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Mobilizing User-Generated Content for Canada's Digital Content Advantage

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Mobilizing User-Generated Content for Canada’s Digital Content Advantage

presented by:
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Michael McNally, Caroline Whippey, and Lola Wong
• Overview of research project and user-generated content (UGC)
• The three domains of UGC
  – Creative Content
  – Small Scale Tools
  – Collaborative Content
• Leveraging UGC
• Barriers to UGC
• Policy Implications
The Project

• Part of SHRCC Knowledge Synthesis Grant program

• Examine current state of UGC and identify research gaps

• Aim is to leverage UGC as part of Canada’s Digital Economy Strategy
What is User-Generated Content?

• User-generated content (UGC) is voluntarily developed content created by individuals or groups

• UGC is developed, distributed, and consumed in a wide variety of media formats

• UGC content distributed through a variety platforms

• UGC is increasingly popular – half of the top ten internet sites in the world heavily rely on UGC (Facebook, YouTube, Blogger.com, Wikipedia and Twitter)
We have divided UGC in to three domains:

• **Creative content**
  – Social networking sites (Facebook, Twitter, YouTube, Vimeo, Flickr, and others)

• **Small scale tools**
  – Video games, virtual worlds, and mobile applications

• **Collaborative content**
  –Wikis, open source software, and other creative content that is authored by a group as opposed to an individual
**Project breakdown: Three major domains**

<table>
<thead>
<tr>
<th>A. Creative Content</th>
<th>B. Small-scale tools</th>
<th>C. Collaborative</th>
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<tr>
<td>• User-generated content is content created, developed, captured and put on display by a individual on an online platform.</td>
<td>• Small scale tools are tools, modifications, and applications that have been created by a user or group of users.</td>
<td>• Collaboratively created UGC is authored collectively and shared by a self-regulating group of contributors.</td>
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<tr>
<td>• Content generated by individuals or small groups (not within virtual worlds, or gaming platforms)</td>
<td>• Game modifications (mods), or add-ons,</td>
<td>• OSS includes both open-source software and free/libre software</td>
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<tr>
<td>• More specifically platforms such as YouTube, Flickr, Twitter, and Facebook.</td>
<td>• Mods, objects, or tools created for virtual worlds such as Second Life.</td>
<td>• Wikis such as wikipedia</td>
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<tr>
<td>• UGC where an individual (or small non-regulated group) is in control of creation of content and uploading it for delivery on a platform.</td>
<td>• User developed applications and tools for mobile devices, such as the iPhone or the Android system.</td>
<td>• Government data sets can be provided by any level of government</td>
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• Individually created content distributed through a one or more platforms

• Platforms range from individual websites or blogs to comments posted on websites or articles in zines

• Content can be on any subject, and is independent of the platform
Creative Content

• Wide array of uploading resources available

• Successful sites integrate content creation, aggregation, distribution and consumption

• This content is often generated with an audience in mind

• Examples of popular repositories of creative content include Facebook, Twitter, YouTube, and Flickr
• Lowered production costs and the internet as a distribution mechanism erode the traditional creator-consumer dichotomy

• UGC included traditional media forms (audio, video, text) and emerging formats such as virtual worlds and augmented reality

• UGC platforms without user fees and obtrusive advertising have proved quite successful
Small Scale Tools: Game Modifications

• Wide variety of popular video games include UGC

• Two main types:
  – User Interface Customization
  – Game Conversion Modification

• Modifications can act as sociotechnical objects, managing gameplay, providing incentive, enabling play, or can incite frustration.
Small scale Tools: Virtual World Modifications

- In Second Life (SL) over 99% of the objects are user generated

- Highly open ended: the limits are the imagination of the users – creations range from clothes and hair styles to libraries and nightclubs

- Users retain intellectual property rights over creations
Small Scale Tools: Mobile Applications

- Cellphone based applications an increasingly popular vehicle for UGC

- Most popular apps are games, news/weather apps, and social networking apps.

- Development requires a Software Development Kit, which may come at a monetary cost

- App stores provide a place for distribution
Collaborative Content: Wikis

- Wikis are a special kind of webpage that facilitate collaborative authorship

- Best known wiki is Wikipedia though numerous other encyclopaedic wikis exist

- Wikis are not limited to encyclopaedias: Wiki City Guides has nearly 13 million pages, and is the largest wiki
• Open source software (OSS) contrasts with the propriety approach to software used by most major software companies

• Though prominent major OSS projects are produced and maintained by organizations, many OSS projects started as UGC

• Examples of OSS with UGC origins include the Apache Web Server and Linux Operating System
Collaborative Content: Coordinating Collaboration

- Norm based governance central to collaborative UGC

- Leaders also play a central role in ensuring quality and version control

- Collaborative UGC is premised on the idea that the greater the number of contributors the better the quality of the output
Leveraging UGC: Best Practices

• Successful UGC models integrate creation, distribution and consumption into a single tool

• User ratings and reviews are important for UGC platforms

• UGC creators often support each other through websites and forums

• Open (as opposed to proprietary) data sets and development tools encourage UGC production
Leveraging UGC: Content Distribution

- Organization, indexing and disseminating UGC are central

- Discussion boards, forums, sites that review services or products, and some sites and blogs offer the ability to post comments and other small contributions

- Aggregation and distribution sites exist for other forms of UGC, and are equally critical in providing access to these forms. (ie: the App Bank, SourceForge, Curse.com)
Leveraging UGC: Quality and Content Control

- Content repositories are useful for aggregating content but may contain material that is offensive or illegal in some jurisdictions.

