



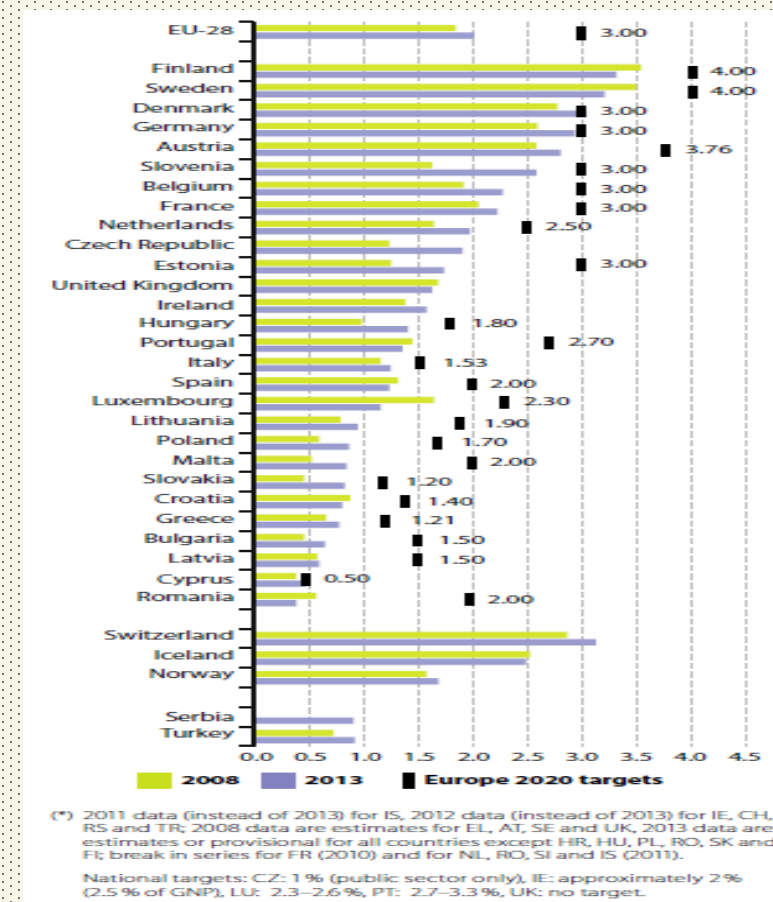
Technological innovation and start-ups: the European Union support

EUROPE HAS A LOT OF POTENTIAL

- INNOVATIVE IDEAS
- LARGE AND DIVERSIFIED COMPANIES AS WELL AS SME'S (ABOUT 24 MILLION)
- SUCCESSFUL ENTREPRENEURS
- GOOD UNIVERSITIES AND OTHER GRADUATE SCHOOLS (>30 IN TOP 100 SHANGHAI RANKING, INCLUDING UK)
- A BIG POTENTIAL EUROPEAN MARKET (+/- 450 MILLION PEOPLE)

BUT

- EUROPE NEEDS TO IMPROVE THE GAP BETWEEN CREATIVITY AND INNOVATIVE PRODUCTS AND SERVICES
- DE-INDUSTRIALIZATION IS AN ISSUE
- HOW TO CURB UNEMPLOYMENT?
- HOW TO VALORIZE SME'S R&D AND CREATIVITY?
- HOW TO CHANGE ATTITUDE TOWARDS RISK AND FAILURE?
- DISPARITY IN EUROPEAN COUNTRIES R&D EFFICIENCY

