Fahrenheit Universities: Strategy for consolidation Universities in Gdansk

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Outline

Short presentation of consolidating universities

Consolidation potential

Legal conditions of Fahrenheit Universities

Where we are and current activities
Consolidating universities:
Gdansk University of Technology

> 15 000
Students

2 900
Employee

300,6 mln zł
Subvention
The Shanghai Ranking: in 2020 PG was included for the first time in the prestigious Academic Ranking of World Universities (ARWU)

QS World University Rankings 2021: GUT for the second time took the place in the 801-1000 range

Seventh in Poland, fourth among Technical Universities in the Perspektywy University Ranking

MEiN: GUT becomes a research University. It ranks second among the 10 best academic centers in Poland
### Consolidating universities: Medical University of Gdansk

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of students</td>
<td>6,196</td>
</tr>
<tr>
<td>Number of scientific staff</td>
<td>1,199</td>
</tr>
<tr>
<td>Number of English Division students</td>
<td>917</td>
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<tr>
<td>Faculties</td>
<td>4</td>
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</table>
Medical Simulation Centre – new trend in teaching

Over 20 mln zł in funding of the Ministry of Health

14, 5 mln zł
Costs of simulation equipment (POWER 2014 – 2020)

Over 6 mln zł
Costs of construction work (RPO WP 2014 – 2020)

15 simulations rooms
High fidelity

14 other rooms
didactic

Consolidating universities:
Medical University of Gdansk
Consolidating universities:
University of Gdansk

22 000
Students

3 300
Employee

316,9 mln zł
Subvention
The Shanghai Ranking: in 2020 **UG was included** in Global Ranking of Academic Subjects among the universities in Ecology discipline

**Times Higher Education World University Ranking (THE WUR):** in 2020, the University of Gdańsk took 4th place in the category of classical universities in Poland and 7th place in the overall ranking of Polish universities

**QS World University Ranking 2020:** UG was ranked high 5th among national classical universities and 11th among all universities in Poland

**Times Higher Education Impact Rankings:** UG is one of 5 Polish universities listed in the global ranking taking into account the 17 Sustainable Development goals set out in the 2030 Agenda

**MNiSW:** UG ranks in the second ten of the IDUB competition
The Daniel Fahrenheit Union of Universities in Gdańsk was appointed at the joint request of the rectors of the Medical University of Gdańsk, Gdańsk University of Technology and the University of Gdańsk.

Fahrenheit Universities was established on September 15, 2020 based on the Act on Higher Education (Dz. U. z 2017 r poz. 2183, ze zm.)

- Participating Universities are independent in the scope of their previous activities and remain autonomous in all domains of their activity
- The union has legal personality
- The collegial resolution-making body is the Association's Assembly chaired by the Association's President.
Position in Poland of the hypothetical „Fahrenheit University”

Fahrenheit University – 3rd in Poland

Regarding to the scholarly output we can benchmark position of the FU in an environment of the Polish universities. Based on FORD (OECD) classification, source SciVal/Scopus

<table>
<thead>
<tr>
<th>All publications type 2015–2019</th>
<th>Overall</th>
<th>Natural Sciences</th>
<th>Engineering and Technologies</th>
<th>Medical Sciences</th>
<th>Agricultural Sciences</th>
<th>Social Sciences</th>
<th>Humanities</th>
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<tbody>
<tr>
<td>University of Warsaw &amp; Warsaw Medical University (UW+WUM)*</td>
<td>21581</td>
<td>12770</td>
<td>2918</td>
<td>7824</td>
<td>740</td>
<td>2960</td>
<td>1674</td>
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<tr>
<td>Jagiellonian University (UJ)</td>
<td>17382</td>
<td>10313</td>
<td>2399</td>
<td>7328</td>
<td>919</td>
<td>1873</td>
<td>1136</td>
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<tr>
<td>University of Warsaw (UW)</td>
<td>14404</td>
<td>10536</td>
<td>2474</td>
<td>1567</td>
<td>511</td>
<td>2740</td>
<td>1654</td>
</tr>
<tr>
<td>Fahrenheit University (FU)</td>
<td>13346</td>
<td>9047</td>
<td>4186</td>
<td>4302</td>
<td>829</td>
<td>1161</td>
<td>357</td>
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<tr>
<td>Adam Mickiewicz University (UAM)</td>
<td>8145</td>
<td>5943</td>
<td>1756</td>
<td>970</td>
<td>753</td>
<td>1522</td>
<td>1167</td>
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<tr>
<td>Nicolaus Copernicus University (UMK)</td>
<td>5824</td>
<td>3767</td>
<td>1184</td>
<td>2129</td>
<td>417</td>
<td>617</td>
<td>373</td>
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<tr>
<td>University of Wroclaw (UWR)</td>
<td>5684</td>
<td>4584</td>
<td>940</td>
<td>781</td>
<td>460</td>
<td>701</td>
<td>479</td>
</tr>
</tbody>
</table>

