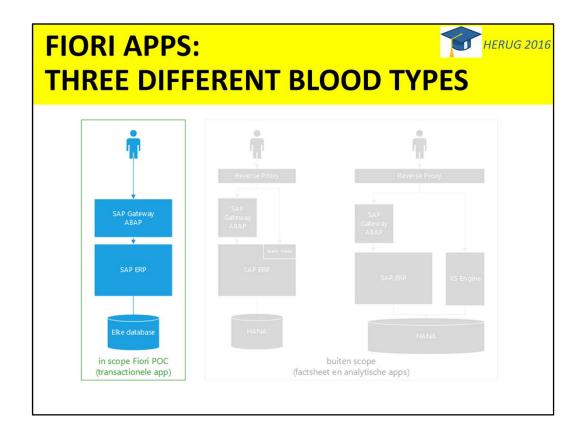
| 4 APPLICATION LIFECYCLE THERUG 2016<br>MANAGEMENT  |  |          |                         |   |   |                  |             |  |
|--|--|----------|-------------------------|---|---|------------------|-------------|--|
|  |  | tandardi | Future p<br>zed platfor |   | Innovation possibility to                     |                  | ty          |  |
| <ul> <li>innovations quickly</li> <li>Principes ITIL Best Practices Solution Manager Support Standards</li> <li>Voorwaarden <ul> <li>Solution Manager put right</li> <li>Knowledge building/gathering in order to be capable to use the ALM processes as intended</li> <li>Organization and roles</li> </ul> </li> </ul> |  |          |                         |   |   |                  |             |  |
| Minde  | <b>at</b><br>werkte UM-<br>er systeem I<br>ie releases p | opieën   |                         | • | Risk-based te<br>Proactive mo<br>Custom codir | nitoring instead | of reactive |  |

| <b>5 USER EXPERIENCE</b>  |   |   |               |  |                       |  |  |  |
|---|---|---|---------------|--|-----------------------|--|--|--|
| Principles<br>Conditions<br>• One-tim   | Simple<br>e create of t                         | Role based  | Intuitive     | ed to the role of the<br>Attractive to use | end user<br>Standards |  |  |  |
| <ul> <li>Organiza</li> <li>Results</li> <li>Widely a</li> <li>PoC base</li> </ul> | ation and role<br>applicable UX<br>ed on standa | n the basis of<br>es<br>( (user experie<br>rdized service<br>er expansion | ence) strateg |  |                       |  |  |  |

| <mark>6</mark> REI  | NFOR   | CED IT-                 |   | HERUG 2016 |
|---|--|-------------------------|---|------------|
| Objectives  | Quality                                      | Future proof            | Cost reduction  |            |
| not applied.  | Main goal is to                              | reinforce - event       | otes and guidelines are availa<br>ually actualized when needed<br>sic rule of conduct |            |
| Principles  | Standard                                     | Overarching             | Accessible and transparant  | Flexible   |
| <ul> <li>Methods a</li> <li>Sponsorsh</li> <li>Results</li> </ul> | ion and roles<br>and Tools<br>hip and budget | :<br>re within Maastric | cht University  |            |

