



Egészségügyi szektor innovációk Magyarországon

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GE Magyarország

A GE Healthcare Üzletág

Egy új, személyre szabott digitális ökoszisztéma

PIACVEZETŐ A KÉPALKOTÁSBAN

- 1M+ installált bázis
- 16k+ scan percenként

PIACVEZETŐ AZ ADATELEMZÉSBEN

- 350M+ vizsgálat
- 160k+ kezelt eszköz

PIACVEZETŐ AZ ÉLETTUDOMÁNYOK TERÉN

- Sejterápia, kontrasztanyagok

54 ezer munkaválló világszerte
19B \$ éves árbevétel



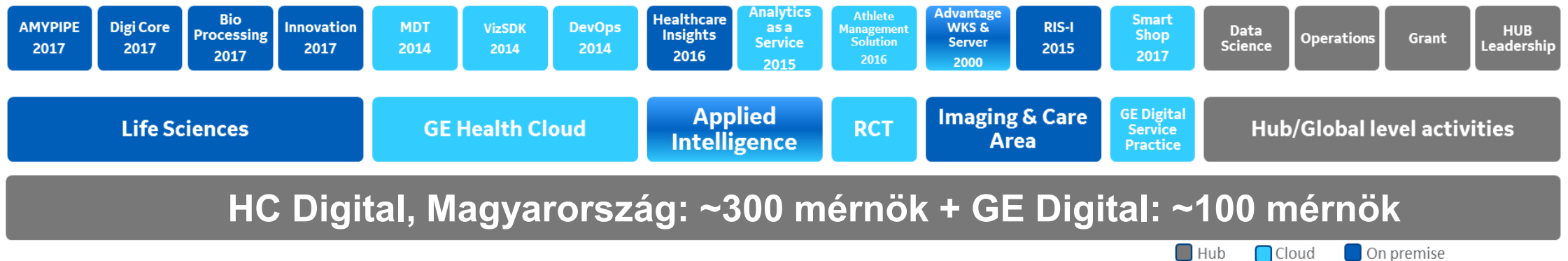
A GE Healthcare Magyarországon

A GE adat- és képelemzésre szakosodott fejlesztési központja 2000 óta van jelen az országban

A GE teljes telepített állománya profitál a Magyarországon tervezett komplex szoftver termékek használatából

Erős akadémiai hálózat (magasan jegyzett egyetemek Magyarországon, Németországban, Lengyelországban, az Egyesült Királyságban)

Az EU egyik legnagyobb „Data Science” csapata támogatja az élettudományi és digitális képalkotási fejlesztéseket



Az egészségügyi innováció globális trendjei

Megoldások a szektor kihívásaira

A LEGJELENTŐSEBB INNOVÁCIÓS TERÜLETEK: AZ ADATELEMZÉS BEN REJLŐ KIAKNÁZATLAN POTÉ

3D nyomtatással készült eszközök

Bioszenzorok és aktivitásmérők

Mesterséges intelligencia

Virtuális valóság

Távgyógyászat

Immunterápia

Kényelmes ellátás

Új generációs szekvenálás

A közösségi média felhasználása

Az ellátás helyén alkalmazott diagnosztika

Egy kórházban keletkezett
adatok mennyisége: 50 petabyte/év

Hasznosulás: <3%

Keletkezett összes
orvosi adat 2011: 153 exabyte
2020: 2314 exabyte

globálisan:

