System and Method for Digital Advertising using Social Media

Provisional Patent Application
System and Method for Digital Advertising using Social Media

Justin Wilson
3205 Arrowhead Circle Apt F
Fairfax, VA 22030

Cheul Rhee
513 Dasan Hall
Suwon, Korea 443-749

Prior Art.

US Patent Documents

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Date</th>
<th>Inventors</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Pat. 8375024</td>
<td>Feb., 2013</td>
<td>Goeldi 707/722 et al.</td>
</tr>
<tr>
<td>US Pat. 8392252</td>
<td>Mar., 2013</td>
<td>Tam et al. 705/14.41 et al.</td>
</tr>
</tbody>
</table>

Advantages.

Various aspects of the system and method for digital advertising using social media may have one or more of the following advantages:

- Provide a more complete, end-to-end advertising experience
- Provide a more targeted method for identifying users to generate content
- Provide a more integrated approach for sharing content to social media networks
- Provide a more targeted method for identifying users to view content
- Provide a more results-oriented method for determining advertisement effectiveness

Drawings.

FIG. 1 illustrates an exemplary digital advertising network environment using social media;
FIG. 2 is a block diagram of an exemplary system and method for digital advertising using social media;
FIG. 3A is an exemplary screen shot of a web page to view and access featured projects;
FIG. 3B is a block diagram of an exemplary system component to view and access featured projects;
FIG. 4A is an exemplary screen shot of a web page to view and access all projects that a user sponsored, advertised, and/or is eligible to advertise;
FIG. 4B is a block diagram of an exemplary system component to view and access all projects that a user sponsored, advertised, and/or is eligible to advertise;
FIG. 5A is an exemplary screen shot of a project web page that a user has selected to advertise;
FIG. 5B is a block diagram of an exemplary system component enabling a user to advertise a project using social media;
FIG. 5C is an exemplary screen shot of a project that a user is advertising using social media;
FIG. 6 is an exemplary screen shot of a project that a user is sponsoring;
FIG. 7A is an exemplary screen shot of a web page to input project details as its sponsor;
FIG. 7B is a block diagram of an exemplary system component to sponsor a project;
FIG. 7C is an exemplary screen shot of a web page to preview and submit a project as its sponsor;
FIG. 8A is an exemplary screen shot of a web page to confirm an email address, account for payment, and social networks as well as view sponsored and advertised projects; and
FIG. 8B is a block diagram of an exemplary system component to confirm an email address, account for payment, and social networks.

Detailed Description.

The inventors listed invented a system and method for digital advertising using social media. Relevant prior art includes systems that allow users to upload digital content, methods to scrape social media web pages, and methods to determine advertisement effectiveness using points-per-click methodologies. The system and method 130 provides a more complete, end-to-end advertising experience enabling advertiser users 101B to search for projects submitted by our sponsor users 101A, generate digital advertising content for multiple projects, submit valid 454 social media post URLs 540 associated with the projects, associate the advertising content with the projects to the benefit of sponsor users 101A, advertiser users 101B, and the advertisement’s intended audience 140, and earn project budget based on user inputs, quantitative, and/or qualitative measures from social media, sponsors, users, and/or the like.

The system and method 130 may host a website that allows one or more users 101, e.g., the sponsor user 101A to sponsor a project for advertiser users 101B to advertise using social media 135, at one or more user devices 110 via a communications network 120 to the website. User devices 110 include a computer terminal, a personal digital assistant (PDA), a wireless telephone, a smart phone, a smart phone application, and/or the like. Communications network 120 includes a local area network (LAN), a wide area network (WAN), a wireless network, a cellular network, an intranet, an internet, and/or the like.

