

Technical Assistance for Turkey in Horizon 2020 Phase-II
EuropeAid/139098/IH/SER/TR

Horizon Europe Calls - <u>Session 4:</u> Practical aspects of EU research collaboration

General Info Day #3

Adamantios Koumpis

izmir, 1 March 2022

Photo by Christian Lue on Unsplash











Preamble: Ever been in a quarry?...











mediates of our federated predictive models we will first analyse technical differences in data collection across performed in an ethical manner without sharing gatient data outside of their respective clinical centers, First, we will inspect individual database solutions including data types and units. Based on the solutions from all ally and betraggraphy of the different solvent. We will implement methods for generating combetic data mental properties. These steps will allow us to ensure the constants of the data harmonisation while respecting

only the notrease platform of the involved SME guadient0 includes key technical solutions to perform the ination steps described above in a secure manner. The platform researcs privacy and allows for expert outside of a data senter of only the non-sensitive data elements, such as data schemes or appropria-

Staying unified data formats in all participating centers we will implement federated approaches to outcome

longer data will be processed using state-of-the-art deep braming approaches to quantify morphological parameters Stature layer within our predictive modelling.

The normalized and augmented data will be fed into machine braving methods trained in a federated manner as described in section 1.2.4. To move treatweethiness and note of application we will choose transparent machine burning approaches that can be interpreted and described to patients and clinicians including decision trees, E-mount middless, recreases based approaches, or support vector machines. To identify the most medicalize

The independent baseline cariables obtained from imaging data, grouppe, clinical absocuteristics and

Call (BORLING MICH SET) AT LOSS TRAIN OF BANKING — Transcriby settlinial banking-serv (All) such to predict the risk of disease blood turing-derived bismarkers will be used with only limited any-defined selection (see 1.2.2). While in granted sibility of this project is researd by the definition of a set of clinical outcomes pivotal to ADPKD.

- a) Xundy of FR ducling in subbain't. They per year. Future loss of hidney function is the most common and stant outcome in ADPED and the primary discriminator regarding currently available treatment
- Ygarly TKV growth in present. Expecially in patients with maintained kidney function yearly of FR decline about will not be sufficient to entouse progression. Bovever, kidneys already give continuously while kidney function is still mental and the growth or flexit disease projections. Key real interactivation provides of flexit provides of flexit pain, you interaction, materialistics, and kidney stenses.
- d) Key extraored manifestations; Occurrence of intracranial annuryous and intracranial blending. New court
- To select the most appropriate model for our tools we will make use of key model metrics used in profit the federated approach taken by ARTICYST-

1.2.6 Health Communication to ADPKD patients

- . Formative evaluation: Establishment of the needs by the three target groups clinicians/patients/public on
- · Process evaluation: Evaluate the anability of the tool across the three target groups Summative Evaluation: Is the tool making any difference
- · Assuments of dispute in the public
- Assuments of distance in the public
 Attitudes homes and fixers towards Al decision making Link to othics in contest and othics in design
- Exabling and facilitating dialog for evidence others.

Technical and ethical aspects of the developed AT tools will be combined in our communication research. In this part of our work we will taskle the issues of the understandability and explainability of Al and their results for ADPKD sisk and progress prediction as well as the othical considerations that were adopted in the tool development. Sefermation about pressures for the decision-making of the Al, who makis involved in the development of the algorithm and data, information about data toxing, booling, and user rights will all be part of the restarch on best communication stategies for Al application in health. Via questionnaires and patient meetings we will address questions such as: To patients and clinicians understand the results and what they mean for their individual medical decision making? Any the recommendations given by Al understandable without further explanation? What kind of context information is needed for the patients and clinicians? Addressing these

At the stary 2 of the evidence ethics exceedure the communicative research will device understandable visuals and medical evidence and history behind its development. Among the evolved strategies we will identify information and communication methods that inflaence in both positive and negative ways the trust of patients, dectors and

1.2.7 Real-world application to improve ADPKD clinical decision making

Real-world aredication and verification of the tools developed is indeed a large ten towards a change in clinical

Call SECURITY SETS NOT ACCUSE THE SECURITY SECURITY OF THE SECURITY SECURITY (SE) tools to product the risk of the security and the description (SE) tools to product the risk of the security and the security se

practice. Consequently, and world writing with aboutly be planted from the beginning of ARTICVST and peride as end-to-end solution for privacy-proserving distributed coloret exploration and policet care. Personal transfer and the state of the state and at the cost of the ancient to companies the federated approach that will rely us have to cost as it is productionally the cost according. The results will be offered to the clinical partners for validation



Replace: "for prophopis" with "in medical diagnostics and grognosis"

Philipp Antozak 10:06 JM Jan 15 Add: "FU ADRIG"

Philipp Antozak 10:07 AM Jan 15

Delete: "from SU in the field of ASPKS" Delete: That cover delly needs and suggest the treatment of more then \$0,000 perlents"

Philipp Antozak 10:07 JAN Jan 15 le this a quess?

Kasia Sozek 206 PM Today Replace: Thirth (1

Add: "Direkt integration of trustworthy All frameworks early in the developmental process through ethical a..."