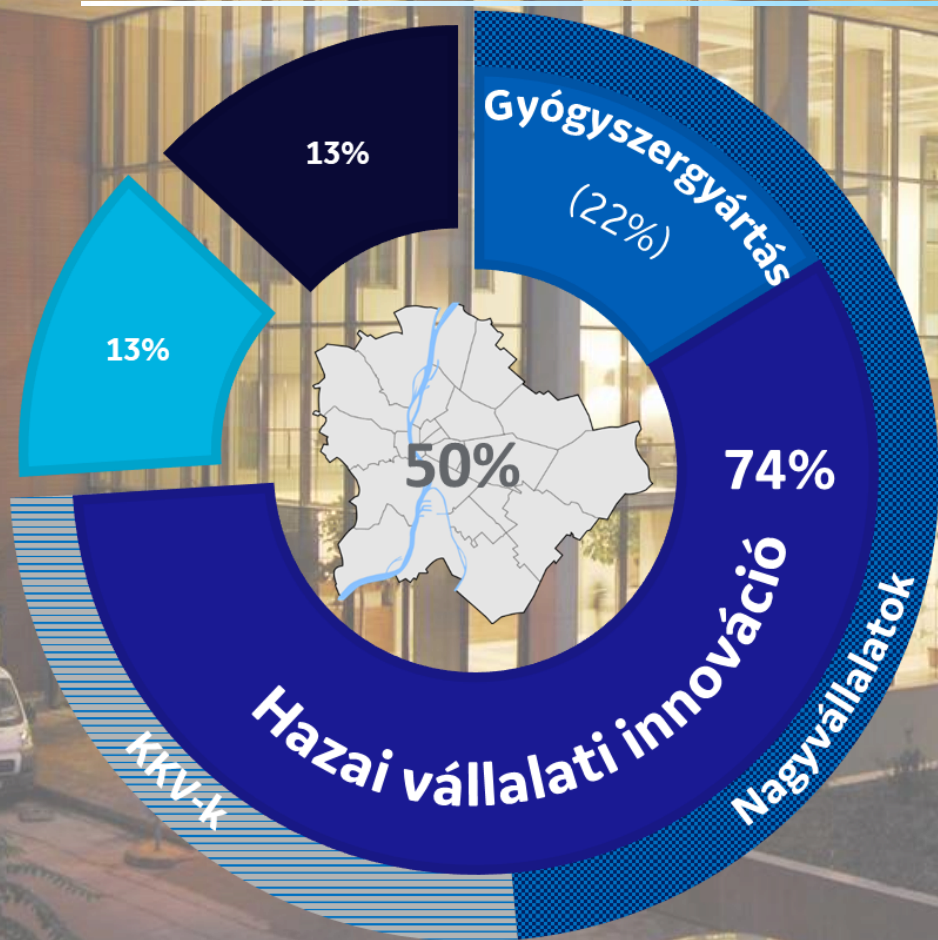
Hasznosulás: ?

Az adatelemzés fejlődésével a precíziós medicina új korába lépünk



Az egészségügyi innováció hazai vetülete

Fókuszban a magas hozzáadott érték megteremtése



Teljes hazai K+F+I ráfordítás (2017): 517Mrd Ft, ebből egészségügyi: 130Mrd+ Ft (becs)

Ökoszisztéma-szintű innováció

A GE Healthcare és partnerei együttműködése

TUDÁSMEGOSZTÁS



PÉCSI TUDOMÁNYEGYETEM
UNIVERSITY OF PÉCS



UPPSALA
UNIVERSITET



NEMZETKÖZI HÁLÓZAT



FINANSZÍROZÁSI HÁTTÉR



Venture Capital Network
EIT crowd-funding platform

HEALTH VENTURELAB *startup akcelerátor program*



4
hónap



pre-seed / seed 10 + 10
fázis csapat



Melléklet



Country Comparison

	Corporate tax %	VAT %	Personal income tax %	Social charges %	GDP growth %	Unemployment rate %
Belgium	29	21/12/6	53,2	27,5	1,7	7,5
Czech Republic	19	21/15/10	15	34	4,3	2,8
France	33	20/10/5,5	51,5	45	1,8	9,5
Germany	30	19/7	47,5	19,4	2,2	3,8
Netherlands	25	21/6	52	19	3,2	5,1
Hungary	9	27/18/5	15	17,5	4,7	3,6
Poland	19	23/8/5	32	21	4,6	4,8

Source: [Deloitte – Survey 2017](#)



Hungary

Innovation Incentives

Type	National incentives	State, provincial, or local incentives ¹	Filing deadlines imposed	Claim in advance or arrears ²	How the incentive is realized	Maximum assistance available to large enterprises ³	Maximum assistance available to SMEs ³
Innovation							
R&D tax	●	●	●	Arrears	Super deduction, investment tax allowance, and social tax exemptions	Varies	Varies
R&D grant (national)	●	●	●	Advance	Cash grant with fixed budget and available for certain periods	100% funding	100% funding
R&D grant (EU)	●	●	●	Advance	Cash grant with fixed budget and available for certain periods	100% funding	100% funding
EKD cash grant (R&D)	●	●	●	Advance	Cash grant, open all year with no fixed budget	25% of costs of R&D project, up to EUR 15M	25% of costs of R&D project, up to EUR 15M
Development tax allowance	●	●	●	Advance	Tax allowance on corporate income tax payable for R&D capital investment	Tax allowance (50% of qualified investment) is limited to reducing corporate income tax liability of up to 80% of the annual corporate income tax payable	Tax allowance (70% of qualified investment) is limited to reducing the corporate income tax liability of up to 80% of the annual corporate income tax payable
Patent box	●	●	●	Arrears	Tax base reduction	50% of profit related to royalty received may be deductible	50% of profit related to royalty received may be deductible