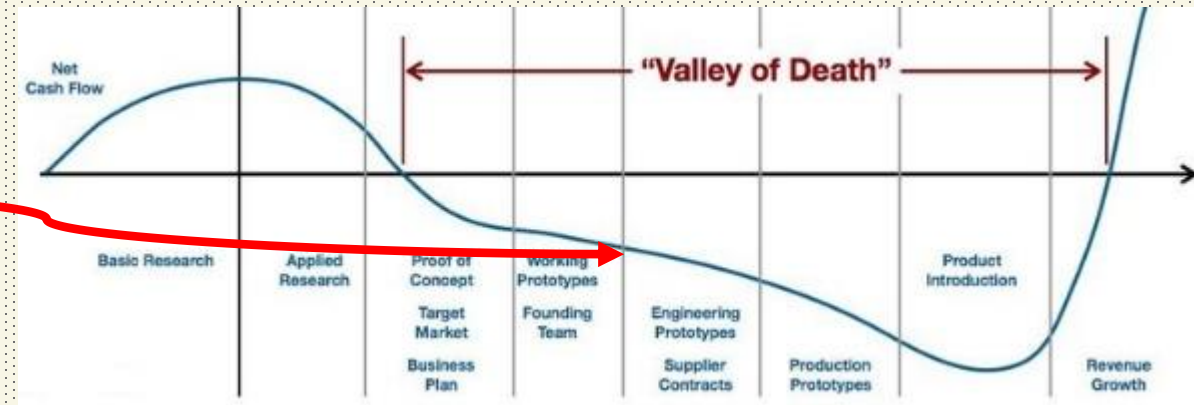
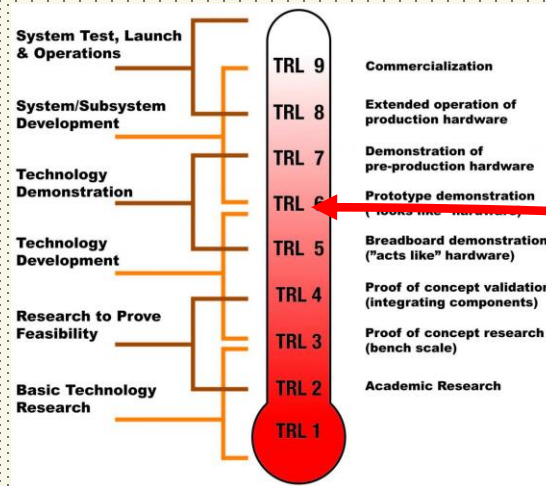




Technological innovation and start-ups: the European Union support

- EU HAS FEWER AND LESS R&D-INTENSIVE “YOLLIES” THAN US (*)
- ON 160 “UNICORNS” COMPANIES (START-UP VALORIZED AT MORE THAN 1 BILLION USD) SINCE 2012: USA(122), CHINA (92), INDIA (65), UK (31), ISRAEL (18), CANADA (17), SOUTH KOREA (15), BRAZIL (12), **FRANCE (12)**, **GERMANY (12)**, **SWEDEN (10)**, SWITZERLAND (7), INDONESIA (7), AUSTRALIA (6), SINGAPORE (6), JAPAN (6), HONG KONG (5), **PORTUGAL (4)**, MEXICO (3), ...
- DEATH VALLEY IS AN ISSUE

From UC
Davies



(*) YOUNG LEADING INNOVATORS, E.G. AMAZON, APPLE, GOOGLE, MICROSOFT, TESLA, UBER, FACEBOOK,...



Technological innovation and start-ups: the European Union support

EU HORIZON EUROPE (2021-2027): BIG BUDGET: 95.5 BILLION €

BUT

« IT'S NOT HOW BIG YOU MAKE IT BUT HOW YOU MAKE IT BIG »: EFFICIENCY?

- **ROOM FOR IMPROVEMENT?**

- ORGANIZATIONAL CHART OF EU R&D DIRECTORATE IS A COMPLEX STRUCTURE (BATTLESHIP MANAGEMENT) WITH MANY DIFFERENT ENTITIES (JRC, EIT, EIC, ERA, ERC,...)
- **PILLAR 3** IS INNOVATIVE EUROPE (STIMULATING MARKET CREATING BREAKTHROUGHS AND ECOSYSTEMS FOR INNOVATION) AND ENCOMPASSES 2 ENTITIES, EIC AND EIT LINKED BY A MOU
- **EIC DEPENDS ON DIRECTORATE R&D. AND SUPPORTS R&D FROM EARLY STAGE TO SCALE UP OF INNOVATIVE START-UPS AND SME'S AND ENCOMPASSES**
 - EIC PATHFINDER: GRANTS FORM EARLY TECHNOLOGY TO PROOF OF CONCEPT (TRL 3-4)
 - EIC ACCELERATOR : GRANTS FOR SINGLE SMEs AND START-UPS
 - EIC TRANSITION: GRANTS FROM PROOF OF CONCEPT TO PRE-COMMERCIAL
 - BUSINESS ACCELERATION SERVICES