Kasia Bozak 206 PM Today Replace: "X" with "X"

Kasia Sozek 206 PM Today should we make it halfo sorges the text?

Kasia Bozek 216 PM Today Replace: "Emergion of the project world-yilds" with "Globel"

Replace: "to cover the global perspective" with "boverage"

Philipp Antorak 10:07 AM Jan 15

Replace: Yor scale-up and transfer of the results by adding two of the world leading certars" with "including key international world leading 40PKD cemers*

Philipp Antozak 10:09 AM Jan 15 Replace: 100PKD / Nich 181

Philipp Antozak 1009 JM Jan 15 Add: Thi ADPXDT

"Involvement"

10:09 JM Jan 15

Replace: 'Lil' olinical and blomedical expertise is unified with experts from All and federated learning in a un..." with "Unification of clinical data, state-of-the-art proteomics, image data analysts, and All and federated..."

Kasia Sozek 2:17 PM Today Replace: "Improve" with "insulnite"

Philipp Antorak 1035.M/Jan 15 Delete: Timportantly, the concordum also has a strong focus on the segect of trust verify All by including out..."

Kasia Sozek 2:19 PM Today Replace: "Direct interaction with and contribution" with and trustworthiness in doctors-patient relationship. The interaction with patients to identify issues in the chose esization stategies will be accodinated by PKD Interactional in abore collaboration with the University of

At the state 2 of the existence othics procedure the communicative research will device audiostandable visuals and easy language for explaining the trahnology, its results, and recommendations. We will provide materials that explain the algorithm, privacy and data storage and train the disctors to clarify the Al processes of the tools, citizens in the developed technologies.

1.2.7 Real-world application to innerve ADPKD clinical decision making

Real-world application and varification of the tools developed is indext's key stay towards a change in clinical

Cult. MOREON AND AND STEED THE SEASON MANAGED ... Transcribe artificial backligners (All) such to product the risk of classes.

equestly, and would seeing will already be planted from the beginning of ARTICVST a naticipating clinical centres in the excisat shall integrate the developed absorbbus into their restine work flows to Property, internet beauty and for the efficient forms authorized performance and tract or final before the first read of the second by the second to the second second the second second to the second seco departs as it is condeminated, the contractables. The results will be efficient to the clinical natures for validation and demonstration of the solutions. To this, all clinical parameters will slightly the end-would set (CVT) solution and the solutions of the solutions. -

a DOSTO sisk production and. This tool - which will help clinicisms to commet potients and guide clinical decision-making - will be developed board on existing data (i.e. 12,000 patients, 5 year average follow-up). Validation will require prospective data appointion between the production and West for production and with a production and with a production and with a production. evaluated using standardized questionnaires completed by the treating physician (ARTEYST-VALIDATE-II) which are developed by University Bielefeld.

ADPKD risk prediction tool — Development of the extended risk production tool (i.e. including nevel markers, e.g., blood-based biomarkers and movel imaging parameters) will take longer. Consequently, a prospective validation will not be possible. However, we'll use the data obtained in ARTICYST-VALIDATE-I to perform a setrospective analysis comparing the posticitive capacity of both tools (ARTICYST-VALIDATE-II). Since the interface will be based on the standard risk prediction tool, usability is ensured by the ARTICYST-I

triest education took. The primary purpose of this application is to inform ADPKD patients about the disease and reseases in everytay life which can be implemented by themselves and are important to prevent proportions. Resides, this tool will inform patients about the role of Al in molicine and ADPKD specifically (explaining the ADPED sisk prediction tool) to increase acceptance and treed in Al solutions. To evaluate the value of this tool, we will perform a patient-reported feedback study based on a standardised questionnaise developed by communication: Bintefield, official questions: Leidou) in an identive procedure between <u>ARTICAT</u> and the beta-feature. In your 4, calcilation of its impact on the state of knowledge and true in conficial All will show be validated firmingly prospective consultances of 190 ADPED patients, which will use the age for 6 months. (ARTICYST-IV)

Currently, we are not planning a validation study for the public education tool "Al supported clinical decision making". While the content will differ partly, the communication strategies in this tool will be based on the patient app and its impact can be extrapolated from ARTICYST-IV

Immact

2.1 Project's nationary towards impact

2.1.1 Relevance and importance of the project's results for ADPED

ADPED comprises the full spectrum of wild disease (i.e. never resulting in history failure, need for distyrin) to very season disease with early owns of hidrog failure soon to patients below the age of 10–10 years." Clinical (e.g.

Cult MOREON AS THE NATE ACCUSED THE SEASON AND ASSESSED AS TRANSPORTED BASIS SHOWN (AS) tools to predict the this of the discount and involve accusing to the companion. early-ment hypothesion, underjoid complications), genetic (type of mutation) and imaging biomarkers are known that help to predict entrous. However, none of these predictors in perfect receiving in Indeed according regarding Se even of Miley School. Importantly, dought being a genetic discuss, there is considerable intuitionalist variability, indicating that genetype is only one piece of the puzzle. Furthermore, ADPKD is a multiproce discuss and a bona-fide prediction of other outcomes than kidney failure & sar yearible to dete (e.g. in

There is only one approved treatment option so far (tobaptan) that comes with side effects (fiver damage, severe polyuria up to more than 10 lites per day) and needs to be taken lifetong. Besides, it does not care the disease but only slows down loss of kidney function by about 20%.

