Public Sector Innovation: innovate, how ... 

Dimitris Gouscos  (gouscos@media.uoa.gr)

Workshop on Fostering Innovation in the Public Sectors of Arab Countries

organized by UN ESCWA

under the patronage of Her Excellency Dr. Hala Helmy El Said, the Minister of Planning, Monitoring and Administrative Reform, Egypt

Cairo, Egypt, October 2017
innovate, how

why different types of innovation processes come up

bottom-up innovation

collaborative innovation

continuous innovation

disruptive innovation

frugal innovation

incremental innovation

local innovation

open innovation
innovate, how

on sustainability, nested sustainability, sustainable development

deco-innovation

sustainability and innovation

sustainable innovation
different types of innovation processes:
why have they come up?

- innovation is a creative process
- it is not easy to explain creativity, let alone to model the way it works
- innovation is a process to make better things that can be useful to others
- it is not easy to know what others want
- it is not easy to have better ideas than others
different types of innovation processes: why have they come up?

- innovation is a process of trial and error
- it is not easy to pay the costs of errors
- innovation promises a moment of happiness, once our ideas work
- we would like this moment to happen again
bottom-up innovation

- conceived at lower responsibility and authority levels of an organizational structure and communicated upwards along organizational layers for approval
bottom-up innovation

- **rationale**: people at the field level know better

- **CSF**: people at lower organizational levels need to commit beyond formal responsibility

- **CSF**: people at lower organizational levels need to embrace the big picture
bottom-up innovation

- **risk:** the process may end up with ideas egocentric or otherwise fragmented

- **promise:** innovations better suited to field-level realities
collaborative innovation

- the people to source and evaluate ideas are prescribed on a broader organizational role/layer basis, and selected later on during the process, the latter being communicated to them in terms of importance to participate
collaborative innovation

- **rationale:** the issues to tackle cross organizational levels and specializations

- **CSF:** participants need to work jointly rather than in parallel

- **CSF:** leadership needs to drive collaboration in a rigorous way
collaborative innovation

- **risk:** ideas may sum up partial interests, rather than synthesize them

- **promise:** innovations with all aspects worked out, backed up with consensus
continuous innovation

- effectively deploy a specific innovation and, in order to keep it enhanced with innovative aspects, establish permanent processes for evolution
continuous innovation

- **rationale:** needs are changing continuously, and a continuous evolution is needed beyond the needs currently known

- **CSF:** the notion of continuous evolution needs to be effectively communicated and operationalized

- **CSF:** evolution needs to move on even at times of no pressing needs
continuous innovation

- **risk:** considering success as an excuse for slowing down, rather than a reason for keeping up

- **promise:** time will become a friend that makes things better, rather than a foe that imposes deadlines
disruptive innovation

- meet two or more of the following characteristics: (a) bring forward large changes and/or changes with large lateral effects, (b) do so at a fast (with respect to the size of changes) pace over time, and (c) establish new ways of work in replacement of existing ones, setting a fixed and possibly pressing for the latter to become abandoned
disruptive innovation

- **rationale:** problems are too interlinked to solve one at a time, the Gordian knot needs cutting
- **rationale:** too much time has passed unused, everything needs to change now

- **CSF:** change towards the environment needs to be managed smoothly during uptime, without creating chaos
- **CSF:** people inside and outside need to be helped to disrupt their own culture and habits
disruptive innovation

- **risk:** too many / too fast changes with unexplored consequences may create problems that defame innovation

- **promise:** everything will be better, before the past has time to resist
frugal innovation

- bring forward small-sized and low-cost changes that may have a multiplier effect and/or desirable impacts positively disproportionate to the budget and resource consumptions that they demand; and/or remove non-essential features to make something more accessible or affordable
frugal innovation

- **rationale:** instead of trying to entirely change something complicated, start by identifying small isolated changes that accumulate to a meaningful improvement.

- **rationale:** to improve does not only mean to add something new, but also to remove something that adds complexity but not real value.

- **CSF:** the changes to effect, although small and simple, need to be meaningful.

- **CSF:** the changes to effect need to have no undesirable lateral effects.
frugal innovation

- **risk:** considering frugal as a synonym to cheap, and making low cost a priority over real value

- **promise:** if we are ingenious enough and understand something well enough, we can find small changes that can make a big difference
incremental innovation

- effecting a series of small innovative improvements, one at a time, using the achievement of some set objectives as concept of success
incremental innovation

- **rationale:** innovation costs need to be proportionate to some set objectives
- **rationale:** not too many innovation need to be effected at the same time

- **CSF:** out of many innovation increments possible at some point, the right one needs to be chosen for realization
incremental innovation

- **risk:** keeping increments proportionate to set objectives may not allow some nice and bigger-scale ideas to find their way to realization

- **promise:** innovation, wisely used, can achieve objectives without wasting resources
local innovation

- an innovation effort explicitly focused on improving a specific local aspect (service, product, way of work), taking stock of elements unique to the corresponding local geography and context
local innovation

- **rationale:** local problems can best be solved by considering the local context

- **CSF:** the local context needs to be considered selectively, needs are different than interests

- **CSF:** local factors need to be considered creatively, and taken up as opportunities rather than shortcomings for innovation
local innovation

- **risk:** local solutions may lack broader value in terms of generality and scalability

- **risk:** local solutions may jeopardize shared resources with tragedy of commons effects

- **promise:** innovative solutions readily adapted to uptake by local communities
open innovation

- the people to source and evaluate ideas are prescribed in terms of minimum profiles that are also met beyond organizational boundaries by external contributors, to present themselves without formal commitments at any stage during the process, the latter being communicated to them in terms of opportunity to shape solutions.
open innovation

- **rationale**: conventional wisdom cannot solve original problems
- **rationale**: we only want what our beneficiaries want

- **CSF**: participants need to be attracted and engaged throughout the process
- **CSF**: the process needs to have rigorous and time-effective leadership
open innovation

- **risk**: an open process may fail to include all stakeholder groups in a fair way

- **promise**: innovations really innovative and really unbiased
Sustainability

From Wikipedia, the free encyclopedia

In ecology, **sustainability** (from *sustain* and *ability*) is the property of **biological systems** to remain **diverse** and **productive** indefinitely. Long-lived and healthy **wetlands** and **forests** are examples of sustainable biological systems. In more general terms, sustainability is the endurance of systems and processes. The **organizing principle** for sustainability is **sustainable development**, which includes the four interconnected domains: ecology, economics, politics and culture.\(^1\) **Sustainability science** is the study of sustainable development and environmental science.\(^2\)
on nested sustainability

on sustainable development

Green growth and eco-innovation

Innovation in technologies and how they are applied are key to enabling industry to create new business values while also benefiting people and the planet. In recent years, manufacturing companies have been upgrading their efforts towards sustainable manufacturing, from pollution prevention to integrated approaches that take into account product lifecycles and wider impacts. Eco-innovation helps to enable this evolution through a combination of technological and non-technological changes that can yield substantial environmental improvements. The current economic crisis and climate change negotiations should be taken as a great opportunity to move towards a green economy by accelerating eco-innovation.

[ source: http://www.oecd.org/innovation/green ]
sustainability and innovation

- eco-innovation:
  innovating for sustainability and sustainable development

- sustainable innovation:
  applying the concept of sustainability to innovation

- innovation able to sustain itself
sustainable innovation

- beyond deploying a specific innovation, establish material and immaterial conditions necessary and sufficient in order to create an innovation process without foreseen end, that will generate innovations and inform, motivate, improve and re-fuel itself through the innovations produced already, in order to advance by regenerating the resources that it consumes
sustainable innovation

- **rationale:** if nature needs to remain diverse and productive to support our needs, so does innovation

- **CSF:** all stakeholders need to be continually committed, in order to make innovation sustainable

- **CSF:** the process needs to remain diverse, all ideas need to be given room to flourish

- **CSF:** the process needs to remain productive, innovations need to be assessed in terms of the room for more innovations that they open up
sustainable innovation

- **risk**: thinking big, without starting small
- **risk**: sustainable innovation cannot be guaranteed via planning and investments, it can only be achieved in practice

- **promise**: a better future lies ahead, for all of us
a model for public sector innovation efforts

exploring time maturity and process type dimensions

fresh maturity metric

modality metric

scarcity metric (for all process type dimensions)

permeability, disruptiveness, hopefulness metrics

directedness, rootedness, partenariality metrics

intentionality, drivenness, focality, afference metrics
a model for exploring time maturity and process type dimensions of public sector innovation efforts

- a multi-dimensional model

- abstracted in a grounded theory mindset from sampled innovation efforts

- pilot-tested against a sample of innovation efforts
fresh maturity metric

This metric conveys the idea that the efforts particularly interesting are those with a lifetime adequately fresh and at the same time adequately mature at the time of study.