- More formalized agreements or contracts serve to enforce quality and content control form some types of UGC:
  - In games/virtual worlds, private law contracts must be agreed to by the user before entering the space.
  - Proprietary control by platform owners (such as the iPhone) are a mechanism to ensure quality, but do limit creator freedom.
Leveraging UGC: Motivating Creative Activity

- UGC creators often derive personal enjoyment from creating and sharing their work.
- Non-pecuniary motives such as developing a reputation are also important motivators.
- Creating UGC can serve as a springboard to a professional career.
Leveraging UGC: Revenue Generation

• Four main sources of revenue for UGC creators:
  – Advertising revenue
  – Voluntary donations from other users
  – Direct payment/subscription fees, and the
  – Licensing of content to third parties

• Aggregation and distribution of UGC are relatively easily monetized

• Some collaborative UGC projects have gone on to spawn small but successful organizations.
Barriers to UGC: Infrastructure and Skills

• UGC creation and distribution is reliant on fast, affordable internet access

• All collaborative UGC requires some basic level of technological literacy

• Creation of applications and software requires a greater knowledge of computer programming

• While UGC creation requires skills, it also enhances them
Barriers to UGC: Private Ordering Mechanisms

• Closed, proprietary systems and formats limit users ability to freely make and distribute content

• Technological Protection Measures (TPMs) inhibit UGC production by making content inaccessible

• Use of content is also restricted through user licensing agreements; however, licensing schemes such as Creative Commons licensing can facilitate UGC production
Barriers to UGC: Intellectual Property

- Intellectual property rights have a significant impact on UGC production and distribution

- Patents on the functions of software can restrict the types of OSS projects that can be produced

- Copyright is implicated in all forms of UGC
  - For originally authored pieces of UGC, the creator becomes the copyright owner
  - Copyrighted materials may also be used as inputs to create new pieces of UGC
Barriers to UGC: Copyright

• The Copyright Act gives copyright owners the exclusive right to produce, reproduce, publish and transform a copyrighted work.

• UGC creators must ensure that material taken from an existing work is licensed or such use is within the scope of a limitations or exception such as fair dealing.

• Some copyright owners rigorously enforce their rights and view any use of their material as infringement.
Policy Implications: Allowing UGC to Flourish

• UGC adds not only economic value, but also enriches the cultural sphere

• Policy framework should aim to balance interests of creators and users

• Policymakers must create an environment innovative and creative UGC can flourish
Policy Implications: International Reaction

- OECD recommends that digital content policies:
  “encourage a creative environment that stimulates market and non-market digital content creation, dissemination, and preservation of all kinds”

- European Union has studied UGC, but recommended no policy changes

- No attempt to address UGC in the United States
Privacy and Patent Law

• Privacy laws must ensure that creators can remain anonymous if they desire

• However, mechanisms must also exist to determine authorship if necessary

• Patent protection, in addition to copyright, for software is redundant and an unneeded encumbrance
  – This issue is particularly relevant in Canada, as the recent Federal Court decision opens the door to software patents in Canada (Amazon.com v. Canada)
Policy Implications: Copyright

- Copyright is the most important policy affecting UGC

- Copyright and licensing laws that facilitate the creation and protection of UGC must also allow the production of UGC from other source material

- Transformative uses of existing works need to be encouraged and viewed as adding value to the original material
Policy Implications: Proposed UGC Exception

- The Copyright Modernization Act (Bill C-32) proposes an exception to copyright law for UGC production.

- However, it is unclear how the stipulations that UGC must be non-commercial will be applied (is YouTube considered non-commercial?)

- More importantly, protection for TPMs in Bill C-32 render UGC exception nugatory.
Where Do We Go From Here?

• There are multiple areas of future research, including:
  – Motivations of creators and users of UGC
  – The provision of library and information services to users/creators of UGC
  – The information sources held by governments/public agencies
  – Intellectual property and other policy issues
  – Mobile applications
  – The use and development of small scale tools
  – Collaborative content: OSS and Wikis
  – the policy and technological infrastructures needed to mobilize and leverage UGC in Canada
  – The avenues for effective commercialization and monetization to gain the value generated by UGC (without hampering the energy and enthusiasm of end users: balancing mechanisms are crucial
Acknowledgements

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• Our full report, *Mobilizing User-Generated Content for Canada’s Digital Advantage* (2010) is available through Scholarship@Western
  
  http://ir.lib.uwo.ca/fimspub/21/

• These presentation slides will also be available on Scholarship@Western in the near future