Designing a Sustainable Future
An approach to the Assessment, Archiving and Preservation of Digital Projects
We are

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How do we conceptualize the relation between society and technology?

[ culture scholarship everyday life ]
From innovation

To maintenance

[potential title of unpublished manifesto]
“The Maintainers: How a Group of Bureaucrats, Standards Engineers, and Introverts Made Digital Infrastructures That Kind of Work Most of the Time”

themaintainers.org
Hail the maintainers

Capitalism excels at innovation but is failing at maintenance, and for most lives it is maintenance that matters more

Andrew L. Russell & Lee Vinsel, *Hail the Maintainers*, Aeon (April 7, 2016)
“What happens after innovation is more important. Maintenance and repair, the building of infrastructures, the mundane labour that goes into sustaining functioning and efficient infrastructures, simply has more impact on people’s daily lives than the vast majority of technological innovations.”

Andrew L. Russell & Lee Vinsel, *Hail the Maintainers*, Aeon (April 7, 2016)
Making the case for Sustainability and Maintenance of Digital Humanities Projects

A fight worth fighting

“to create, to endure and continue to provide value well beyond the term of the grant, long-term success”

We are not alone in this.

JISC / Ithaka-Strategic Content Alliance

“We define ‘sustainability’ as having a mechanism in place for generating, or gaining access to, the economic resources necessary to keep the intellectual property or the service available on an ongoing basis”. (Guthrie et al., 2008: 10)

- Arts and Humanities Data Service (AHDS) <http://www.ahds.ac.uk/>
- Digital Preservation Coalition’s < www.dpconline.org >
- Promoting and Enhancing Reuse of Information throughout the Content Lifecycle taking account of Evolving Semantics (PERICLES), <http://www.pericles-project.eu/ >
KDL approach to Sustainability (in a nutshell)
Process workflow

Risk & Issues Assessment

DDH legacy projects Master List → Assessment Matrix version 1 → SIACIA (Optional) → Assessment Matrix Version 2

SDLC

Funding Assessment & Allocation → Archival Product / ISBN Allocation → Prioritisation (Matrix weight type)

Senior Mgt input

Archival Products Catalogue

PI / technical / research data mgt - open access input

Security working group

Vice Dean Research, DDH input.
Projects Master List

20 years

164 projects - and still counting
Assessment matrix

Institutional reputation (Brand impact)
- Research impact
- Research value
- Web Traffic
- Altmetrics
- Linked data dependencies
- Copyright / licencing

Costs of Publication
- Bugs
- Infrastructure costs
- Development costs
- Security risk
- Archiving & preservation difficulty
<table>
<thead>
<tr>
<th>Grade</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional reputation</td>
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<td>Research impact</td>
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<tr>
<td>SIA / CIA (ONLY in phase 2)</td>
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Stakeholder Impact Assessment /Change Impact Assessment
1. Stakeholder Identification

To detail assumptions and other notes use the 'Insert Comment' function. All comments will print out automatically.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Stakeholder's objectives</th>
<th>Stakeholder's degree of power and influence (Low, Medium, High)</th>
<th>Impact on Stakeholder (Low, Medium, High)</th>
<th>Stakeholder's level of interest in the programme/project (Low, Medium, High)</th>
<th>Stakeholder's level of awareness of the programme/project (Unaware, Aware, Active)</th>
<th>Stakeholder's level of support (Neutral, Supporter, Opposed)</th>
<th>Stakeholder capacity to participate (Low, Medium, High)</th>
</tr>
</thead>
</table>

3. Change Activity

Please enter Change Activity that has not been captured in the individual change impact worksheets. To detail assumptions and other notes use the 'Insert Comment' function. All comments will print out automatically.

<table>
<thead>
<tr>
<th>Change activity</th>
<th>Activity objectives</th>
<th>Participants</th>
<th>Resource requirements</th>
<th>Timetable activities</th>
<th>Cost ($000)</th>
<th>Responsibility</th>
<th>Due Date</th>
<th>Status</th>
</tr>
</thead>
</table>

4. Engagement Activity (Stakeholder Specific)

Should be completed in consultation with the Business Owner and external subject matter experts i.e. Training, HR, Sector Communication staff. To detail assumptions and other notes use the 'Insert Comment' function. All comments will print out automatically.

Overall Engagement objective (including metrics of success):

<table>
<thead>
<tr>
<th>Engagement Activity (Activities to achieve the engagement objective)</th>
<th>Stakeholder(s)</th>
<th>Engagement Objective (What will the activity achieve i.e. change notification, call to action)</th>
<th>Key Messages (What messages need to be delivered)</th>
<th>Due Date</th>
<th>Responsibility</th>
<th>Resource requirements</th>
<th>Cost ($000)</th>
<th>Status</th>
<th>Evaluation (Did the activity achieve the objective)</th>
<th>Comments</th>
</tr>
</thead>
</table>

4 October 2016, Complexities of project logistics workshop, DiXiT-ESTS conference, Antwerp
## 2. Key Stakeholder Change Impact

1 Sheet per key stakeholder

To detail assumptions and other notes use the "Insert Comment" function. All comments will print out automatically.

At minimum, complete for those with an impact rating of medium or high (refer the Stakeholder Identification Sheet)

<table>
<thead>
<tr>
<th>Programme/Project Name:</th>
<th>Stakeholder (organisation type of functional unit impacted):</th>
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</thead>
</table>

### Change Impact Ratings

<table>
<thead>
<tr>
<th>Level of impact (on the stakeholder):</th>
<th>Difficulty to achieve</th>
<th>Contribution to benefit realisation</th>
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</thead>
<tbody>
<tr>
<td>Low - Minimal or low levels of change that can be accommodated within business as usual activity</td>
<td>Low - No change impact</td>
<td>Note or limited contribution to the achievement of benefits</td>
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<tr>
<td>Medium - Requires changes to how the organisation/unit operates requiring additional investment of time and resources to achieve</td>
<td>Medium - Variable support for the change and there is variable capacity to accommodate the change within available resources</td>
<td>Substantial contribution to the achievement of benefits</td>
</tr>
<tr>
<td>High - Requires significant change to how the organisation/unit operates (involving a significant investment of time and resources)</td>
<td>High - Low support for the change and/or change can not be met within available resources</td>
<td>Critical contribution to the achievement of benefits</td>
</tr>
</tbody>
</table>

### Future environment

- Business model: e.g. Governance, Cost Structure, Organisation’s Core Capabilities, Business operating model
- Culture/behaviours: e.g. Relationship [Internal and external], Leadership, Knowledge sharing, Culture
- People: e.g. Capability, capacity, accountabilities, organisation design
- Processes: e.g. Clinical and business delivery processes, reporting processes, policies and procedures
- Interacting technology: e.g. hardware, software, information standards
- Government policy and legislation
- Patients/individuals: e.g. use of patient information, behaviours and activities, privacy

### Current environment

(Only include points of difference to the future environment)

### Level of impact

- Difficult to achieve

### Contribution to benefit realisation

- Required actions
- Due Date
- Status
- Cost project ($,000)
- Annual cost ongoing ($,000)
- Funder
Archiving solutions catalogue

1. Data only
2. Web connector / backend support
3. Maintained VM
4. Offline or Unmaintained VM
5. Cloud hosting
6. Static website
7. “Active” maintenance
8. ISBN/ISSN allocation
Challenges

Risks and Issues?

Is it feasible?

Built-in or Add-on Sustainability?
Thank you!

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