Technological innovation and start-ups: the European Union support

- **EIT DEPENDS ON DIRECTORATE EDUCATION AND CULTURE**

EIT DRIVES INNOVATION BY BRINGING TOGETHER BUSINESS, EDUCATION AND RESEARCH TO FIND SOLUTIONS FOR GLOBAL CHALLENGES

- **QUESTION: OVERLAP EIT VERSUS EIC OR COMPLEMENTARITY?**

EU COMMISSION SAYS COMPLEMENTARITY BUT...THE MACHINERY IS COMPLEX AND BUREAUCRATIC

- **PROCEDURE FOR PROJECT PARTICIPATION**

- HAS BEEN SIMPLIFIED BUT STILL A HIGH BURDEN FOR SME'S (LARGE COMPANIES HAVE DEDICATED STAFF)
- LONG DELAYS FOR DECISION AND FOR GRANT, IF SUCCESSFUL, ARE A DETERRENT FOR SME'S

- **A COMPREHENSIVE STUDY WAS COMMISSIONED BY EU TO ANALYZE R&D & INNOVATION EFFICIENCY (ENIRI STUDY BY BIRD AND BIRD, 2017)**

- ENIRI STUDY COMPARED, A.O., PUBLIC RDI SUPPORT UN THE EU AND 9 OTHER COUNTRIES (AUSTRALIA, BRAZIL, CANADA, CHINA, INDIA, JAPAN, RUSSIA, SOUTH-KOREA AND USA)



Technological innovation and start-ups: the European Union support

- **ENIRI STUDY CONCLUSIONS**

- EU PUBLIC RDI SUPPORT IS **LESS EFFICIENT** IN EU THAN JAPAN, S-KOREA AND USA BECAUSE OF **COMPLEXITY OF EU RULES**, THEIR IMPLEMENTATION AND **LONG DURATION OF EU APPROVAL PROCESS**
- **EU STATE AID RULES** DO NOT TAKE INTO ACCOUNT THE SPECIFIC CHALLENGES AND NEEDS OF **SME'S** AND PROVIDE INSUFFICIENT INCENTIVES FOR COLLABORATION BETWEEN **SME'S**, UNIVERSITIES AND RESEARCH CENTERS OR **RTO'S** (RESEARCH AND TECHNOLOGY ORGANIZATIONS)
- **TRANSPARENCY REQUIREMENT** (NOT REQUESTED IN NON EU COUNTRIES) IS A DETERRENT FOR MANY SINCE IT **PROVIDES COMPETITORS WITH SENSITIVE INFORMATION ON THE RESEARCH UNDERTAKEN BY THE BENEFICIARY**
- THE PRESUMPTION THAT **AID DISTORTS COMPETITION MAY NOT BE APPROPRIATE FOR RDI** AND LEAVES **START-UPS AND SME'S ALONE WHEN THEY NEED FINANCIAL HELP MOST**, I.E. SCALING UP AT TRL 5-7 (DEVELOPPING, ENGINEERING AND PRODUCING PROTOTYPES)

- **NB: 27 JUL 2021 | NEWS: MORE MONEY FOR RESEARCH AS EU ADOPTS LONG-AWAITED STATE AID EXEMPTIONS**

- “WE ARE ALSO INTRODUCING MORE POSSIBILITIES FOR MEMBER STATES TO PROVIDE STATE AID **TO SUPPORT THE TWIN TRANSITION TO A GREEN AND DIGITAL ECONOMY** WITHOUT THE NEED OF A PRIOR NOTIFICATION PROCEDURE, **WHILE AT THE SAME TIME NOT CAUSING UNDUE DISTORTIONS OF COMPETITION IN THE SINGLE MARKET**,” SAID COMMISSION EXECUTIVE VICE-PRESIDENT MARGRETHE VESTAGER.
- ACCORDING TO THE COMMISSION, THE RELAXED RULES WILL PREVENT DELAYS AND REMOVE ACCOUNTING BOTTLENECKS IN THE ROLLOUT OF RESEARCH, DEVELOPMENT AND INNOVATION PROJECTS IN THE 2021-27 EU BUDGET. (LIMITED TO SME'S AND SOME OTHERS)
- **HOW EFFECTIVE? TIME WILL TELL**