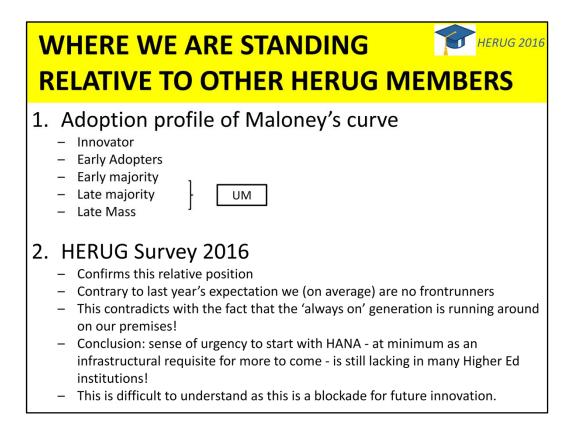


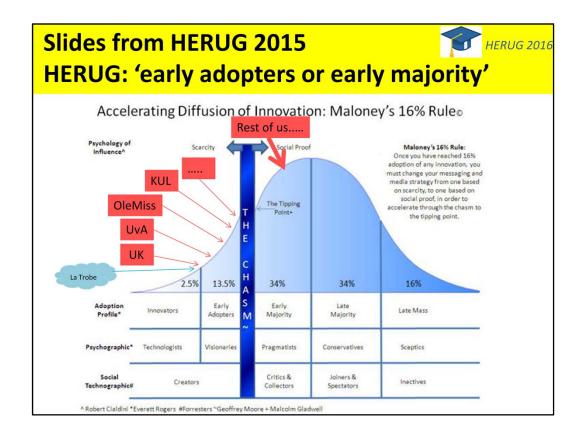
TDI Tailored Datacenter Integration HCP HANA Cloud Platform



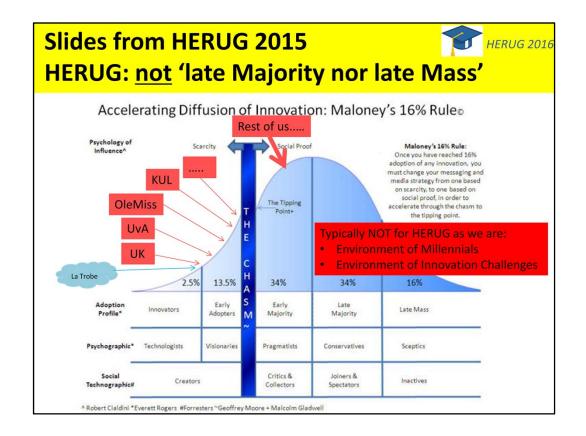
SAP FIORI blood types:

- 1. Transactional apps only (do not require HANA)
- 2. Factsheets (do require HANA)
- 3. Analytical apps (do require HANA)

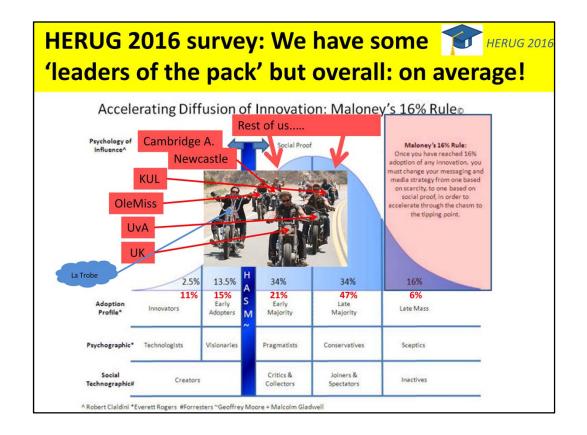




HERUG members are supposedly 'early adopters' & 'early majority'



HERUG members are supposedly NOT in 'late majority'or 'late Mass'

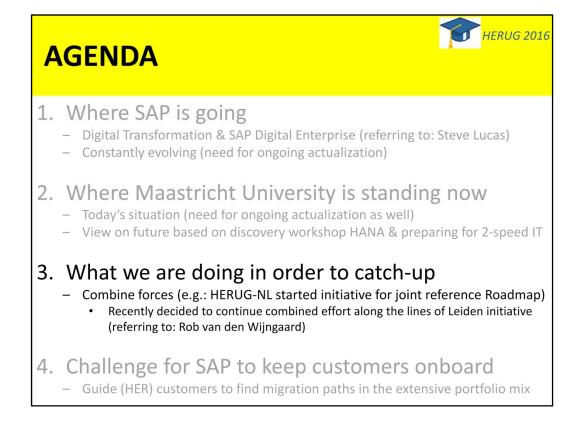


Very high-level observation based on HERUG-survey (therefore certainly of limited statistical proof). But anyway a rough indication. HANA adoption is not yet at highest peak.