This metric is calculated according to the formula

\[ \text{min(launch age, 5)} - \text{completion age} + 1 + (\text{max(launch age-(5+1)}, 0)\times0.5) \]

using the launch age and completion age metrics as defined above. This formula allows to consider into fresh maturity all years during the last 5-year freshness timeframe in which the effort under study was alive, plus any previous years during which the effort was alive taken into consideration with a contribution adjusted by a 0.5 oldness factor. The 5-year freshness timeframe can be narrowed down to 1 / broadened to values greater than 5, and the 0.5 oldness factor can be decreased down to 0.0 / increased up to 1.0, to allow different versions of this metric that may consider freshness as, respectively, more/less important in comparison to maturity than in the version of the metric proposed above.

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
modality metric

modality

This metric takes up the following values:

*top-down*, for efforts conceived at higher responsibility and authority levels of the organizational structure and communicated downwards along organizational layers for enactment; and

*bottom-up*, for efforts conceived at lower responsibility and authority levels of the organizational structure and communicated upwards along organizational layers for approval.
**scarcity metric (for all process type dimensions)**

\[ m\text{-scarcity} \]

This metric is calculated as

\[ I, \text{ for innovation efforts having more scarce types of modality within the sample studied; and} \]

\[ 0, \text{ otherwise.} \]

The value of this rating is clearly dependent upon / specific to a given sampling of innovation efforts under study. Consequently, use of this metric is legitimate for comparing innovation efforts within the same sample only, rather than for performing cross-sample comparisons.
permeability metric

**permeability**

This metric takes up the following values:

*impermeable*, in case of efforts for which the people to source and evaluate ideas are preselected on an individual profile basis and stable throughout the process, the latter being communicated to them in terms of assignment;

*collaborative*, in case of efforts for which the people to source and evaluate ideas are prescribed on a broader organizational role/layer basis, and selected later on during the process, the latter being communicated to them in terms of importance to participate; and

*open*, in case of efforts for which the people to source and evaluate ideas are prescribed in terms of minimum profiles that are also met beyond organizational boundaries by external contributors, to present themselves without formal commitments at any stage during the process, the latter being communicated to them in terms of opportunity to shape solutions.

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
disruptiveness metric

*disruptiveness*

This metric takes up the following values:

*non-disruptive*, for efforts that meet two or more of the following characteristics: (a) they bring forward small changes with minimized lateral effects, (b) they do so at a slow pace over time, and (c) they establish new ways of work complementary or symbiotic to existing ones, allowing a convenient tentative timeframe for the latter to become abandoned after the test of time;

*disruptive*, for efforts that meet two or more of the following characteristics: (a) they bring forward large changes and/or changes with large lateral effects, (b) they do so at a fast (with respect to the size of changes) pace over time, and (c) they establish new ways of work in replacement of existing ones, setting a fixed and possibly pressing, always with respect to the size of changes timeframe for the latter to become abandoned; and

*semi-disruptive*, for efforts that fall in-between the previous cases, especially in terms of the timeframe that they allow for change, or otherwise said in terms of the speed of change that they demand.

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
hopefulness metric

**hopefulness**

This metric takes up the following values:

*one-off*, in cases of efforts that focus on effectively deploying a specific innovation and curating this in the future, without setting explicit objectives for further innovativeness;

*continuous*, for efforts targeted at effectively deploying a specific innovation and enhancing it with further innovative aspects, through processes that continue along a meaningful timeframe in the future; and

*sustainable*, for efforts that without or beyond focusing at deploying a specific innovation, are more targeted at establishing material and/or immaterial conditions necessary and sufficient in order to create an innovation process without foreseen end, that will generate innovations and inform, motivate, improve and re-fuel itself through the innovations produced already, in order to advance by regenerating the resources that it consumes.
**directedness metric**

**directedness**

This metric takes up the following values:

- *horizontal*, for efforts aiming at implementation and/or impact public sector-wide; and

- *vertical*, for efforts targeted at implementation and/or impact in specific domains.

[source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region]
rootedness metric

rootedness

This metric takes up the following values:

*central government (CG)*, for efforts defined and owned by state leadership or central government at the top national level;

*public administration (PA)*, for efforts defined and owned by top-level public sector branches (e.g. ministries, independent public authorities) and public administration agencies;

*local administration (LA)*, for efforts defined and owned by local administrations such as regional and municipal authorities and agencies; and

*under public law (UPL)*, for efforts defined and owned by legal entities under public law, such as academic institutions, health institutions, water/food/energy/transport security authorities, public banking system institutions and other analogous.

[source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region]
partenariaity metric

This metric takes up the following values:

- **public sector-internal**, for cases of public sector agencies partnering with other public sector agencies of the same national administration or not partnering with any other stakeholder at all (in the case of purely in-sourced internally-focused efforts);

- **public-local**, for cases of public sector agencies partnering with local administrations or other local stakeholders of any type;

- **broader public**, for cases of public sector agencies partnering with legal entities under public law, such as academic or health institutions;

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
partenariality metric

*public-social*, for cases of public sector agencies partnering with civil society organizations, non-governmental organizations and social innovation networks at the national or international level;

*public-private*, for cases of public sector agencies partnering with private industry, commerce, services or financing sector players;

*cross-country*, for cases of public sector agencies or public administrations partnering with peer agencies or administrations from other countries;

*public-international*, for cases of public sector agencies partnering with international organizations, supra-national institutions or thematic networks world-wide; and

*multilateral*, for combinations of the previous cases.

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
intentionality metric

This metric takes up the following values:

- **institutions and structures**, for efforts intended to establish institutions and/or organizational structures that help innovation;

- **policies and standards**, for efforts intended to establish policies and/or standards that help innovation;

- **practices and guidelines**, for efforts intended to create innovative/exemplar practices and/or practice guidelines; and

- **systems and services**, for efforts intended to create innovative information systems, applications, platforms and/or services.

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
drivenness metric

This metric takes up the following values:

*crisis-based*, for efforts targeted at providing response to current and/or future urgencies, technical/natural catastrophes and/or crises;

*needs-based*, for efforts targeted at providing response to recurring and/or upcoming regular needs of citizens, businesses and other public sector beneficiaries; and

*opportunity-based*, for efforts intended to take stock of current and/or future opportunities, uptake emerging technologies and/or keep up with developments and advancements from model players in a forward-thinking approach.