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- **MAIN RECOMMANDATIONS FROM ENIRI STUDY**
 - **LIMITING SCOPE OF TRANSPARENCY REQUIREMENT**
 - **SHORTENING AND SIMPLIFYING APPROVAL PROCESS (5 MONTHS MAX FOR « SERIOUS ISSUES »)**
 - **TRANSFERRING POWER TO APPROVE SUPPORT FOR RDI UNDER THE EU STATE AID RULES, FROM DG COMPETITION TO DG RESEARCH AND INNOVATION**
 - **EXPANDING THE NOTION OF « IMPORTANT PROGRAMMES OF COMMON EUROPEAN INTEREST »**
- **MORE GENERALLY (CF. REPORT « A ROBUST INNOVATION ECOSYSTEM FOR THE FUTURE OF EUROPE, REPORT ON THE RESULTS OF THE STAKEHOLDER CONSULTATION OF OCTOBER 2019-FEBRUARY 2020 »)**
 - **EU WANTS AND NEEDS AN EFFICIENT ECOSYSTEM, WHAT MEANS DIFFERENT STAKEHOLDERS, ENTITIES AND CONDITIONS:**
 - **START-UPS, INVESTORS, CORPORATES, SME'S, UNIVERSITIES, RTO'S, REGIONS, CITIES, NATIONAL INNOVATION AGENCIES**
 - **KEY ISSUES ARE COMPETENCE, TALENT, CONNECTEDNESS OF STAKEHOLDERS ACROSS BORDERS AND CAPITAL**
 - **CONNECTEDNESS IN EU IS JEOPARDIZED BY THE CURRENT REGULATORY BURDEN → NEED FOR SIMPLIFICATION AND FLEXIBILITY IN ORDER TO DECREASE THE « TRANSACTION COSTS »**



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- **FOR IMPROVING THE EU ECOSYSTEM: A MORE BOTTOM UP SYSTEM** VERSUS THE CURRENT TOP DOWN EU MODEL
- **A NEW KIND OF SYMBIOTIC ECOSYSTEM, SHORTENING SOCIAL DISTANCE, LIMITING « TRANSACTION COST », BREAKING UP HIERARCHIES AND BUREAUCRACY, PROMOTING EASY AND QUICK CONNECTIONS: A DYNAMIC AND FLEXIBLE NETWORK TO ALLOW EMERGENCE, BIFURCATION AND SEIZE OPPORTUNITIES**
 - DECREASING THE NUMBER OF PROGRAMMES CURRENTLY ELIGIBLE AND OPEN UP FOR RESEARCHERS INGENUITY AND CREATIVITY TO COME UP WITH NEW PROJECTS
 - MORE FINANCIAL SUPPORT FOR RESEARCH INFRASTRUCTURE IN EUROPEAN UNIVERSITIES
 - INCREASE SUPPORT FOR INTERNATIONAL COLLABORATION FOR RESEARCHERS
 - PROMOTE STEM STUDIES AND CAREERS FOR THE YOUNGER GENERATIONS



Technological innovation and start-ups: the European Union support

- **FOR IMPROVING THE EU ECOSYSTEM: A MORE BOTTOM UP SYSTEM** VERSUS THE CURRENT TOP DOWN EU MODEL
 - CAMPAIGN FOR A POSITIVE IMAGE OF RESPONSIBLE RESEARCH AND INNOVATION AS A VECTOR TOWARDS UN 17 SUSTAINABLE DEVELOPMENT GOALS
 - SIMPLIFY AND CLARIFY STRUCTURE OF DG RESEARCH AND INNOVATION, AVOIDING OVERLAPS AND UNNECESSARY COMPLEXITY
 - UPGRADE STATE AID RULES TO STIMULATE MORE COOPERATION BETWEEN SME'S, UNIVERSITIES AND RTO'S
 - LIMIT SCOPE OF TRANSPARENCY REQUIREMENT CURRENTLY HARMING BENEFICIARIES
 - SHORTEN AND SIMPLIFY PROJECT APPROVAL PROCESS (<5 MONTHS)