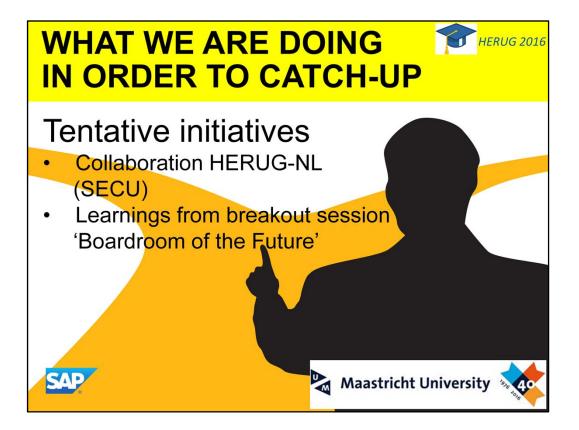
Adoption measured as:

- Sold licenses?
- Started implementation?
- Go-live?
- Etc.??????

We are 'on average'. We are NOT leading the pact! Opposite to what was expected last year.

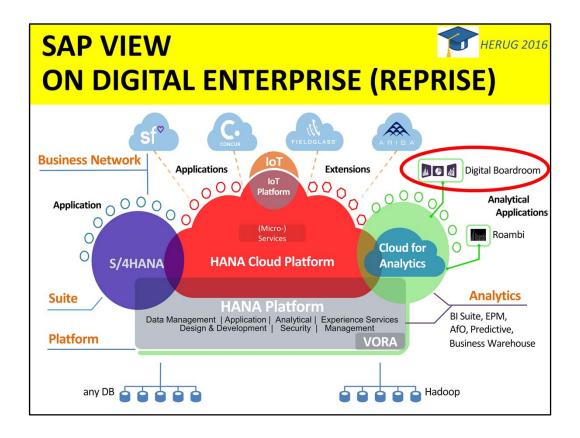


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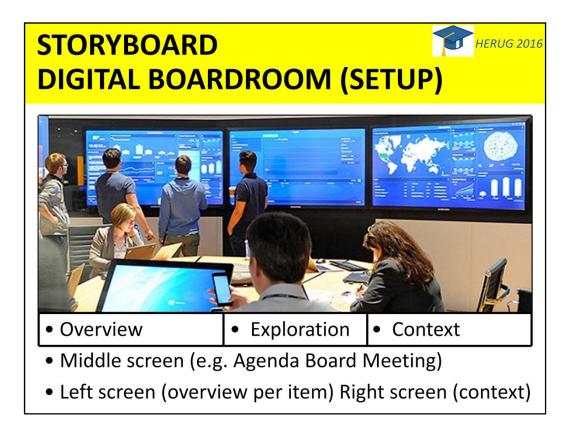


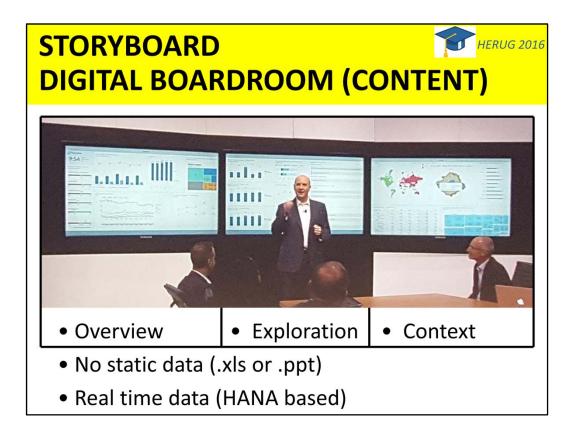
SECU = SAP CENTER of EXCELLENCE for UNIVERSITIES in the Netherlands; INTERNATIONAL equivalence: HERUG-NL