[source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region]
focality metric

focality

This metric takes up the following values:

local, for innovation efforts explicitly focalized on improving a specific local administration or community, taking stock of elements unique to the corresponding local geography and context;

frugal, for innovation efforts explicitly focalized on bringing forward small-sized and low-cost changes that may have a multiplier effect and/or desirable impacts positively disproportionate to the budget and resource consumptions that they demand;

tool-novel, for innovation efforts explicitly focalized on exploring the meaningful and fruitful use of novel information technology tools, that bring along the promise and potential of making public sector processes and services much better, and/or giving rise to new processes and services that were not possible before;
focality metric

gender, for innovation efforts explicitly focalized on establishing equality for gender minorities and/or genders with unrecognized rights and/or lowered opportunities;

children, for innovation efforts explicitly focalized on establishing rights and practical opportunities for the well-being of children or specific children groups;

social, for public sector innovation efforts explicitly focalized at helping create or synergizing with existing social innovation, social entrepreneurship and social solidarity efforts;

democratic, for public sector innovation efforts explicitly focalized at helping create new or improving existing schemes for democratic participation and governance;

multiple, in cases of public sector innovation efforts with more than one focal points from the above or other analogous; and

generic, in cases of public sector innovation efforts with no explicit focal points of the above or other analogous. [ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
afference metric

afference

This metric is encoded according to the official UN SDG nomenclature, taking up the following values:

SDG1 no poverty; SDG2. zero hunger; SDG3. good health and well-being; SDG4. quality education; SDG5. gender equality; SDG6. clean water and sanitation; SDG7. affordable and clean energy; SDG8. decent work and economic growth; SDG9. industry, innovation and infrastructure; SDG10. reduced inequalities; SDG11. sustainable cities and communities; SDG12. responsible consumption and production; SDG13. climate action; SDG14. life below water; SDG15. life on land; SDG16. peace, justice and strong institutions; SDG17. partnerships for the goals;

combinations of the above, in case of afference to multiple SDGs at the same time; and

none, in case of no afference to any of the United Nations SDGs.

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
putting this model to use

exploring effort samples: fresh maturity analysis

exploring effort samples: latitudinal analysis

exploring effort samples: longitudinal analysis

exploring effort samples: SDG afference analysis

putting this model to multiple uses
applying the IPTTM model for exploring effort samples:

fresh maturity analysis

<table>
<thead>
<tr>
<th>的努力 samples by fresh maturity value (total efforts sampled: 69)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0 and greater</td>
</tr>
<tr>
<td>[9.0 – 10.0)</td>
</tr>
<tr>
<td>[8.0 – 9.0)</td>
</tr>
<tr>
<td>[7.0 – 8.0)</td>
</tr>
<tr>
<td>[6.0 – 7.0)</td>
</tr>
<tr>
<td>[5.0 – 6.0)</td>
</tr>
<tr>
<td>[4.0 – 5.0)</td>
</tr>
<tr>
<td>[3.0 – 4.0)</td>
</tr>
<tr>
<td>[2.0 – 3.0)</td>
</tr>
<tr>
<td>[1.0 – 2.0)</td>
</tr>
</tbody>
</table>

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
applying the IPTTM model for exploring effort samples: latitudinal analysis

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region, word clouds produced using wordle.net]
applying the IPTTM model for exploring effort samples:
latitudinal analysis

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region, word clouds produced using wordle.net]
applying the IPTTM model for exploring effort samples:
longitudinal analysis

source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region, word clouds produced using wordle.net
applying the IPTTM model for exploring effort samples: longitudinal analysis

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region, word clouds produced using wordle.net]
applying the IPTTM model for exploring effort samples:
SDG afference analysis

<table>
<thead>
<tr>
<th>SDG</th>
<th>Efforts Sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG17. partnerships for the goals</td>
<td>2</td>
</tr>
<tr>
<td>SDG16. peace, justice and strong institutions</td>
<td>7</td>
</tr>
<tr>
<td>SDG15. life on land</td>
<td>1</td>
</tr>
<tr>
<td>SDG14. life below water</td>
<td>2</td>
</tr>
<tr>
<td>SDG13. climate action</td>
<td>1</td>
</tr>
<tr>
<td>SDG12. responsible consumption and production</td>
<td>2</td>
</tr>
<tr>
<td>SDG11. sustainable cities and communities</td>
<td>2</td>
</tr>
<tr>
<td>SDG10. reduced inequalities</td>
<td>1</td>
</tr>
<tr>
<td>SDG9. industry, innovation and infrastructure</td>
<td>14</td>
</tr>
<tr>
<td>SDG8. decent work and economic growth</td>
<td>1</td>
</tr>
<tr>
<td>SDG7. affordable and clean energy</td>
<td>1</td>
</tr>
<tr>
<td>SDG6. clean water and sanitation</td>
<td>1</td>
</tr>
<tr>
<td>SDG5. gender equality</td>
<td>3</td>
</tr>
<tr>
<td>SDG4. quality education</td>
<td>4</td>
</tr>
<tr>
<td>SDG3. good health and well-being</td>
<td>1</td>
</tr>
<tr>
<td>SDG2. zero hunger</td>
<td>1</td>
</tr>
<tr>
<td>SDG1. no poverty</td>
<td>1</td>
</tr>
</tbody>
</table>

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
putting the IPTTM model to multiple uses

- intended to help as an exploration tool for existing efforts

- as a selection tool for particularly interesting efforts

- as a gap analysis tool for missing efforts

- as a design choices tool for new efforts (cf. interactive session)
a lifecycle for public sector innovation efforts

the IDEA lifecycle

IDEA lifecycle Ideation Phase

IDEA lifecycle Deliberation Phase

IDEA lifecycle Evolution Phase

IDEA lifecycle Assimilation Phase

degrees of iterativeness in the IDEA lifecycle
the IDEA lifecycle

IDEA lifecycle for innovation

- Assimilation phase
- Ideation phase
- Evolution phase
- Deliberation phase

[source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region]
IDEA lifecycle Ideation Phase

- Collaboration
- Gamification
- Employee engagement
- Idea management
- Data visualization

[source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region]
IDEA lifecycle Deliberation Phase

- participation
- policy making
- crowdsourcing
- debating
- open innovation
- argumentation
- opinion mining
- sentiment analysis
- semantic modelling

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
IDEA lifecycle Evolution Phase

- project management
- performance appraisal
- knowledge management
- IT management
- data governance
- process management
- performance management

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
IDEA lifecycle Assimilation Phase

- Online community
- Feedback management
- Social media management
- Advocacy

[source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region]
degrees of iterativeness in the IDEA lifecycle

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
information technology tools

on tools and innovation

emerging paradigms of technology to consider

different paradigms of tools to consider

different sources for identifying tools

IT tools explored: software peer reviews providers

IT tools explored: software comparison reports providers

IT tools explored: OSS directory providers

IT tools explored: academic sources

IT tools catalogued
on tools and innovation

- innovation is possible without new technology
- technology can offer means for innovation, if we have an idea and an opportunity
- technology can offer opportunities for innovation, if we have an idea
- technology can offer ideas for innovation, to make itself useful
on tools and innovation

- innovation finds itself linked to new technology

- often, the biggest hope that technology brings along is innovation

- innovation finds itself driving public sector technology procurement
emerging paradigms of technology to consider

- zero infrastructure and hardware as a service
- application platformization and software as a service
- data management and workplace virtualization
- digital transformation and cognitive management
- user experience and citizen journey
- digital trust, digital innovation and digital disruption
different paradigms of tools to consider

- closed source, software as a product tools
- open source, software as a shared good tools
- no source, software as a service tools
- there are pros and cons, in terms of IT management benefits and risks
- there are obvious gains and hidden costs, in terms of IT budgets
different sources for identifying tools

- competitive intelligence metasources
- competitive intelligence sources
- liveness, activity and influence assessments (a CR/TI index)
- software peer reviews providers
- software comparison reports providers
- OSS directory providers
- OSS-focus provider assessments (an OSS focus index)
- academic literature review papers
different sources for identifying tools