Stablengle accurates to accordy important and depends on gradicion of flavor occurre. Patients that we not uni". Brokker, statt greatletten will be equally important for both patient smartfaction and allisted

Parkerners, risk mediction is a central comment of nation connection and education to allow for \$40. beformation and shared-decision multing by clinicisms, medical professionals and patients.

2.1.2 Relevance and importance of the project's results for AT-based solutions in medicine

For the scope of our intended research and innovation activities, trustworthy Al develo challenge, lacking established infrastructures and methodologies. To this country, ADSKO it the perfect model disease, as in communicación disease existes, e.g. distrois confraçorir, in genetic casos decreases the impact of perential confounders (mainly committellises)

In our view, the challenge of centring an infrastructure for a trustructly All tool needs a let of attention and relies on high data quality from cohorts with limited be these date and the type of the disease limits confounders (i.e. variables influencing occurrie). However, the Add: To Appear

and All and federated..."



Türkiye Cumhuriyeti tarafından

Philipp Antozak 10:09 JM Jan 15 Replace: "Lif clinical and blomedical expertise is unified with expense from All and federated learning in a un.," with "Unification of clinical data, state-of-the-ert proteomics, image data analysts.

Kasia Bozek 2:17 PM Today Replace: "Improve" with "maximize"

Philipp Antozak 1035 AM Jan 15 Delete: Tingomently, the concordum also has a strong focus on the sepect of trustworthy All by including out..."

Kasia Sozek 219 PM Today Replace: "Direct intersection with and contribution" with "Involvement"

Kasia Bozek 220 PM Tode A44:30

Delete: "perspective to ensured"

Replace: "expertise regarding" with "through application of"

Kasia Bozak 201 PM Today Delete: ToT Kasia Bozak 221 PM Today

Replace: "Inclusion of a high performance" with "Involved"

Philipp Antozak 11:09 AM Jan 15 merry gure this is said by the text before

Kasia Sozek 202 PM Today Yeal agree

Roman Müller 692 PM Jan 19

I feel we need such an overview. Can also be added to the worldlow flours.

But this may indeed also be the place to formulate 'oritical risks" and risk mitigation plans. Otherwise, this needs to be comewhere else, but will be excepted (at least come words). The combination of a basic tool and a + tool is already good to exemplify risk mitigation.

Roman Müller 620 PM Jan 12 In my view we need the figure on the composition of the

consortium, but even more importantly an outline of the atena taken towards tool development. I.e. a. graphic visualization of step 1 data types /database, step 2 differential privacy /federated learning, step 2 maphine learning based outcome prediction, step 4 interface. development, steg 5 validation studies, steg 6 commercialization / rollout to plinical practice / partification

There is the previous acronym in the image

Kasia Bozek 225 PM Todey Add: Titl

Kada Bozek 226 PM Today Delete: "cuestions"





is our view, the charlings of ceruting an estructuration for a trustworthy A1 foot needs a fet of attention and consequently at this steps relies on high data quality from colorits with limited between over the executable has been done and the type of the disease limits confounder the variables influencing account. Measure, the account having each; is sufficiently large (as described above) to narrows a high most for excesses gradienter

ily. Target parts of the Softestructure built within our project can be extended to other land then more complete freezer is the Sance og starting with hidney-consciuted disorders such as result cell carcinom majorelichiasis, but also other organs since the strategy regarding federated braming and Al is larger

2.13 . Unique contribution of the project results towards the entormes of the addressed topic of the call

Currently outcome prediction for the ADPED is humaned by

- lack of introduction of different data boson, as well as
- limited exploitation of available data (i.e. biased selection of markers that were examined in studies and this was only done in a single-marker featured fashion in most cases).

ARTICYST will everyone these limitations through the construction of a unique ADPKD-focused AT-platfor employing ethical followed huming approaches. Improved risk prediction using the ARTECVST tools will solve cannotly annothed questions regarding treatment algorithms. Taken together, the delicerables will greatly improve ADPKD potent care and are expected to know a large impact for both individual patients and healthcare tracial expirates based on the significant based based based on the significant based based based on the significant based on the significant based based on the significant based on

Individual potients: Kidney Silbare, risk of intracassial bleeding, abdominal pain, psychological buston

Give the full reference here for: Muller et al. Tobuston NDT 2021.

Cult MINISTER AS THE NATE ACCUSED THE SEA MANAGED — Transmistry welfaled band ignore (A2) such to product the risk of the discount and for the managed in the season and for the managed in ion of abdresses, lock of fitness), inheritance (i.e. patients know what happened e.g. to their fether

- Bealthcare: genetic pervalence 1:1,000, 50% of patients stab kidney failure at the age of 50:60 years, cost
 of dialysis. -50,000:60,000 6 per year, transplantation, -260,000 6 for yr, then 17,000 6/yr for increasing presents etc., plus required patient care before reaching kidney father and regarding extraored and references. Telluspian (only approved treatment option) approximately 20,000 6 per year (to be taken lifetong), i.e. only patients at wisk to be treated also for excession assumes.
- As a consequence of symptoms / kidney failure beat of QALYs and increase of DALYs and, at some great extent, loss of ability to work.