The system terms of use 202 is accessible via a terms of use link 308 on the web page to view and access featured projects 300. The terms of use 202 apply to all visitors, users, and others who access the service. Non-users 102 may view projects 202 apply to all visitors, users, and others who access the service. Non-users 102 may view projects 202 as well as apply and register 204 by accessing an online application via apply/register link 304 on the web page to view and access featured projects 300. If deemed appropriate for membership, non-users 102 will receive a confirmation code to use during registration. Users 101 are also given read-only access to view projects 350 until they login 355. Users 101 unable to login may use forgot password functionality 360 via forgot password link 306. Users 101 may login by entering required login information 310, such as registered email address 312 and
password 314. Once logged in, users 101 may access their homepage 208 as well as advertise and sponsor projects 210. System activity is stored in a number of databases, schemas, and tables referred to as an activity database 212. The web page to view and access featured projects 300 consists of two sections; first, the top three ranked projects based on the project budget remaining divided by number of days before project end date which is also the default option for the filtering drop-down 434. The top three projects are controlled by finger swipe or left scrolling 307L and right scrolling 307R buttons. Projects ranked fourth through sixth are displayed underneath. Each featured project 320 displays the project name 322, project image 324, project budget 326, project start and end date 327, project budget earned and total project budget 328, and number of advertiser users 101B advertising the project 329. Successfully login 465 or click on a project image 324 to access the web page to view and access all projects that a user is sponsoring, advertising, or is eligible to advertise 400. Non-users 102 will have read-only access. Sponsor users 101A can view projects that they are sponsoring 495B and sponsor additional projects 495A via the submit projects link 416. Advertiser users 101B can view projects that they are advertising 490B and advertise additional projects 490A via the advertise project button 429. Username and ranking 406 are displayed if user 101 is logged into the system 465. Timestamp of last update to user ranking and statistics of projects that the user is advertising 407 is also displayed if user 101 is logged into the system 465. Else, link to login is displayed. Please note that a user 101 can be both a sponsor user 101A and advertiser user 101B. By default, all projects are sorted by project budget remaining divided by number of days before project end date and limited to 10 results to display. Projects may be filtered via the filtering drop-down 432, sorted via the sorting drop-down 434, and limited via the results per page drop-down 436. Search for a project using the search functionality 440 by selecting the search criteria 442 and typing the keyword to search 444. Each project has its own section of project information 420 displaying project name 421, project image 422, project status 423, project sponsor 424, project start and end date 425A, number of days before project end date 425B, project budget earned and total project budget 426A, project budget remaining 426B, number of advertiser users 101B advertising the project 427, and project description 428. If the project start date is in the future then days to start and days from start date to end date will be displayed. Project status will be in one of three states: sponsoring shown by grey arrow, advertising shown by purple arrow, or eligible to be advertised shown by no arrow with an advertise project button 429 displayed. To sponsor a project 495A or advertise a project 490A, the user 101 must have successfully logged in 465 and have confirmed email address, account for payment, and social networks 475. To confirm this information, the user 101 must access their homepage 485 and complete the confirmation section 820. Help documentation is available via the image link 404 located underneath the navigation section 410. Advertiser users 101B can view a project that they are advertising 490B or advertise additional projects 490A via the advertise project button 429 and they will be redirected to a web page specific to the project and advertiser user without associated social network posts 500. Notice that the filtering drop-down 432 displays “selected” to notify that a specific project has been selected. The selected project has its own section of project information 420 and advertiser-specific section of advertising information 510. The advertiser-specific section of advertising information 510 contains a separate row for each social media network, e.g. YouTube, Instagram, and/or the like. If advertiser users 101B have not confirmed ownership of the social media account 525 as they have claimed on their homepage 800,
then a link will be displayed to confirm the social media account 512. If the social media account is confirmed, then the advertiser user 101B may associate the digital content posted on their social network account to the project by entering the social post URL 514 and selecting the submit button 516. The social post URL 514 is validated 545 to ensure that the social post was created after the project start date, is associated with the social media account confirmed by the advertiser user 101B, and has not already been associated with another project.

Advertiser users 101B may associate one piece of digital content (e.g. YouTube video, Instagram photo, and/or the like) per social network for a project. A web page specific to the project and advertiser user with associated social network posts 550 displays a link to the social media content on YouTube 562A, social media content on Instagram 562B, and/or the like. Each posting displays the social network’s equivalent to views, likes, comments, and/or the like. For example, budget earned for a YouTube posting 563A from the sponsor user 101A to the advertiser user 101B is based on a calculation involving views 564, likes 565 / dislikes 566. The calculation for budget earned for a YouTube posting 563A is equal to

\[
\text{min}(\text{PostMetricFixedRate}, \text{PostMetricVariableRate}) \times \text{PostViewsTotal} \times \text{ProjectPostLikePercent}; \quad \text{where}
\]

- \( \text{min} \) – find lowest value
- \( \text{PostMetricFixedRate} = \$0.001 \)
- \( \text{PostMetricVariableRate} = \frac{\text{ProjectBudget}}{\text{PostViewsTotal}} \)
- \( \text{ProjectBudget} = \) total project budget
- \( \text{PostViewsTotal} = \) YouTube views
- \( \text{ProjectPostLikePercent} \)
  - If (YouTube likes) + (YouTube dislikes) = 0, then \( \text{ProjectPostLikePercent} = 0.5 \)
  - Else, \( \text{ProjectPostLikePercent} = \frac{\text{YouTube likes}}{\text{[(YouTube likes) + (YouTube dislikes)]}} \)

Similarly, budget earned for an Instagram posting 563B from the sponsor user 101A to the advertiser user 101B is based on a calculation involving hearts 567 and comments 568.

\[
\text{min}(\text{PostMetricFixedRate}, \text{PostMetricVariableRate}) \times \text{PostViewsTotal}; \quad \text{where}
\]

- \( \text{min} \) – find lowest value
- \( \text{PostMetricFixedRate} = \$0.001 \)
- \( \text{PostMetricVariableRate} = \frac{\text{ProjectBudget}}{\text{PostViewsTotal}} \)
- \( \text{ProjectBudget} = \) total project budget
- \( \text{PostViewsTotal} = [\text{[(Instagram hearts) + (Instagram comments)]}] \)

Both calculations use the min function to guarantee that the budget earned never exceeds the total project budget. FIG. 5C illustrates \$0.10 project budget earned and \$1,025 total project budget 426A based on social media content on YouTube 562A plus social media content on Instagram 562B as an exemplary embodiment of the invention. The advertiser user 101B may reload post statistics 547 for a specific project’s budget earned for each social network posting’s equivalent to views, likes, comments, and/or the like by selecting on the YouTube reload action button 561A, Instagram reload action button 561B, and/or the like. Reloading post statistics 547 triggers code to scrape the social media post 548 and
update the activity database 212. If successful, success message 552 is displayed to the advertiser user 101B. If unsuccessful, an error message will be displayed instead of success message 552. Advertiser users 101B may reload post statistics 547 for all projects that they are advertising 490B by selecting on the user refresh statistics link 446.