Type	National incentives	State, provincial, or local incentives ¹	Filing deadlines imposed	Claim in advance or arrears ²	How the incentive is realized	Maximum assistance available to large enterprises ³	Maximum assistance available to SMEs ³
Innovation							
R&D tax	●	●	●	Arrears	Super deduction	19% of qualified research expenses (QREs) and an additional 21% on the increase in QREs over the prior year	19% of qualified research expenses (QREs) and an additional 21% on the increase in QREs over the prior year
R&D grant (national)	●	●	●	Arrears	Cash grant	25%–100% of eligible costs	35%–100% of eligible costs
R&D grant (EU)	●	●	●	Arrears	Cash grant	25%–100% of eligible costs	25%–100% of eligible costs
Patent box	●	●	●	N/A	N/A	N/A	N/A

Czech Republic Innovation Incentives

Netherlands Innovation Incentives

Type	National incentives	State, provincial, or local incentives ¹	Filing deadlines imposed	Claim in advance or arrears ²	How the incentive is realized	Maximum assistance available to large enterprises ³	Maximum assistance available to SMEs ³
Innovation							
R&D tax	●	●	●	Advance	Wage tax credit	31% of qualifying wages up to EUR 350K and 14% of remaining qualifying wages	40% of qualifying wages up to EUR 350K and 14% of remaining qualifying wages
R&D grant (national)	●	●	●	Advance	Cash grants	Varies (between 15% and 50% funding, depending on the program)	Varies (between 15% and 50% funding, depending on the program)
R&D grant (EU)	●	●	●	Advance	Cash grants	Varies (between 15% and 50% funding, depending on the program)	Varies (between 15% and 50% funding, depending on the program)
Patent box	●	●	●	Advance and arrears	Reduced corporate income tax rate on innovative profit	5% corporate tax rate instead of 25% for qualifying income, no cap	5% corporate tax rate instead of 25% for qualifying income, no cap

Type	National incentives	State, provincial, or local incentives ¹	Filing deadlines imposed	Claim in advance or arrears ²	How the incentive is realized	Maximum assistance available to large enterprises ³	Maximum assistance available to SMEs ³
Innovation							
R&D tax	●	●	●	Arrears	Refundable tax credit	30% of qualified research expenses	30% of qualified research expenses
Innovation tax credit	●	●	●	Arrears	Refundable tax credit	N/A	20% for certain pilot model and prototype development costs
R&D grant (national)	●	●	●	Advance	Nonrefundable and refundable cash grants ⁴	Varies, around 20%–25% of project expenditure	Varies, around 40% (maximum of 60%) of project expenditure
R&D grant (EU)	●	●	●	Advance	Nonrefundable cash grant ⁴	Varies, around 20%–25% of the relevant project	Varies, around 40% (maximum of 60%) of the project expenditure
Patent box	●	●	●	Arrears	Reduced tax rate	17% effective tax rate for qualifying income ⁵	17% effective tax rate for qualifying income ⁵

France Innovation Incentives

Type	National incentives	State, provincial, or local incentives ¹	Filing deadlines imposed	Claim in advance or arrears ²	How the incentive is realized	Maximum assistance available to large enterprises ³	Maximum assistance available to SMEs ³
Innovation							
R&D tax deduction	●	●	●	Arrears	Super deduction	200% of qualifying expenditure (250% for R&D centers)	200% of qualifying expenditure (250% for R&D centers)
R&D grant (national and EU)	●	●	●	Advance	Cash grant	25%–65% of qualifying expenditure, depending on the type of activities	35%–80% of qualifying expenditure, depending on the type of activities and size of company
R&D Infrastructure grant (EU)	●	●	●	Advance	Cash grant	15%–50% (until 2017) and 10%–50% (from 2018) of qualified expenditure, depending on the location of the investment (lower aid intensity for Warsaw)	25%–70% (until 2017) and 20%–70% (from 2018) of qualifying expenditure, depending on the location of the investment and the size of the company
Patent box	●	●	●	N/A	N/A	N/A	N/A

Poland Innovation Incentives