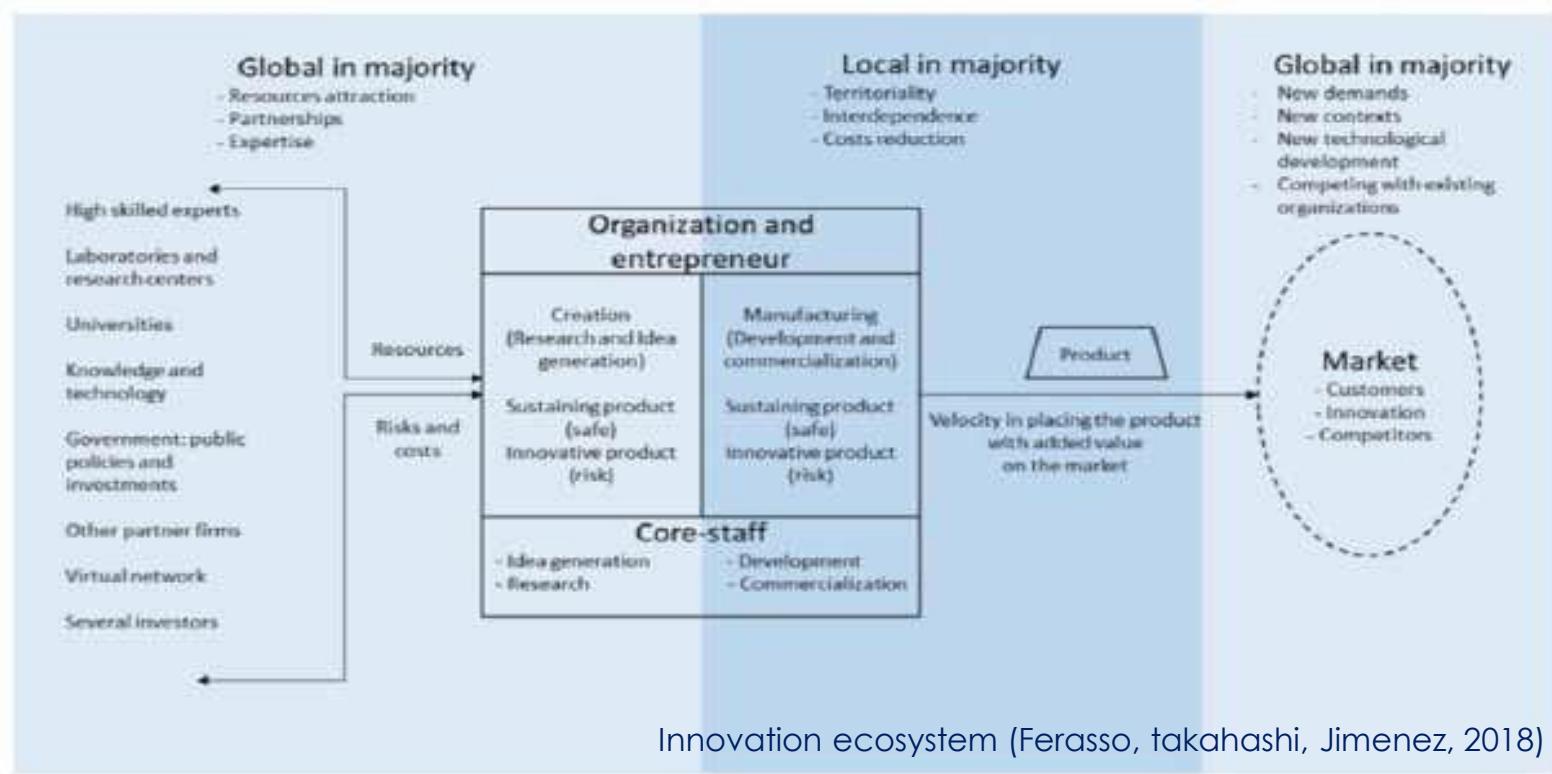
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- **How TO DO IT?**
 - **OPTION 1: STARTING WITH SOME OF THE EXISTING RESSOURCES?**
 - **INDUSTRY (ERT: [HTTPS://ERT.EU/](https://ert.eu/)):** FORUM FOR CEOs AND CHAIRS OF >55 LEADING COMPANIES OF EUROPEAN PARENTAGE IN THE INDUSTRIAL AND TECHNOLOGICAL SECTOR
 - **INDUSTRIAL RESEARCH (EIRMA: [WWW.EIRMA.ORG](http://www.eirma.org))**
 - **UNIVERSITIES (EUA: [HTTPS://EUA.EU/](https://eua.eu/)):** >800 EUROPEAN UNIVERSITIES
 - **RTO's (EARTO: [HTTPS://WWW.EARTO.EU/](https://www.earto.eu/)):** 350 RTO's IN 23 COUNTRIES
 - **38 MAJOR EUROPEAN RESEARCH PUBLIC ORGANISATIONS (SCIENCE EUROPE: [HTTPS://WWW.SCIENCEEUROPE.ORG/](https://www.scienceeurope.org/))**



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- **OR OPTION 2: FROM SCRATCH**, with Business angels and VC's, R&D technological parks, large companies, sme's, government, laboratories, universities **and...with the right model!**



**OR combination
options 1+2**



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Timing is
essential