*Hypothetical, non-existing University, only for benchmark.
Fahrenheit University – number of employee and PhD students

Research and teaching staff
(January 2021)

Professor – 406
Habilitated doctor – 968
doctor – 1796
Masters' degree – 570
Physician – 115

total – 3855

PhD students
(January 2021)

Doctoral studies – 1248
Doctoral schools – 475

total – 1723
Fahrenheit University – disciplines

Archeology
Architecture and urban planning
Automation, electronics and electrical engineering
Economics and Finance (GUT and UG)
Philosophy Socio-economic geography, and farm space
History
Informatics
Technical Informatics and Telecommunications
Biomedical engineering
Chemical engineering
Civil Engineering and Transport
Material Engineering
Mechanical Engineering
Environmental Engineering, Mining, Energy
Linguistics
Literary Studies
Mathematics (GUT and UG)
Biological Sciences
Chemical Sciences (GUT and UG)
Pharmaceutical Sciences

Physical Sciences (GUT and UG)
Medical Sciences
Culture and Religion Sciences
Management and quality sciences (GUTG and UG)
Health Sciences
Earth and Environmental Sciences
Legal sciences
Sociological Sciences
Education
Psychology
<table>
<thead>
<tr>
<th>Discipline</th>
<th>Number of scoring articles (2019–2020)</th>
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</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Medical Sciences</td>
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<tr>
<td>Health Sciences</td>
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<tr>
<td>Pharmaceutical Sciences</td>
<td>7</td>
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<tr>
<td>Automation, electronics and electrical engineering</td>
<td>22</td>
</tr>
<tr>
<td>Civil Engineering and Transport</td>
<td>20</td>
</tr>
<tr>
<td>Material Engineering</td>
<td>17</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>14</td>
</tr>
<tr>
<td>Environmental Engineering, Mining, Energy</td>
<td>10</td>
</tr>
<tr>
<td>Chemical Sciences (GUT and UG)</td>
<td>72</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>23</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>19</td>
</tr>
<tr>
<td>Earth and Environmental Sciences</td>
<td>13</td>
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<tr>
<td>Psychology</td>
<td>1</td>
</tr>
<tr>
<td>Economics and Finance</td>
<td>1</td>
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<tr>
<td>Literary Studies</td>
<td>1</td>
</tr>
<tr>
<td>Linguistics</td>
<td>1</td>
</tr>
</tbody>
</table>
The World’s Top 2% Scientists published by Stanford University

1. Śp. Jacek Namieśnik
2. Jan Kalinowski
3. Sławomir Koziel
4. Victor A. Eremeyev
5. Jacek Tejchman
6. Kazimierz Darowicki
7. Robert Jankowski
8. Waldemar Wardencki
9. Ewa Klugmann-Radziemska
10. Czesław Szmytkowski
11. Marek Krawczuk
12. Piotr Jasiński
13. Wojciech Pietraszkiewicz
14. Magdalena Rucka
15. Maciej Niedźwiecki
16. Michał Mrozowski
17. Rafał Szłapczyński
18. Marek Makowski
19. Zbigniew Krzemiński
20. Janusz Smulko
21. Ryszard Strzelecki
22. Andrzej Stateczny
23. Andrzej Seweryn

1. Śp. Jan Kapuściński
2. Grzegorz Węgrzyn
3. Śp. Alfons Kawski
4. Śp. Marek Grinberg
5. Bogdan Skwarzec
6. Michał Horodecki
7. Paweł Horodecki
8. Jerzy Falandysz
9. Ryszard Horodecki
10. Piotr Stepnowski
11. Andre Marc Selosse
12. Marek Żukowski
13. Adriana Zaleska Medynska
14. Robert Alicki

1. Śp. Roman Kaliszan
2. Krzysztof Narkiewicz
3. Jacek Jassem
4. Piotr Szefer
5. Tomasz Bączek
6. Zdzisław Brzozowski

Fahrenheit University – total: 43 scientists
Fahrenheit University – grants (2019-2020)

Joint grants (GUMED – PG – UG) – realized in 2019-2020

STRATEGMED III (Gumed – PG – UG)
OPUS 10 (GUMED-PG)
OPUS 13 (PG – UG)
OPUS 14 (Gumed – PG)
OPUS 15 (Gumed – PG)
OPUS 18 (GUMED-UG)
OPUS 18 (GUMED-UG)
FNP (GUMED-UG) – 3 projekty
FNP (GUMED-PG-UG)
SONATA BIS (PG-UG)
TECHMATSTRATEG 3 (Gumed – PG – UG)
Rozwój Innowacji Drogowych (RID) (PG – UG)
HORYZONT 2020 (Gumed – PG)
HARMONIA 9 (GUMED-UG)
NCBiR (didactic) (PG-UG)
Inkubator Innowacyjności 2.0 (GUMED-PG-UG)
Inkubator Innowacyjności 4.0 (GUMED-UG)
Centrum Projektów Polska Cyfrowa (GUMED-PG-UG)
GRIEG (Polish-Norwegian) (GUMED-UG)