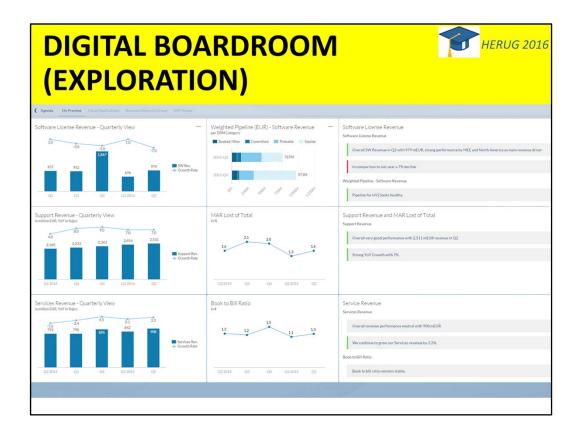


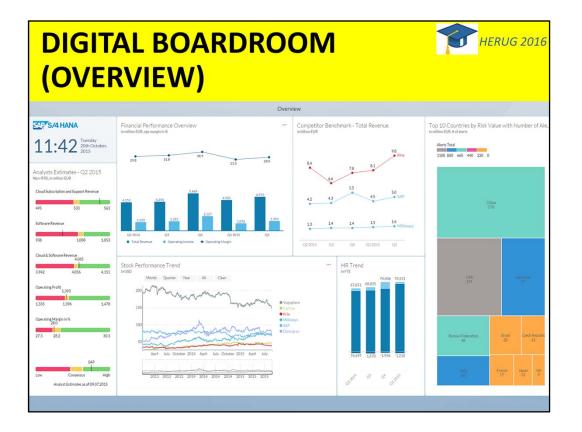
Basically the picture we have seen in the keynote from Steve Lucas with one single item added: AfO (Analysis for Office) as presented by Marlies van Roode. Now focusing on: Digital Boardroom.