Furthermore, currently available education materials for ADPKD nations about their disease and measures to be taken in everyday life are limited, betreegeneous and often lack up-to-date information. Besides, the form which this information (e.g. buffets) is provided in sublicity to be of beautiff for most nations. ARTICYST will extremely important step frescals tractivesthy AT solutions and is accompanied by a public education tool addressing the overall population.

2.1.3 Impact summary table

2.1.1 Other contributions to the wider impacts for the addressed declination in the work programme

States we briefly describe the contributions of ARTICYST regarding the expected impacts of the Decisio

ARTICIST's research agenda correlators to Expected Impact I for "Citizens adaptifug" healthire lifterplat and behaviours, make healthier chalcus and matmath langer a healthy, tridependent and earlie life with a reduced disease burden, training as ald ages or to other valuesable stages of life" <u>ARTIC VST</u> coupleys multidissiphinary opherostetion returns to thoroughly study, assess and make widely available across Europe implementation officials, studigies and bands to derive and facilitate the necessional scalarup and transfer of innecessive guidelly-real-bird solutions, for the treatment of ADEKD patients, that are shaped to their target constrats in an rvices, policy briefs and guidelines) required to make the most out of it for improving care conditions. Our alli-faceted communication, discremination and policy extensels activities along with oxidence-based exploitation <u>Reflected</u> communication, disconnication and policy extensis activities along with reidense-based exploring mill play us maximize our contribution to this expected impact, enaching not to ever ??? goding

Cut: MOREOVER SET OF A STATE OF THE SET OF SECURITY SET OF SECURITY SET OF SECURITY SET OF SECURITY SE en in co-creating, testing and/or using our results by the project's and

ANTICITY reserved agenda correlator to Especial Impact 2 for "District (Soling) ship and emphasized to manage glasses with one opposition for mental health and security and the state of the security of the internationally. We do this by extending and ampleying an established and effective financemic for analysing the performance of SCC Coloria 1970 (1998) returned 188, with a fixed so indeplying and documenting soletant existence for yalldeding colorious and goining their acceptance in the monity and health care restlems considered. a structure we call the long chain of responsibilities and guidance effice which had been developed by partner [11.8] Juppe of Bend. In a long chain of pregentabilities various decisions are made that all have an influence on the final quality of the resulting system, thus contributing to the increase of transparency and standardistic of the latest and transparency and standardistic of the latest and the latest

perene: guernone

Kasia Bozek 206 PM Today Replace: "Twith land"

Kasia Sozek 206 PM Toder

Delete: "0"

Replace: "expens" with ""

Kasia Sozek 2:26 PM Today Replace: "se" with "which is"

or gradient0?

Replace: "provided" with They build"

Kasia Sozek 2:27 PM Today Replace: "ell" with "then hee"

Add: Total*

Kasia Sozek 1:00 PM Today

Replace: "other fields" with "there-specific disease-relate

Philipp Antorak 11:11 AM Jan 15

Replace: "Perient date" with "Key clinical characteristics

459907

How about bliniosi characterization of ADPKD patie

Roman Müller 7:39 PM Today

Replace: Tolinical characteristics offer JDPVD patient di data" with "input parameters for outcome prediction"

Kada Bozek 2:39 PM Today Replace: "for" with for"

Add: "perlent dete"

Replace: "D" with "These d"

Kacia Sozek 221 PM Today Delete: "on these cohorts"

Kasia Bozek 931 PM Today Replace: "by all" with "in each"

Kasia Bozek 2:32 PM Today Delete: "6"

Kasia Bozek 2:22 PM Today Kasia Sozek



evidence for validating solutions and gaining their acceptance in the society and health care workers according to a structure we call the long chain of responsibilities and guidance efficit which had been developed by parties ITE Jupes of hord. In a long chain of responsibilities various decisions are made that all have an influence on the final quality of the resulting system, thus contributing to the increase of transparency and examinability mechanisms to help adview accountability of the http://www.ford.nl.yydron.Furthermone, our consentational comparative implementation study will offer ample implementation insights into key enables, and burious for the http://www.ford.nl.yydron.Furthermone, our consentational comparative implementation insights into key enables; and burious for the scale-up and transfer of innovative solutions via the implementation of a lighthrouse implementation, enabling us to provide automable findings along with evidence-based tools to help all relevant stakeholders identify and implement the changes that need to happen to shift their systems towards integrated people-centred care in a Sucible as well as sustainable manner that 'works' for the different contexts.