- competitive intelligence metasources
- competitive intelligence sources
- liveness, activity and influence assessments (a CR/TI index)
- software peer reviews providers
- software comparison reports providers
- OSS directory providers
- OSS-focus provider assessments (an OSS focus index)
- academic literature review papers
**IT tools explored:**

excerpt from software peer reviews providers

<table>
<thead>
<tr>
<th>Software base for Ideation Phase</th>
<th>Capterra categories</th>
<th>Software entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Capterra / Collaboration</td>
<td>415 entries</td>
</tr>
<tr>
<td>Idea Management</td>
<td>Capterra / Idea Management</td>
<td>114 entries</td>
</tr>
<tr>
<td>Data Visualization</td>
<td>Capterra / Data Visualization</td>
<td>133 entries</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>Capterra / Employee Engagement</td>
<td>143 entries</td>
</tr>
<tr>
<td>Gamification</td>
<td>Capterra / Gamification</td>
<td>22 entries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software base for Evolution Phase</th>
<th>Capterra categories</th>
<th>Software entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>Capterra / Project Management</td>
<td>505 entries</td>
</tr>
<tr>
<td>Performance Appraisal</td>
<td>Capterra / Performance Appraisal</td>
<td>132 entries</td>
</tr>
<tr>
<td>Knowledge Management</td>
<td>Capterra / Knowledge Management</td>
<td>125 entries</td>
</tr>
<tr>
<td>IT Management</td>
<td>Capterra / IT Management</td>
<td>155 entries</td>
</tr>
<tr>
<td>Data Governance</td>
<td>Capterra / Data Governance</td>
<td>43 entries</td>
</tr>
<tr>
<td>Process Management</td>
<td>Capterra / Business Process Management</td>
<td>198 entries</td>
</tr>
<tr>
<td>Performance Management</td>
<td>Capterra / Business Performance Management</td>
<td>125 entries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software base for Assimilation Phase</th>
<th>Capterra categories</th>
<th>Software entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Community</td>
<td>Capterra / Community</td>
<td>40 entries</td>
</tr>
<tr>
<td>Social Media Management</td>
<td>Capterra / Social Media Management</td>
<td>32 entries</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Capterra / Advocacy</td>
<td>19 entries</td>
</tr>
<tr>
<td>Feedback Management</td>
<td>Capterra / 360 Degree Feedback</td>
<td>77 entries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software base for total IDEA lifecycle</th>
<th>Capterra categories</th>
<th>Total entries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2,278 entries in total (overlaps not excluded)</td>
</tr>
</tbody>
</table>

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
## IT tools explored:

### excerpt from software comparison reports providers

<table>
<thead>
<tr>
<th>software base for Ideation Phase</th>
<th>Forrester Wave Reports</th>
<th>software entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>The Forrester Wave™: Enterprise Collaboration, Q4 2016</td>
<td>10 entries</td>
</tr>
<tr>
<td>Idea Management</td>
<td>The Forrester Wave™: Innovation Management Solutions, Q2 2016</td>
<td>15 entries</td>
</tr>
<tr>
<td>Data Visualization</td>
<td>The Forrester Wave™: Advanced Data Visualization (ADV) Platforms, Q3 2012</td>
<td>17 entries</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>The Forrester Wave™: Enterprise Collaborative Work Management, Q4 2016</td>
<td>13 entries</td>
</tr>
<tr>
<td>Gamification</td>
<td>no specific-focus report available[^1], subsumed by reports in affine categories</td>
<td>0 entries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>software base for Evolution Phase</th>
<th>Forrester Wave Reports</th>
<th>software entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td>The Forrester Wave™: Portfolio Management For The Tech Management Agenda, Q1 2015</td>
<td>13 entries</td>
</tr>
<tr>
<td>Performance Appraisal</td>
<td>The Forrester Wave™: Learning And Performance Management, Q4 2016</td>
<td>22 entries</td>
</tr>
<tr>
<td>Knowledge Management</td>
<td>The Forrester Wave™: Cognitive Search And Knowledge Discovery Solutions, Q2 2017</td>
<td>10 entries</td>
</tr>
<tr>
<td>IT Management</td>
<td>The Forrester Wave™: Enterprise Architecture Management Suites, Q2 2017</td>
<td>10 entries</td>
</tr>
<tr>
<td>Data Governance</td>
<td>The Forrester Wave™: Data Governance Stewardship And Discovery Providers, Q2 2017</td>
<td>14 entries</td>
</tr>
<tr>
<td>Performance Management</td>
<td>The Forrester Wave™: Enterprise Performance Management, Q4 2016</td>
<td>11 entries</td>
</tr>
</tbody>
</table>

[^1]: [source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region]
## IT tools explored:

**excerpt from OSS directory providers**

<table>
<thead>
<tr>
<th>Software base for Ideation Phase</th>
<th>Sourceforge categories</th>
<th>Software entries [1],[7]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Office Suites</td>
<td>246 entries</td>
</tr>
<tr>
<td>Idea Management</td>
<td>Knowledge Management</td>
<td>89 entries</td>
</tr>
<tr>
<td>Data Visualization</td>
<td>Visualization</td>
<td>782 entries</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>Workflow</td>
<td>106 entries</td>
</tr>
<tr>
<td>Gamification</td>
<td>Gamification ad hoc query</td>
<td>2 entries</td>
</tr>
</tbody>
</table>

**Software base for Evolution Phase**

| Project Management               | Project Management                                           | 324 entries              |
| Performance Appraisal            | Human Resources                                              | 46 entries               |
| Knowledge Management             | Business Intelligence                                        | 117 entries              |
| IT Management                    | System Administration                                        | 8,515 entries            |
| Data Governance                  | Data Warehousing                                             | 118 entries              |
| Process Management               | Business Process Management                                  | 63 entries               |
| Performance Management           | Business Performance Management                               | 41 entries               |

**Software base for Assimilation Phase**

| Online Community                 | Conferencing                                                | 219 entries              |
| Social Media Management          | Social Media Management ad hoc query                        | 206 entries              |
| Advocacy                         | Advocacy ad hoc query                                       | 3 entries                |
| Feedback Management              | Feedback Management ad hoc query                            | 32 entries               |

**Software base for total IDEA lifecycle**

<table>
<thead>
<tr>
<th>Sourceforge categories</th>
<th>Software entries [1],[7]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,909 entries in total (overlaps not excluded)</td>
<td></td>
</tr>
</tbody>
</table>
IT tools explored:
excerpt from academic sources

<table>
<thead>
<tr>
<th>software base for Deliberation Phase</th>
<th>academic sources</th>
<th>software entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>Scholar Google</td>
<td>25 entries</td>
</tr>
<tr>
<td>Crowdsourcing</td>
<td>Scholar Google</td>
<td>38 entries</td>
</tr>
<tr>
<td>Debating</td>
<td>Scholar Google</td>
<td>10 entries</td>
</tr>
<tr>
<td>Argumentation</td>
<td>Scholar Google</td>
<td>17 entries</td>
</tr>
<tr>
<td>Semantic Modelling</td>
<td>Scholar Google</td>
<td>11 entries</td>
</tr>
<tr>
<td>Sentiment Analysis</td>
<td>Scholar Google</td>
<td>15 entries</td>
</tr>
<tr>
<td>Opinion Mining</td>
<td>Scholar Google</td>
<td>16 entries</td>
</tr>
<tr>
<td>Open Innovation</td>
<td>Scholar Google</td>
<td>31 entries</td>
</tr>
<tr>
<td>Policy Making</td>
<td>Scholar Google</td>
<td>19 entries</td>
</tr>
<tr>
<td>software base for total IDEA lifecycle</td>
<td>academic sources</td>
<td>182 entries in total (overlaps not excluded)</td>
</tr>
</tbody>
</table>

[ source: consultant, original work for the study on Fostering Innovation in the Public Sectors of the Arab Region ]
IT tools catalogued

- approx. 470 SaaP / SaaS tools
  for the IDEA/Ideation, Evolution and Assimilation phases

- approx. 170 OSS tools
  for the IDEA/Ideation, Evolution and Assimilation phases

- approx. 180 tools and platforms
  for the IDEA/Deliberation phase
on innovation and knowledge resources

needs for access to knowledge resources

knowledge resources catalogued
needs for access to knowledge resources

- if force has to with our ability to do what we want to do, and
- power with our ability to make others do what we want to do

- then, the more powerful we are, the more we need knowledge
- in order to know the right things to make others do

- innovation –related knowledge resources abound
- approaches that can be applied to innovation abound
- domains for public sector innovation abound
knowledge resources catalogued

- approx. 290 book sources, organized around 33 core themes
- approx. 100 academic journals, organized around 5 core themes
- approx. 80 websites and topical webpages, organized around 4 core themes
- approx. 60 background reports by international organizations, organized around 6 core themes
knowledge resources catalogued

- approx. 160 recent (2015 onwards) insight reports by management and IT consultants

- approx. 190 online resource webpages by management and IT consultants

- approx. 310 recent (2012 onwards) academic papers on public sector innovation

- approx. 40 recent (2015 onwards) academic papers on deliberation tools and platforms
innovating with external stakeholders, semi-institutionally

- participatory design
- crowdsourcing
- pervasive participation
- playful brainstorming
- playful democratic participation
- DIY and DIWO citizenship
- visual thinking and visual storytelling
participatory design: some premises

- the way things work, or fail to work, is heavily influenced by their design

- together, we can make choices more inclusive and better for all
CoDesign for Public-Interest Services – a new book born at POLIMI DESIS Lab

We are proud to present a new book born at POLIMI DESIS Lab: it is ‘CoDesign for Public-Interest Services’ by our researcher Daniela Selloni.