Total number of joint projects:
PG–GUMED: 4
PG–UG–GUMED: 6
PG–UG: 4
GUMED–UG: 7

Fields of study (total): 143
Number of students: 42 200

Joint field of study:

– Mechanical and medical engineering, Eng. and MSc (PG/GUMED)

– Space and Satellite TEchnologies (PG/UG/UMG/AMW)

– Full time PhD studies in Chemistry and Biochemistry at the Faculty of Chemistry (UG/GUMED)

– International Ph.D. Programme „Chemistry for Health and the Environment” (INTERCHEM) (PG/UG)

– Intercollegiate Doctoral School of Biotechnology of the University of Gdansk and Medical University of Gdansk (UG/GUMED)
Factors for the successful consolidation

„The consolidation of colleges / universities is justified if it results in synergies that increase the value of a newly created entity. Essentially, synergy means the value of a merged universities exceeds the sum of the value of each individual university” (based on Fuzje Uczelni, Łukasz Sułkowski, 2020)

\[ V_{AB} = V_A + V_B + S_{AB} \]

- \( V_{AB} \) — value of merged universities
- \( V_A \) — value of University A
- \( V_B \) — value of University B
- \( S_{AB} \) — SYNERGY

The success of the fusion depends on the developed synergy effects
Development of synergistic areas

Synergy $S_{AB}$ at three levels:

1. Operational activities:
   - larger scale of activity,
   - international recognition, visibility at the Polish marker,
   - strong brand.

2. Financial, reduction of operating costs through:
   - rationalization of maintenance costs,
   - higher effectiveness of research and teaching activities.

3. Market activity:
   - reduction of local competition in the field of higher education,
   - organizing of the local market of scientific activity.
Synergy – selected activities

Joint Maintenance Center
– joint energy purchases (realized: 14% price reduction in two years)
– sharing maintenance activities (in progress).

Library Center (in progress)
– access to library resources of all universities,
– access to library digital resources of all universities.

Joint Service Center for dormitories (in preparation)
– flexible access of students of all universities to dormitories,
– sharing of dormitory modernization works,

Joint Public Procurement Service Center (in preparation)
– carrying out of joint procedures (e.g., chemical reagents ordering)
– provision of public procurement services for units or employees of all universities.

And other activities…. development of Gender Equality Plan for three universities in cooperation…
Identification of synergistic areas in science

**Joint interdisciplinary research:**
– joint local thematic seminars (ongoing),
– networking of research teams,
– promoting joint projects applications, including European.

**Joint Research Infrastructure Center** (ongoing):
– developing a concept for creating research centers laboratories,
– unification of the rules for using research infrastructure,
– rationalization of research infrastructure maintenance costs.
Difficulties in consolidation universities

Why have some college/university consolidation failed?

– lack of the acceptance of the consolidation process by the key community groups of individual universities;
– unrealistic programs of combining university activities;
– reduction of the number of managerial positions and personal conflicts

Factors for a successful consolidation

– the majority of community of all universities must to see the benefits for themselves of the introduced changes
– consolidation processes must be carried out considering the main demands of the academic community

The road map:
Association ➔ Federation ➔ Fahrenheit University
Expected effects of consolidation

The goals of the consolidation of the Pomeranian universities are:

- improving the quality of life and wealth of the inhabitants,
- boosting the economic development of Pomerania and the country based on knowledge and innovation
- increasing the academic level of Pomerania by increasing the number of students and scientists and implementation activities.

through:

creating a university with an undisputed international position, attracting talented and creative students who will stay in the region after their studies, supporting its dynamic development, as well as young scientists who will contribute to the dynamic development of Pomerania and the entire Polish Science.
Project „Supporting the consolidation processes of Universities” founded by Ministry of Education and Science

General information about the project

- Co-financing amount: 2 985 300 zł
- Project Leader: Gdansk University of Technology
- Partner institutions: University of Gdansk and Medical University of Gdansk

Aim:

Preparation of a comprehensive analysis and a feasibility study of the consolidation process of three Gdańsk universities at all important stages of consolidation. On their basis, federation / consolidation scenarios will be prepared, defining the optimal joint action program and correlated action programs for each university joining the federation.
Summary and tips

Identify synergy areas in your consolidation process

Include academic community into merging process (debates, workshops, etc.)

Include financial mechanism to increase research level and cooperation activities (small University grants system, awards for high impacted publications, etc.)

Don’t do it in rush!!
Thank you for your attention