ASTICIST's research agenda contributes to Expected Impact 3 regarding "Citizens" trust in investigationed health interventions and in guidence from health authorities is strongthened, including through improved health literacy (including anyoung ages), resulting in increased engagement in and adherence to effective strategies for health grametiem, diseases grevention and treatment including increased vaccination reter and garlest reflect. More specifically, because studying and directly contributing to the scale-up and transfer of Innovative solutions for improving people-control care of ADPED patients, ARTICYST shall because its results. and its introductionally well-activated nations to device a perior of dimensional and outward activities and synaptic with neural inferent inflictive to simulate and further increase the option of such solutions across fumps. Indicatorly we restrict this New York and Follows. On top of thes, we expect our platform to movemality expresses with an emphasis on SMEs, and high-polyiensmost mendous datapast to develop

iven took and services for people-cented case with increased social value and thus rehance chances o being taken up to both ATPERP potention of their Annual and most. The constant applies of our solders the first other descend than ATPERP is reported to have a control to be a second or the constant of our responsibility by creating and promoting now market openings for condition and office ATPER, despited starting, fit Surfles increasing the potential fire scale up and transfer of innovative colutions to improving people-central care in

Europe. To this end, ARTICYST will engage with several digital health. digital medicine solutions providers in Europe and Internationally during the project in order to sentent the condition of a vibrant exercystem that can

ARTICIST's received agenda correlators to Dispected Impact 4 concerning. Wealth policies and actions for health presented and design amount of the control of the properties and the control of the contr and autison that are more responsive to the words of people and their carres through Public and Patient Intellegement (90%) with publicipations, working in partnership with elimination enting generates for the research We introduce publicipants with ADPKD conditions from the content of the project in planning for and in the distance. We assume postinguish with ADPALD conduction times that state of the propert in planning to adm at the depth of the conduction of the property of the property of the conduction of the property of the property of the conduction of the property of the prop documents and promotional material, napport the disconnection of achievements and put our final results into

Call SCREEN SETS NOT STEEN THE SEASON AND AN ADDRESS OF THE SEASON SETS OF THE SEASON SEAS

At the same time, we also contribute and support the P^a pillar of the Commission's Communi ation of health and case in the Digital Single Market by head-on addressing two key problems: (28) the adoption problem: AKIN'TM adopts the platform accountry concept as the main means to build a metainable exception that will attend the attention of all states below and which shall be capable to: (i) validate the unitability as well as improve the configuration of me tractional and care models, (ii) allow for the action composition between clinicians, clinical restarchess, case professionals and ADPKD patients, while also (iii) promoting the utilisation of transcriby Al took and solutions in ways that increase the value of the provided case with respect to officiency and controllections as criteria; (b) the up-scaling problem: Care models are typically deployed only on a small scale, and though initial evidence unfraster potential bose fits for patients and booth and care systems, it emains an open more love their scaling up will take place so that emilies the quality is sent at rich nor the singular qualities that such scaling-up and implementation platforms should inhountly include to allow for such a transformation. Aspects like the increase of the life expectancies and the quality of life of ADPKD patients as

ıriyeti tarafından Kada Bozek 202 PM Today Delete: "coe" Philipp Antonii 11:12.6/Jun 15 Replace: Wesides, if with TE Kasia Sozek 202 PM Today Delega: Tool Kasia Sozek 222 PM Today Add: "elec"

Agg: Tremuse in

Replace: "concriturabe the source for the different data layers that will nursure" with "represent the beals for development of the" Kasia Bozek 234 PM Today Replace: "be the source for" with "constitute"

Kacia Bozek 226 PM Today Replace: "tool development nineline" with "methods"

Kasia Bozek 226 PM Today Replace: "Briefly of with 10"

do we really distinguish these two layers? does it matter here?

Kasia Bozek 236 PM Today Delete: "of class"

Kasia Bozek 9:97 PM Today Replace: "ly" with "bless will include"

Maria Bozek 227 PM Today Delete: "- on an Individual baols-"

Philipp Antorak 11:12.8M Jan 15 Delete: "["

Philipp Antonii 11:12.8M Jan 15 Delete: ")"

Kasia Bozak 2:07 PM Today Add: 7

Kasia Bozak 2:07 PM Today Add: T

R 625 PM Dec 22 Ron, should we provide a concise list here?

Kada Sozak 250 PM Today "to orrainer sent: era enact the Add."

















Proposal writing is...

- An art?
- Or engineering?
- Both of the above?
- None of the above?
- ...
- No need to get stressed! There is no clear answer to this (as for many things in business and in life...)









Few essentials about any Calls / Call topics where the control of the control of

- Important to read the Call
- Necessary to understand the Call
- Worrying how to interpret the Call and 'translate' it into a hopefully successful proposal
- It is not a trivial process at all
- At any point one may get 'lost in translation'











Does it look familiar this story?

- Two proposal writers for a Horizon Europe call are involved in a dispute and ask a Key Expert to settle it for them
- When the first consultant tells his opinion, the Key Expert says: You are right!
- The second Key Expert protests when he tells his version, the Key Expert says: You are right!
- Then, a third proposal writer, who has been listening, intervenes: But they can't both be right
- And the Key Expert promptly replies: You are also right!





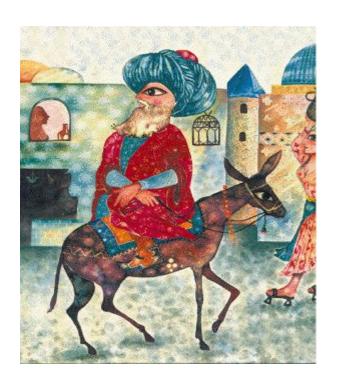






Relations, correlations, etc.