The Participatory Design Conference (PDC) is a conference with a long history in bringing together scholars who present research on the direct involvement of people in design, development, implementation, and appropriation activities of information and communication technologies, spaces, artefacts, and services. PDC brings together a multidisciplinary and international group of researchers and practitioners encompassing a wide range of issues that emerge around participatory design, encountered and discussed in multiple fields. These include, but are
Participatory Constitutional Design: A Grassroots Experiment for (Re)Designing the Constitution in Greece

Abstract

This chapter reports how participatory processes and ICT tools can go against rule-driven bureaucratic approaches to political participation and public deliberation, trying to defy strict procedural norms in favor of more flexible formats for citizen mobilization, political co-thinking, and sustained social innovation in the area of constitutional building. After describing key theoretical issues on trends and perspectives of public participation in constitution building
crowdsourcing: some premises

- crowds are not inevitably destructive; they can be constructive as well

- the many, summing up the information and knowledge that they provide, create more wisdom than the few

- the many, summing up the work and resources that they provide, create more strength than the few
COBWEB: Citizen Observatory Web was a project which ran from 1st November 2012 to 31st October 2016.

COBWEB's aim was to enable citizens to collect environmental data using mobile devices. This is the project website and includes resources, co-design project reports, official deliverables, policy briefings, open source software, and information on the project and COBWEB consortium.

Co-Design - Learn how local groups and communities are contributing to COBWEB’s design

[ source: https://cobwebproject.eu/ ]
Answering the big science questions around climate change and the diversity of life requires lots of data, and our researchers can’t gather this alone. You can help.

Our citizen science projects invite you to actively contribute to our science research. By recording observations of wildlife, collecting samples, or transcribing handwritten records, you can unlock the potential of our collections and gather vital data for our scientists, helping them to better understand the natural world.

Anyone can take part - you don’t need special skills or training as we tell you everything you need to know to get involved. It’s a fun, free way to enjoy nature while doing a little bit of good in the world.

Thousands of people across the country take part in our citizen science research and crowdsourcing projects. Why not join in?

[ source: http://www.nhm.ac.uk/take-part/citizen-science.html ]
WeSenseIt is an EU FP7 project developing citizen observatories of water and flooding to facilitate citizen engagement in planning, decision making and governance. One of the three case studies within the WeSenseIt project is the Dutch Delfland Case.
Houston Hackathon 2017

24 hours to help solve civic issues together

at Houston Technology Center

Saturday May 20 + Sunday 21

Subscribe for updates
RSVP on Meetup

[ source: http://houstonhackathon.com/ ]
Houston Hackathon 2017 projects initiated on Github

[ source: https://github.com/sketch-city/project-ideas/issues ]
Singapore eCitizen Ideas!

Featured Challenges

[source: https://ideas.ecitizen.gov.sg/egp/process/EGOV/EideasHomepage]
collaborative city building: CityStudio Vancouver

CityStudio Vancouver is an innovation hub where City staff, students, and community co-create experimental projects to make Vancouver more sustainable, liveable and joyful.

Through the launching of experimental projects on-the-ground, university students learn the skills they need to succeed in today’s economy and inspire action in the community and government.

Explore past projects, courses and stories from CityStudio Vancouver.

[ source: http://www.citystudiovancouver.com/ ]
Translators without Borders (TWB) is a non-profit organization offering language and translation support for humanitarian and development agencies, and other non-profit organizations on a global scale.
pervasive participation: some premises

- the public sphere is not restricted to formal politics; many things in everyday life are political in nature and call for citizen choices and feedback

- people can contribute as active citizens, if we make this meaningful
b-Part is an interdisciplinary research project funded by FFG, Tekes and Formas under the European Commission’s Joint Programming Initiative Urban Europe. Between April 2013 and March 2016 (extended to December 2016), the involved researchers will investigate novel concepts and solutions for citizen e-participation utilizing latest mobile device technology and appliances embedded in today’s urban environments. The proposed pervasive participation approach will consider each level of e-participation by enabling, engaging, and empowering citizens with the ultimate aim of encouraging a continuous dialogue between a city and citizens by using contemporary technology.
The Ludic City: Exploring the Potential of Public Spaces

by Quentin Stevens

This international and illustrated work challenges current writings focusing on the problems of urban public space to present a more nuanced and dialectical conception of urban life.

Detailed and extensive international urban case studies show how urban open spaces are used for play, which is defined and discussed using Caillios' four-part definition – competition, chance, simulation and vertigo. Stevens explores and analyzes these case studies according to locations where play has been observed: paths, intersections, thresholds, boundaries and props.

Applicable to a wide-range of countries and city forms, The Ludic City is a fascinating and stimulating read for all who are involved or interested in the design of urban spaces.

playful brainstorming: some premises

- if we feel well in a brainstorming process, we will contribute more and better ideas.

- a process, to make us feel well, has to be felt less like work and more like play.
playful brainstorming approaches, around the net

[ source: https://www.google.com/search?q=playful+brainstorming ]
Gamestorming for Innovators, Rulebreakers, and Changemakers

Gamestorming
A Playbook for Innovators, Rulebreakers, and Changemakers

By Dave Gray, Sunni Brown, James Macanufo

Publisher: O'Reilly Media
Release Date: July 2010
Pages: 290

Great things don't happen in a vacuum. But creating an environment for creative thinking and innovation can be a daunting challenge. How can you make it happen at your company? The answer may surprise you: gamestorming.

This book includes more than 80 games to help you break down barriers, communicate better, and generate new ideas, insights, and strategies. The authors have identified tools and techniques from some of the world's most innovative professionals, whose teams collaborate and make great things happen. This book is the result: a unique collection of games that encourage engagement and creativity while bringing more structure and clarity to the workplace. Find out why -- and how -- with Gamestorming.
playful democratic participation: some premises

- disengagement from and apathy towards politics also have to do, among other factors, with the gravity and formality of participation processes

- combining participation with fun, will be more inclusive and mobilizing
Making Democracy Fun

How Game Design Can Empower Citizens and Transform Politics

By Josh A. Lerner

Overview

Anyone who has ever been to a public hearing or community meeting would agree that participatory democracy can be boring. Hours of repetitive presentations, alternatingly alarmist or complacent, for or against, accompanied by constant heckling, often with no clear outcome or decision. Is this the best democracy can offer? In Making Democracy Fun, Josh Lerner offers a novel solution for the sad state of our deliberative democracy: the power of good game design. What if public meetings featured competition and collaboration (such as team challenges), clear rules (presented and modeled in multiple ways), measurable progress (such as scores and levels), and engaging sounds and visuals? These game mechanics would make meetings more effective and more enjoyable—even fun.

[ source: https://mitpress.mit.edu/fun ]
DIY and DIWO citizenship: some premises

- we take pride in doing things ourselves, for the sake of it, and we like to find others that feel the same.