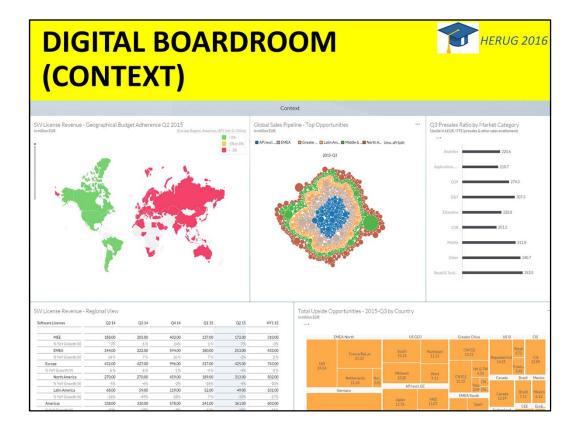


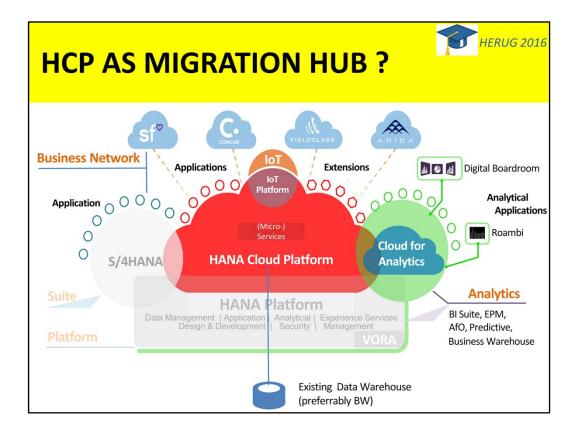




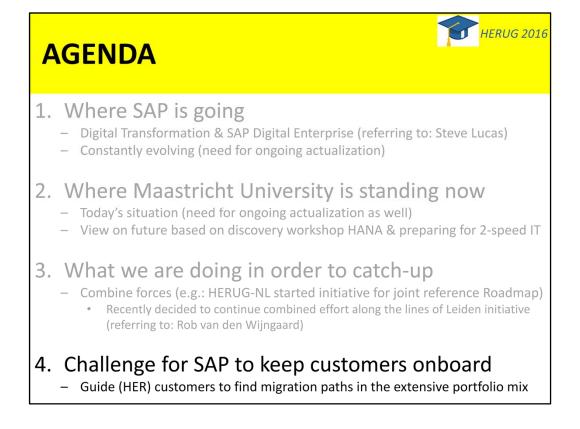




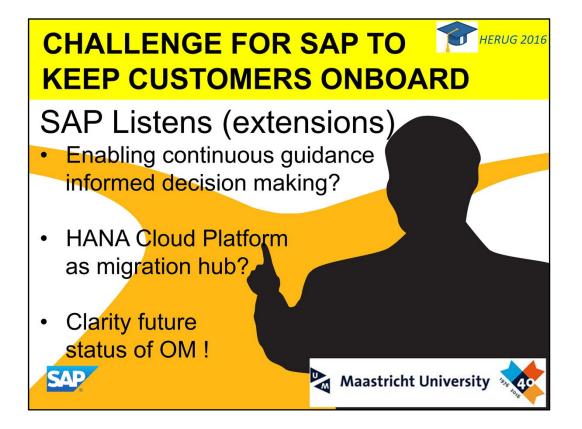




Basically the picture we have seen in the keynote from Steve Lucas with one single item added: AfO (Analysis for Office) as presented by Marlies van Roode. Question after 'Digital Boardroom workshop' HERAC: could HCP serve as a migration hub for migrating the existing old-style SAP landscape towards a new 'Digital University' landscape?



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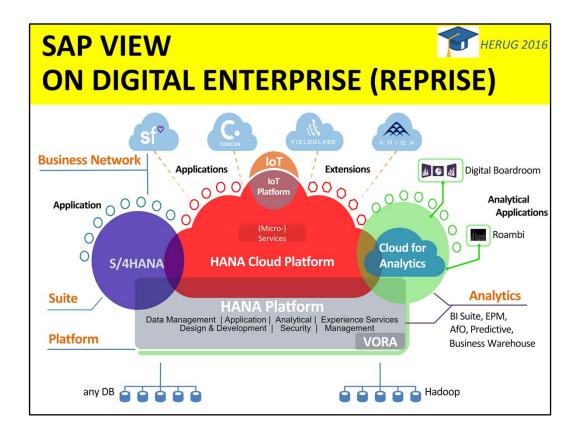


## CONTINUOUS GUIDANCE NEEDED

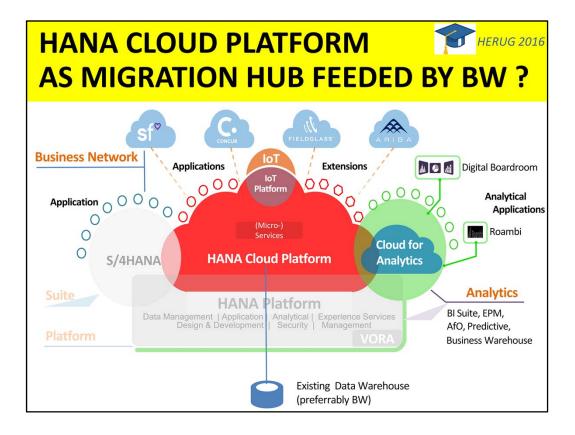
HERUG 2016

• Customers face serious problems to stay connected on the journey to the Digital Enterprise (University)

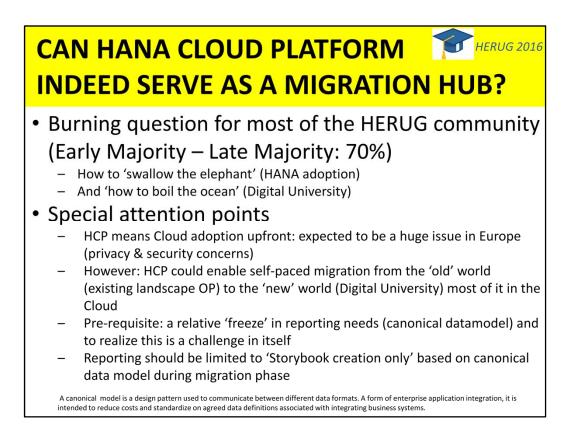
- Different awareness levels on 'what is going on'
- Many reasons to postpone strategic decision on Board level
  - Not ready for this yet (short term oriented vision)
  - No budget available (budget cutting financial mindset)
  - Let other's go first (low risk-appetite)
- Customers need help in order to survive the transition
  - When aware: how do we tackle this huge animal?
  - This is not my father's Cadillac anymore!
  - This is a new concept; like Apple-car, Google-car, ....



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I know, I know. I am a rather metaphorical speaker! In some cases the reason I am not well understood. But that's me.

## CLARITY FUTURE STATUS

- Burning question for HERUG community
  - With regard to HCM and SuccessFactors
  - With regard to SLcM
  - With regard to Workflow
  - With regard to .....
- Special attention point for the future
- High priority