The 'Match'

The core idea

The addressed topic











- The 'Match' = The 'Story'
- The 'Match' = The 'Setting'
- The 'Match' = The 'Context'











1. Introduction – context setting

- Templates are important *not only a technicality*
- Form follows function
- Trade offs:
- too (much) scientific
- too (much) industry
- too (much) sale pitch
- Compromise: accommodate all above aspects even partly
- With a bad template several hundreds of people will ... suffer
- A good template shall help all write better proposals and very important: help people build better learning curves











2. Deficiencies of the old templates

1.1 Objectives

Describe the overall and specific objectives for the project, which should be clear, measurable, realistic and achievable within the duration of the project. Objectives should be consistent with the expected exploitation and impact of the project (see section 2).

1.2 Relation to the work programme

Indicate the work programme topic to which your proposal relates, and explain how your
proposal addresses the specific challenge and scope of that topic, as set out in the work
programme.

1.3 Concept and methodology

(a) Concept

Describe and explain the overall concept underpinning the project. Describe the main ideas models or assumptions involved. Identify any inter-disciplinary considerations and, where relevant, use of stakeholder knowledge. Where relevant, include measures taken for public/societal engagement on issues related to the project. Describe the positioning of the project e.g. where it is situated in the spectrum from 'idea to application', or from 'lab to market'. Refer to Technology Readiness Levels where relevant. (See General Annex G of the work programme);











2. Deficiencies (cont'd)

(b) Methodology

 Describe and explain the overall methodology, distinguishing, as appropriate, activities indicated in the relevant section of the work programme, e.g. for research, demonstration, piloting, first market replication, etc.

1.4 Ambition

- Describe the advance your proposal would provide beyond the state-of-the-art, and the
 extent the proposed work is ambitious.
- Describe the innovation potential (e.g. ground-breaking objectives, novel concepts
 and approaches, new products, services or business and organisational models)
 which the proposal represents. Where relevant, refer to products and services already
 available on the market. Please refer to the results of any patent search carried out.









This project is co-financed by the European Union and the Republic of Turkey Bu proje Avrupe Brigil's Ye Türkey Cumhurylett turafınd

3. Comparison of old and new templates

- OLD: 70 pages
- **New:** 45 pages (but...)
- OLD: Section 1 (Excellence): 4 subsections
- New: Section 1 (Excellence): 2 subsections (but...)
- OLD: Section 2 (Impact): 2 Sections
- New: Section 2 (Impact): 2 'old' + one new: Impact canvas
- OLD: Section 3 (Implementation): 4 Sections
- New: Section 3 (Qual. & effic. of implem.): 2 Sections











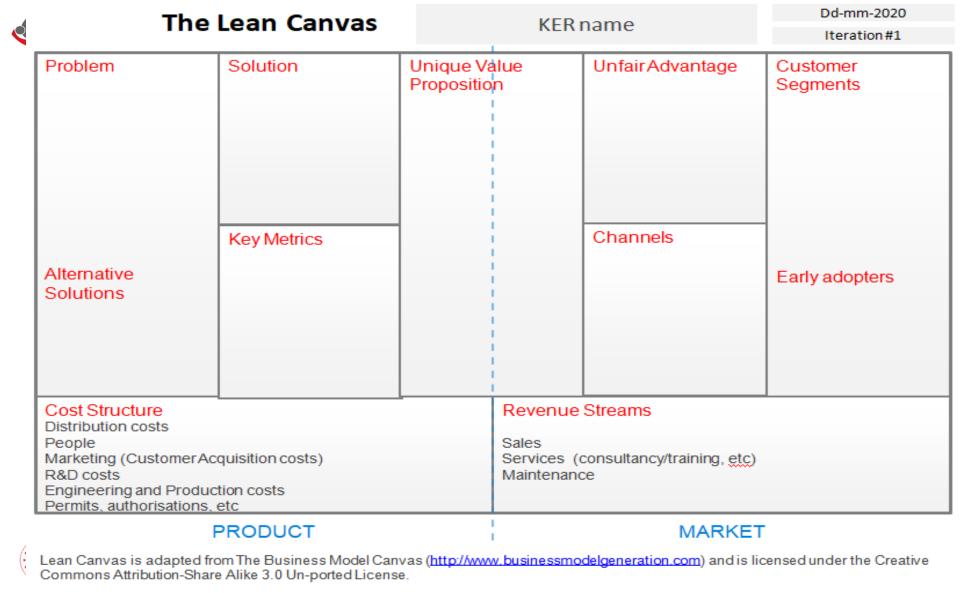
Imapct canvas

- Perhaps the most 'new', 'innovative', 'game changing' part in the new template? ...
- Some prehistory:
- With the business model canvas of Osterwalder, the idea of providing information in such a structured form became more and more popular
- Horizon Results Booster currently uses two other 'canvas' templates:
- The Lean Canvas
- The Value Proposition Canvas









Value Proposition Canvas

Designed for:

KER Name

Designed by:

Name1, Name2....