- what we feel we have to do as active citizens, including solving our problems, we can do it ourselves.
DIY Citizenship
Critical Making and Social Media

Edited by Matt Ratto and Megan Boler
Foreword by Ronald Deibert

Overview
Today, DIY—do-it-yourself—describes more than self-taught carpentry. Social media enables DIY citizens to organize and protest in new ways (as in Egypt’s “Twitter revolution” of 2011) and to repurpose corporate content (or create new user-generated content) in order to offer political counternarratives. This book examines the usefulness and limits of DIY citizenship, exploring the diverse forms of political participation and “critical making” that have emerged in recent years. The authors and artists in this collection describe DIY citizens whose activities range from activist fan blogging and video production to knitting and the creation of community gardens.

[ source: https://mitpress.mit.edu/books/diy-citizenship ]
visual thinking and visual storytelling: some premises

- write for me a report, and I promise to read it
- prepare for me a presentation, and I promise to attend
- tell me a story, and I’ll start to empathize
- show me a story, and I’ll start to understand

- as human beings, we can put more of our truths in stories and pictures, than in any other format
What is Visual Thinking?

Visual thinking is a way to organize your thoughts and improve your ability to think and communicate. It's a great way to convey complex or potentially confusing information.

It's also about using tools—like pen and paper, index cards and software tools—to externalize your internal thinking processes, making them more clear, explicit and actionable.

[source: http://www.xplaner.com/visual-thinking-school/ ]
the back of the napkin
when words do not work

7. 

**Blah Blah Blah**

Dan Roam

What do you do when words just aren’t enough? Explaining complex concepts, making ideas memorable, and grabbing your audience’s attention sometimes needs the perfect visual. Learn how to liven up your content with visual media.

Scenes storytelling and storyboarding

Scenes: a storytelling and -boarding tool
Margaret / 03.2017 / Collaboration Tools, Design Tools, Legal Product Design / Leave a Comment

SAP’s User Experience design services team has a wonderful free resource to build storyboards and tableaus in your design work. It’s called Scenes. You can download the pdf and make a DIY, physical, interactive storyboarding kit to work with in your team or with your client.

Use Scenes to

Humanize your research insights
Create a storyboard to show your project team how users experience their world. The project team will experience it too!

Capture current scenarios
Map the user journey of your existing solution as a story. This will help you to identify problems and understand their impact.

Validate new ideas
Do you have a great idea for a future solution? Create a storyboard about how it will work to get early feedback.
innovating with external stakeholders, institutionally

innovation marathons

innovation hackathons

innovation prizes

innovation and patents

innovation green papers, innovation white papers
What happened during the 24 Hours of Innovation 2009

Nick De Mey / May 20, 2009 / Board Of Innovation

On Friday May 15 at exact 10am CET/4am EDT/1am PST we started a 24 Hour marathon of innovation projects around the world. During a full day and night 60+ participants presented their innovation initiatives, ranging from small Innovation blogs up to large multinationals. Reviewing high quality presentations, facing technical challenges, judging a student challenge, live streaming brainstorms, receiving last minute contributions to be processed on the road... the 24h was a hectic, fun and interesting experience! In order to make sure that no qualitative contributions got lost in the rush, let’s have a look at what happened during the first edition of the 24 Hours of Innovation (2009).

Sofia Innovation Hackathon 2017 (Bulgaria, May 2017)

Ideas for a Better Sofia: Sofia Innovation Hackathon 2017

© 14.06.2017

For the fourth consecutive year, Innovation Starter organized Academy of Innovation – Sofia Innovation Hackathon for students. The most important part of the competition was a 24-hour marathon, where the young teams developed and presented great ideas within three categories: Digital Environment, Products and Services of the Future, Branding / Competitive Advantages / of Sofia City.

This year students from New Bulgarian University (NBU), Sofia University “St. Kliment Ohridski” (Sofia University), University of National and World Economy (UNWE), American University in Bulgaria (AUBG), Software University (SoftUni), University of Finance, Business and Entrepreneurship (VUZF) took part in the event.

SingHealth Hackathon 2017 (Singapore, January 2017)

Breakthroughs, New Ideas and Innovations Galore at SingHealth Hackathon 2017

The SingHealth Hackathon focused on three challenges:
1) **Coordination**: Exploring how to better connect and facilitate timely sharing of patient information among the healthcare teams caring for the patients,
2) **Communication**: Finding better ways to communicate with patients and their families to help them understand their condition and treatments and
3) **Rehabilitation**: Conceiving better methods to help patients get back on their feet.

FAQ's

What is the Dutch Open Hackathon?
The Dutch Open Hackathon makes it possible for foreign and local developers to develop digital products or services by mixing and matching APIs and technologies from a large group of corporates from Dutch origin. These corporations are Politie, KPN, SIDN and PostNL. Over the course of 48-hours, developers build a working prototype of the mobile applications. These prototypes will then be presented to a panel of judges with international representatives from named Dutch companies.

[source: https://dutchopenhackathon.com/p/faq]
Hackathons Aren’t Just for Coders

While hackathons can help companies develop new products and services, the benefits reach far beyond the output of a single hackathon. We’ve seen companies use hackathons to promote cultures of innovation, to change the operating norms at the most senior levels of a company and to rally support around major initiatives.

[ source: https://hbr.org/2016/04/hackathons-arent-just-for-coders ]
how does innovation compare to a marathon?

- it is open to everyone
- preparation, endurance, persistence are all necessary to win, but not to participate
- not a brute force process, strategies and methods can help
- there is value in the process
how does innovation compare to a marathon?

- there is value for others in the outcome, other than setting an example

- it is competitive but not antagonistic, there is room for many winners, yet winners are not always awarded grand prizes
how do hackathons deliver value?

- build on the idea that anyone may be able to innovate
- provide an opportunity to freely choose and commit to, rather than a forced obligation
- provide a clear challenge on what to achieve, specified at a meaningful level of detail
- provide freedom on what to do, thus challenging creativity, collaboration and effectiveness
how do hackathons deliver value?

- time limits make teams focus on the essential

- pursue proofs of concepts and paradigm shifts by solving a core problem in a scalable way

- no need to go down the full deployment scale
InnoCarnival 2017 (Hong Kong, October 2017)

InnoCarnival

Underscoring the theme “Live Smart. Be Innovative”, InnoCarnival 2017 features various types of activities, such as exhibitions, workshops, seminars, science competitions, guided tours, performances and interactive games for the public to gain hands-on and fun-filled experience of the convenience and fun brought by innovation and technology to their daily life.

All activities of InnoCarnival 2017 are free of charge. Pre-registration is required for some activities.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>21, 22, 28 and 29 October 2017 (Saturdays &amp; Sundays)</td>
<td>10:00-19:00</td>
<td>Hong Kong Science Park</td>
</tr>
<tr>
<td>23 to 27 October 2017 (Mondays to Fridays)</td>
<td>10:00-18:00</td>
<td>Hong Kong Science Park</td>
</tr>
</tbody>
</table>

domain-specific innovation awards

Student Innovation Award

An international competition for students aiming to recognise innovative thinking and pioneering solutions in the area of olefin, polyolefin or base chemicals research.

[ source: https://www.borealisgroup.com/company/innovation/student-innovation-award ]
domain-specific innovation awards

Eni Award 2017

You can find below and download all the information about the competition and the regulations for the 2017 edition of Eni Award. The competition is made up of three sections divided into different topics for external projects, Two Young Researcher of the Year Prizes, Two Debut in Research: Young Talents from Africa prizes and a further section reserved for our own internal research scientists. There is a specific announcement and a prize for each one of these, while the general rules for the competition are in the Regulations section. Find below all the documentation necessary to participate in the 2017 edition of Eni Award.

Regulations Eni Award 2017

Eni Award 2017

- Announcement for Energy Frontiers Prize
- Announcement for Energy Transition Prize
- Announcement for Advanced Environmental Solutions Prize

domain-specific innovation awards

We are pleased to announce
The PharmInnova Award
competition for the year 2017-18
and invite participation from your
College / Institute / University.
We look forward to
your active participation.

The Masters Dissertation Award is for outstanding research undertaken by students on taught postgraduate courses. The Award aims to promote the importance of advanced research skills in enabling students to pursue specialised careers.