DD/MM/YYYY

Date:

X.Y

Product

Benefits

A benefit is what your product does for the customer. The benefits are the ways that the features make your customer's life easier by increasing pleasure or decreasing pain. The benefits of your product are the really core of your value proposition. The best way to list out the benefits of your product on the canvas is to imagine all the ways that your product makes your customer's life better.

Features

Product

A feature is a factual description of how your product works. The features are the functioning attributes of your product. The features also provide the 'reasons to believe'. Many FMCG marketers deride the importance of features because features are no longer a point of difference in most FMCG marketing. But for technology products and innovative new services the features on offer can still be an important part of your value proposition.

Experience

The product experience is the way that owning your product makes the customer feel. It's the sum total of the combined features and benefits. Product experience is different to features and benefits because it's more about the emotional reasons why people buy your product and what it means for them in their own lives. The product experience is the kernel that will help identify the market positioning and brand essence that is usually built out of the value proposition.

Customer

Wants

The emotional drivers of decision making are things that we want to be, do or have. Our wants are usually conscious (but aspirational) thoughts about how we'd like to improve our lives. They sometimes seem like daydreams but they can be powerful motivators of action. The wants speak more to the pull of our hearts and our emotions.

The customer's needs are the rational things that the customer needs to get done. Interestingly, needs are not always conscious. Customers can have needs that they may not know about yet. Designers call these "latent needs". The needs speak more to the pull of our heads and rational motivations.

Fears can be a strong driver of purchasing behaviour and can be the hidden source of wants and needs. For any product there is a secret "pain of switching". Even if your product is better than the competition, it might not be a big enough improvement to overcome the inertia of the status aug.

Needs

Ideal Customer

Name your product or service

Name you ideal customer

Substitutes

These are not just the obvious competitors, but also existing behaviours and coping mechanisms. Remember that people made it this far in life without your product. If your product isn't better than the existing solutions then you don't have a real-world value proposition.





The HE Impact canvas

• Caution: It is meant to be a summary



- It consists of six parts:
- 1. Specific needs
- 2. Expected results
- 3. D&E&C measures
- 4. Target groups
- 5. Outcomes
- 6. Impacts











See is to believe...

SPECIFIC NEEDS

What are the specific needs that triggered this project?

Example 1

Most airports use process flow-oriented models based on static mathematical values limiting the optimal management of passenger flow and hampering the accurate use of the available resources to the actual demand of passengers.

Example 2

Electronic components need to get smaller and lighter to match the expectations of the end-users. At the same time there is a problem of sourcing of raw materials that has an environmental impact.

EXPECTED RESULTS

What do you expect to generate by the end of the project?

Example 1Successful large-scale demonstrator:

Successful large-scale demonstrator:

Trial with 3 airports of an advanced forecasting system for proactive airport passenger flow management.

Algorithmic model:

Novel algorithmic model for proactive airport passenger flow management.

Example 2

Publication of a scientific discovery on transparent electronics.

New product: More sustainable electronic circuits.

Three PhD students trained.

D & E & C MEASURES

What dissemination, exploitation and communication measures will you apply to the results?

Example 1

Exploitation: Patenting the algorithmic model.

Dissemination towards the scientific community and airports: Scientific publication with the results of the large-scale demonstration.

Communication towards citizens: An event in a shopping mall to show how the outcomes of the action are relevant to our everyday lives.

Example 2

Exploitation of the new product: Patenting the new product; Licencing to major electronic companies.

Dissemination towards the scientific community and industry:

Participating at conferences; Developing a platform of material compositions for industry; Participation at EC project portfolios to disseminate the results as part of a group and maximise the visibility vis-à-vis companies.











TARGET GROUPS

Who will use or further up-take the results of the project? Who will benefit from the results of the project?

Example 1

9 European airports:

Schiphol, Brussels airport, etc.

The European Union aviation safety agency.

Air passengers (indirect).

Example 2

End-users: consumers of electronic devices.

Major electronic companies: Samsung, Apple, etc.

Scientific community (field of transparent electronics).

OUTCOMES

What change do you expect to see after successful dissemination and exploitation of project results to the target group(s)?

Example 1

Up-take by airports: 9 European airports adopt the advanced forecasting system demonstrated during the project.

Example 2

High use of the scientific discovery published (measured with the relative rate of citation index of project publications).

A major electronic company (Samsung or Apple) exploits/uses the new product in their manufacturing.

IMPACTS

What are the expected wider scientific, economic and societal effects of the project contributing to the expected impacts outlined in the respective destination in the work programme?

Example 1

Scientific: New breakthrough scientific discovery on passenger forecast modelling.

Economic: Increased airport efficiency Size: 15% increase of maximum passenger capacity in European airports, leading to a 28% reduction in infrastructure expansion costs.

Example 2

Scientific: New breakthrough scientific discovery on transparent electronics.

Economic/Technological: A new market for touch enabled electronic devices.

Societal: Lower climate impact of electronics manufacturing (including through material sourcing and waste management).



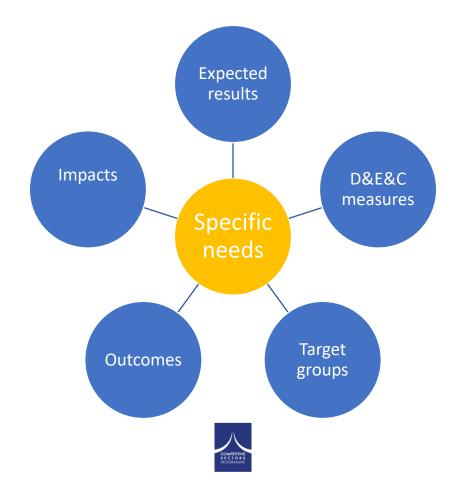








The basic notions











The basic notions











The basic notions











Final remarks for the impact canvas

- It is not as 'easy' as it seems...
- Needs hands-on practice
- Don't forget: practice makes the master!
- Ideal: to be composed with interaction amongst partners
- Also: it needs time it is not wise to leave for the last moment
- Even better: Ideal to *start your proposal from this section* and then build and elaborate on the other parts!











Other points of the new template

- **New** Section 1.1 Objectives and ambition:
- Combines and integrates following of the old template:
- OLD Section 1.1 Objectives
- OLD Section 1.2 Relation to the work programme
- OLD Section 1.3a Concept
- OLD Section 1.4 Ambition
- And all these in only (<u>as suggested</u>) 4 pages!
- (Don't dare to come up with an estimate how many pages were used for these sections as of today...)











Other points (cont'd)

- New Section 1.2 Methodology
- Corresponds to:
- OLD Section 1.3b Methodology

- 1.2 Methodology [e.g. 15 pages]
 - Describe and explain the overall methodology, including the concepts, models and assumptions that
 underpin your work. Explain how this will enable you to deliver your project's objectives. Refer to any
 important challenges you may have identified in the chosen methodology and how you intend to
 overcome them. [e.g. 10 pages]
 - This section should be presented as a narrative. The detailed tasks and work packages are described below under 'Implementation'.
- includes also references to national or international research and innovation activities linked to the project (in the past was under the Concept subsection)
- Suggested length: 15 pages!
- For both new sections 1.1 (4 pages) and 1.2 (15 pages) we shall need to seriously think on how we are going to build our *narratives*
- Especially for Section 1.2 it is meant as a preamble to Section 3.1 regarding workplan and resources











4. Conclusions

- The new proposal template (as any other) has to be lived-in by the people
- Consider the 10.000 hours rule ;-)
- Less pages does not necessarily mean less effort
- Impact canvas is tricky: looks simple but has to be filled-out with good quality information
- Impact canvas can be the starting point for a proposal





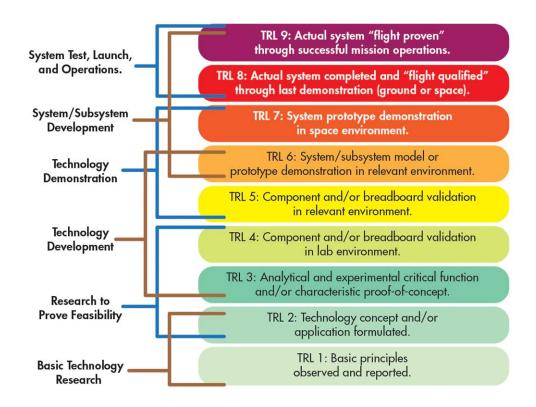




TRL: Technology Readiness



The Technology Readiness Levels











Evaluation Process



From submission to invitation to a Grant







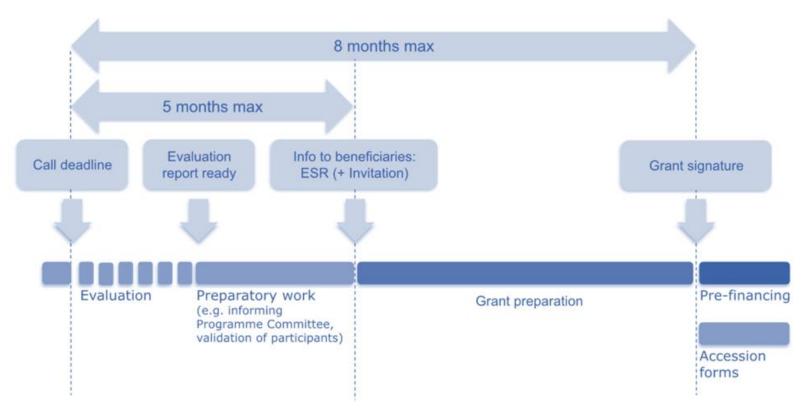




How evaluation works?



The evaluation timeline











Award Criteria



How Proposals are evaluated

EXCELLENCE	IMPACT	IMPLEMENTATION
 Are objectives clearly identified? Is proposed work is ambitious? Goes beyond the state-of-the-art? Is proposal sound? 	 Is the pathway suggested credible? Are outcome and impacts in line with WP? What's the scale of the contributions? Are measures to maximise impact suitable? 	 Is the WP effective? Are risks identified? Effort assigned appropriate? Capacity and role of participants? Consortium as a whole?











For follow-up questions contact me at:

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Q&A

Time to ask your questions!







Teşekkür ederim!

Thank you!