Prizes

- Premier Award (£1000, trophy and certificate)
- Highly Commended Award (£500, trophy and certificate)
- Merit Award (trophy and certificate)

Rules of Entry

[ source: http://iandrawards.cio.org/award-categories/masters ]
A celebration of the world research community

Elsevier awards researchers and research organizations throughout the world who have been credited with outstanding achievements and are making a significant contribution to the advancement of their field, thereby having a positive influence on our society.
The European Commission has launched the fifth edition of the EU Prize for Women Innovators to award women entrepreneurs who have achieved outstanding innovations and brought them to market. Apply by 15 November 2017 and follow us on #WIPrizeEU.

Carlos Moedas, Commissioner for Research, Science and Innovation, said: "The EU Prize for Women Innovators gives public recognition to outstanding women entrepreneurs and inspires other women to follow in their footsteps"
The annual ISPIM Innovation Management Dissertation Award is made to the student completing the best PhD within innovation management each calendar year. The Award is open to all students completing a PhD within innovation management.

The submission page has now closed for the 2017 award, the winner was announced at the ISPIM conference in Vienna, June 2017. The three finalists were:

- Andres Ramirez-Portilla - KTH Royal Institute of Technology, Sweden
- Balazs Szatmari - University of Amsterdam, Netherlands (winner)
- Monika Hengstler - Zeppelin University, Germany
AIF Innovation Prize for Africa

IPA 2018 applications are now open

Read the call for Applications
APPLY NOW

Deadline for submission is 10.01.2018 at 23.59 GMT

[ source: http://innovationprizeforafrica.org/ ]
Blue Bag Water Innovation Award Challenge

Innovate for Jakarta and win a full scholarship for the Master’s Programme in Water Resources Engineering at Lund University in Sweden.

Develop solutions to improve access to clean water, increase sanitation facilities, and reduce water contamination levels for residents of Jakarta.

[ source: http://www.bluebagaward.com/ ]
how do innovation hackathons and awards compare?

- both can communicate innovativeness
- both can motivate innovation
**how do innovation hackathons and awards compare?**

- hackathons call for good results in a set (very short) deadline; awards evaluate end results independently of the time needed, come with a deadline well ahead, and recur on some regular basis to allow a “next time” concept

- hackathons are typically addressing ingenious teams; awards are typically addressing talented individuals

- hackathons may best serve for creating interest, awareness and a culture for innovativeness; awards may best serve for establishing a tradition, examples and a culture of excellence
beyond hackathons and awards: patents, to protect interests

- contributing our ideas and work to a hackathon
- contributing our ideas and work to an award
- aspects of a gift economy

- in a non-gift economy, there are profits and losses to make
- non-gift creates interests to protect
- interests create patents to get protected
What may be the difference between an innovation patent and a standard patent

<table>
<thead>
<tr>
<th>What requirements does the product, process or invention need to meet?</th>
<th>Be new, useful, and involve an innovative step, which is a less onerous requirement than the inventive step required for a standard patent</th>
<th>Be new, useful, and involve an inventive step, that is, that the invention must be 'non-obvious'.</th>
</tr>
</thead>
<tbody>
<tr>
<td>After the patent is granted, can the patent owner enforce the patent against infringers?</td>
<td>No. If the owner of an innovation patent seeks to enforce it against an infringer, the patent first has to be examined (i.e. investigated to ensure that it meets all the requirements for a patent).</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

Does innovation lead to patents, or patents lead to innovation?

By Gene Quinn
April 20, 2017

I recently had the opportunity to speak on the record with Matt Levy, current counsel with Wiley Rein and former patent counsel for the Computer & Communications Industry Association. To start reading our conversation from the beginning please see A Software Patent Discussion with Matt Levy. What follows is part 2 of our interview; the final segment. We pick up our conversation with me suggesting that there is a problem with claims being found to be abstract when the decision maker has been able to do a complete 102 (novelty) and 103 (obviousness) analysis. We then move on to discuss the meaning of “innovation,” whether innovation leads to patents or patents lead to innovation, and briefly touch on a long-time disagreement about whether patents are property rights.

innovation patents in the private sector: some remarks to make

- the critical issue: everyone wants to profit from an innovation
- patents considered as a pre-requisite for innovation
- patents as a guarantee of protection from replicas, and thus prospective RoI
- patents as a safeguard of intellectual attribution, and thus prestige and self-satisfaction
To sustain a population of 9.7 billion people by 2050 the world is going to need innovations that make careful use of the available resources, human and environmental. Key industry sectors such as energy, water, agriculture and transport are already under pressure to move to more sustainable methods of production and consumption. However, there are barriers in the way.

MESSAGE FROM THE EXECUTIVE DIRECTOR ON THE MPP STRATEGY

The MPP has a clear mission: to increase access and innovation in the fields of HIV, hepatitis C and tuberculosis treatment for people living in developing countries.

Read more
innovation patents in the public sector:

some remarks to make

- we want public goods innovation to be replicated
- we want public sector innovation to be replicated (the “Tesla” effect, so to say)
- public sector innovators want to be replicated
innovation patents in the public sector: some remarks to make

- innovators, like anyone else, and even more so, want to keep attribution of their intellectual work

- the critical issue: not everyone wants to uptake an innovation

- public sector innovation patent systems that safeguard intellectual attribution, and at the same time encourage (not just allow) replication
Open Patent Office

We aim to stimulate innovation by providing an open, free & social alternative to the traditional patent offices.

COMPARE

PATENTS

- Registration and renewals fees are expensive
- Writing a patent is difficult & requires expensive advice
- Often hard to understand, vague legalese
- Slow publication process

OPEN PATENTS

- No fees
- Writing an open patent is easy.
- Enabling description
- Immediate publication

[ source: http://www.openpatentoffice.org/ ]
A Call for Open Patents

[ source: https://blog.p2pfoundation.net/a-call-for-open-patents/2017/05/02 ]
Patentleft (also patent left, copyleft-style patent license or open patent) is the practice of licensing patents (especially biological patents) for royalty-free use, on the condition that adopters license related improvements they develop under the same terms. Copyleft-style licensors seek "continuous growth of a universally accessible technology commons" from which they, and others, will benefit.[1][2]

Patentleft is analogous to copyleft, a license which allows distribution of a copyrighted work and derived works, but only under the same terms.

[ source: https://en.wikipedia.org/wiki/Patentleft ]
innovation patents in the public sector: some ideas to explore

- open patents and patentleft concepts

- public sector innovation sharing instruments (events, knowledge repositories)

- public sector innovation replication instruments (workshops, collaborations)

- can we explore the idea of innovation replication awards?
innovation papers:
from green to white

- green papers,
  typically containing proposals on which feedback is sought

- white papers,
  typically containing finalized policies to be implemented
innovation white papers

Innovation White Papers | InnoCentive
https://www.innocentive.com/resources-overview/whitepapers/  
Jul 18, 2017 - Download our latest White Papers to explore topics, trends and practice in Open Innovation.

Intelligent Automation White Paper | UBS Innovation
https://www.ubs.com › Innovation › Into the future  
Jan 31, 2017 - What is intelligent automation and what does it mean for the financial services industry? What’s the role and application of artificial intelligence (AI) in this context...

Innovation White Papers | Original Research on Innovation - ARK Invest
https://ark-invest.com/innovation-white-papers  
Dec 16, 2016 - We provide thought leadership on disruptive innovations. ARK innovation white papers focus on research of new technologies and investment opportunities.

New white paper on industrial policy focuses on innovation - The ...
https://www.forskingsradet.no/en/...white_paper...innovation/...p1177315753918  
Apr 24, 2017 - The Norwegian Government has launched a white paper on industrial policy that provides a framework for a trade and industry that has the capacity to...

[ source: https://www.google.com.eg/search?q=innovation+white+papers&tbs=qdr:y ]
more to reflect upon, for innovating innovation

innovation wikis

innovation KPIs

innovation and standardization

caring for public sector innovation capability

readiness models

digital maturity models

capability maturity models

in quest of a public sector innovation capability maturity model

smooth efforts to the top
innovation wikis: what could be

Etherpad is a highly customizable Open Source online editor providing collaborative editing in really real-time.

[ source: http://etherpad.org/ ]
innovation wikis: what is not any more

Mixedink

Mixedink is a startup that provides web-based, collaborative writing software enabling large groups of people to create text that expresses a collective opinion, such as a mission statement, editorial, political platform, open letter or product review.

Mixedink was first used publicly by a group of progressive online activists, the Netroots, to draft a political platform, a piece of which was subsequently included in the 2008 Democratic Party Platform.[1][2] Mixedink formally launched in January 2009.[4] The tool has been since been used to gather community input by media organizations, including The Associated Press,[5] and Slate Magazine,[6][7][8] as well as political and government offices, including the White House Office of Science and Technology Policy.[9][10] It has also been suggested that Mixedink’s software would be useful in teaching writing skills,[11][12][13] though the company does not highlight this application on its website.

Mixedink’s platform attempts to combine elements of a wiki with a democratic rating system to ensure that the final text reflects participants’ collective voice and cannot be hijacked by any individual editor. The collaborative authoring process occurs during a fixed time period in which contributors write original, complete versions of the text, edit others’ submissions, remix segments of different versions together to create new ones, and rate different submissions on a 5-star scale. At the end of the time period, the version of the text with the highest average rating is meant to reflect participants’ shared viewpoint and is intended to be interpreted, published, or promoted accordingly.[14]
innovation KPIs

- we would all like to have them
- we are not really sure how to define them
- nor can we easily agree on common definitions
we are maybe measuring our innovation teams in the wrong way

[ source: https://www.inc.com/art-markman/there-are-3-key-performance-indicators-for-innovation.html ]
developing, implementing and using KPIs that win

there are innovation pillars and innovation outputs

The Global Innovation Index (GII) is an evolving project that builds on its previous editions while incorporating newly available data and that is inspired by the latest research on the measurement of innovation. The GII relies on two sub-indices—the Innovation Input Sub-Index and the Innovation Output Sub-Index—each built around key pillars.

Five input pillars capture elements of the national economy that enable innovative activities: (1) Institutions, (2) Human capital and research, (3) Infrastructure, (4) Market sophistication, and (5) Business sophistication. Two output pillars capture actual evidence of innovation outputs: (6) Knowledge and technology outputs and (7) Creative outputs.

Each pillar is divided into sub-pillars and each sub-pillar is composed of individual indicators (81 in total in 2017). Sub-pillar scores are calculated as the weighted average of individual indicators; pillar scores are calculated as the weighted average of sub-pillar scores.

Four measures are then calculated:

- Innovation Input Sub-Index: is the simple average of the first five pillar scores
- Innovation Output Sub-Index is the simple average of the last two pillar scores
- The overall GII score is the simple average of the Input and Output Sub-Indices
- The Innovation Efficiency Ratio is the ratio of the Output Sub-Index over the Input Sub-Index

The GII gathers data from more than 30

[ source: https://www.globalinnovationindex.org/about-gii#framework ]
innovation KPIs: some remarks to make

- the need to define what constitutes performance
- what is done is different from what is achieved
- both are important to manage, and thus to evaluate
- multiple heterogeneous data sources are necessary
- multiple heterogeneous stakeholder viewpoints are necessary
caring for public sector innovation capability

- as something to help increase
- as something to guide along correct paths
- as something to assess
- in quest of a public sector innovation readiness index
- in quest of a public sector innovation maturity concept
- in quest of a public sector innovation capability maturity model
# Networked Readiness Index

Select Index Component:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Economy</th>
<th>Info</th>
<th>Value</th>
<th>Distance from best</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Singapore</td>
<td>🔄</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Finland</td>
<td>🔄</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sweden</td>
<td>🔄</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Norway</td>
<td>🔄</td>
<td>5.8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>United States</td>
<td>🔄</td>
<td>5.8</td>
<td></td>
</tr>
</tbody>
</table>

Forrester (2017) Digital Maturity Model 5.0

Why Read This Report

Are you ready to transform your digital business but unsure where to start? Are you curious about how you compare with other firms trying to tackle the same problem? Forrester's Digital Maturity Model 5.0 helps you plot your organizational maturity to offer strategic guidance on how to graduate to higher levels of maturity. This report updates our Digital Maturity Model 4.0 with new global data in order to see what progress firms made in 2016.

[ source: https://www.forrester.com/report/The+Digital+Maturity+Model+5.0/-/E-RES136841 ]
Gartner (2017) Digital Government Maturity Model 2.0

Introducing the Gartner Digital Government Maturity Model 2.0

Published: 20 July 2017  ID: G00334525

Analyst(s): Andrea Di Maio | Rick Howard

Summary
Making steady progress in transforming public services requires government CIOs to assess where their organization stands in relation to its goals and take strategic steps to increase digital maturity. Gartner's Digital Government Maturity Model provides CIOs with a framework for that purpose.

Table of Contents
Analysis
OpenROADS (2017) Introduction to the Open Digital Maturity Model V2

Published on 11 Aug 2017
985.41KB PDF file
111 have downloaded this

Whitepaper

Introduction to the Open Digital Maturity Model V2

This paper provides members of the Open ROADS Community with an introduction to the Open Digital Maturity Model (referred to in this document as the ODMM) and its use as an assessment tool to measure digital maturity.

Open ROADS Community members who wish to conduct an ODMM assessment for their organization can contact the Open ROADS Community to request a formal assessment, a list of accredited assessors.

Further information about the ODMM, including a deeper explanation of its categories, metrics and KPIs, please contact us by email: enquiries@openROADScommunity.com.

Download Whitepaper

Tags: Open Digital Maturity Model

TMForum (2017) Digital Maturity Model for Digital Transformation

A new online tool to navigate the maze of digital transformation

The digital revolution creates both significant opportunities and threats impacting every industry, service providers can embrace significant growth opportunities by looking beyond connectivity. At the same time, commoditization and digitalization of connectivity services have created an urgency to dramatically simplify and transform the efficiency of the existing business.

[ source: https://www.tmforum.org/digital-maturity-model-metrics/ ]
What Is CMMI®?

CMMI is a world-class performance improvement model for competitive organizations that want to achieve high-performance operations. Proven effective in organizations and governments globally over the last 25 years, CMMI consists of collected best practices designed to promote the behaviors that lead to improved performance in any organization.

CMMI Institute models help identify and improve the key capabilities that elevate your organization’s performance, quality, and profitability. CMMI offers four models that can be customized to fit your needs for different environments.

**Discover which CMMI Institute Model is right for you.**
CMMI Maturity Levels

1. Initial
   - Unpredictable and reactive. Work gets completed but is often delayed and over budget.

2. Managed
   - Managed on the project level. Projects are planned, performed, measured, and controlled.

3. Defined
   - Proactive, rather than reactive. Organization-wide standards provide guidance across projects, programs, and portfolios.

4. Quantitatively Managed
   - Measured and controlled. Organization is data-driven with quantitative performance improvement objectives that are predictable and align to meet the needs of internal and external stakeholders.

5. Optimizing
   - Stable and flexible. Organization is focused on continuous improvement and is built to pivot and respond to opportunity and change. The organization's stability provides a platform for agility and innovation.

in quest of a public sector innovation capability maturity model

- what and how to assess in terms of readiness
- what and how to assess in terms of maturity
- what and how to assess in terms of capability

- why to assess in private
- why to assess in public

- assessment as a non-antagonistic, non-competitive, improvement-only process
- the risks of rankings
smooth efforts to the top

- advancing over time, rather than racing against time
- identifying the average level
- trying to perform above average
- increasing the running average
Public Sector Innovation: innovate, how ...

Dimitris Gouscos (gouscos@media.uoa.gr)

Workshop on Fostering Innovation in the Public Sectors of Arab Countries

organized by UN ESCWA

under the patronage of Her Excellency Dr. Hala Helmy El Said,

the Minister of Planning, Monitoring and Administrative Reform, Egypt

Cairo, Egypt, October 2017
thank you very much

شكرا جزيلا