Sponsor users 101A can view a project that they are sponsoring 495B or sponsor additional projects 495A via the submit projects button 416 and they will be redirected to a web page specific to the project and sponsor user 600. Notice that the filtering drop-down 432 displays “selected” to notify that a specific project has been selected. The selected project has its own section of project information 420 and sponsor-specific section of advertising information 560. The sponsor-specific section of advertising information 560 contains a separate row for each advertiser user 101B and social media network, e.g. YouTube, Instagram, and/or the like. FIG. 6 illustrates two advertiser users 101B advertising the selected project. The first advertiser user 101B has chosen to advertise the project 490A and submitted valid 454 social media post URLs 540; one media post URL for YouTube 562A and another media post URL for Instagram 562B. The second advertiser user 101B has chosen to advertise the project 490A but has not yet submitted valid 454 social media post URLs 540 to associate to the selected project. A message is displayed for the advertiser user 101B without an associated YouTube post 612A and without an associated Instagram post 612B. The sponsor user 101A can view all advertiser users 101B advertising the project and their social network postings, if associated. Please note that users 101 may act as both sponsor users 101A and advertiser users 101B but cannot advertise their own sponsored projects.

To sponsor a project 495A or advertise a project 490A, the user 101 must have successfully logged in 465 and have confirmed email address, account for payment, and social networks 475. To confirm this information, the user 101 must access their homepage 485 and complete the confirmation section 820. To sponsor a new project 495A, users 101 can click the submit project link 416 and they will be redirected to a web page of required and optional project fields 700. Project timeline 701, project name 702, project budget 703, project category 704, and agreement 708 to terms of use 202 are required. Project URL 705, project image URL 706, and project description 707 are optional. Clear project details to start over by selecting the clear button 709B. Review project details 780 by selecting the preview button 709A. If you are satisfied with the previewed project details, select the submit button 789 to submit your project. To modify, use the browser’s back button to return to the previous web page of required and optional project fields 700, edit details, and reselect the preview button 709A. Please note that a sponsored project is not active and/or visible 760 until the project has been activated 760, i.e. payment agreement met and/or other review procedures completed. Once activated, the project will be visible on the web page to view and access all projects that a user is sponsoring, advertising, or is eligible to advertise 400. The project may also appear on the web page to view and access featured projects 300 if it ranks among the top six projects based on project budget remaining divided by number of days before project end date.

To utilize all aspects of the system, users 101 must have successfully logged in 465 and have confirmed email address, account for payment, and social networks 475. To confirm this information, users 101 must access their homepage 485 and complete the confirmation section 820. This information is confirmed to reduce the possibility of advertiser users 101B impersonating as the owner of another’s social network account and/or posts. The first step to confirm an email address, account for payment, and/or social network 855 is entering the email address, username, and/or user identifier of the account
that you claim ownership 860. The value entered is valid 865 if that value has not already been confirmed by another user 101 and meets the formatting rules of the account type. FIG. 8A contains an exemplary example of entering a Facebook user identifier 825 to claim ownership 860. The second step is enter the confirmation code messaged to the claimed account 870 sent via the messaging functionality of account type, e.g. email, PayPal, YouTube, Instagram via instaDM, and/or the like. If a user 101 has access to the account, then he or she will be able to retrieve the confirmation code, enter it into the appropriate account confirmation field 827, and select the confirm button 829A. If the confirmation code entered by the user 101 matches what is stored in the activity database 212, then the account has been ✓ confirmed 880. If the confirmation code entered is incorrect, an error message will display and the user 101 may try again.

In addition to confirming email address, account for payment, and social networks 475, the homepage 800 also displays the projects that the user is advertising 830 and the projects that the user is sponsoring 840. The homepage 800 also provides a user summary 810 of number of projects advertising 812, project budget earned and project budget remaining from projects advertising 814, and a more prominent display of project budget earned 816.

There are many alternative ways that the system and method for digital advertising using social media can be implemented:

- Additional required and optional fields can be added to apply and/or register
- Non-users can register automatically without having to apply
- Non-users can login using their social media accounts via integrations such as Facebook Connect and/or the like
- Additional featured projects can be displayed and in more places throughout the system
- Featured project rankings can be based on alternative calculations using additional metrics
- Filtering and sorting can be based on alternative calculations using additional metrics
- Additional search criteria can be added to the search functionality
- More than one posting per social network can be enabled
- Additional social networks can be integrated with the system and method
- Budget earned for a social network posting can be customized based on user inputs
- Budget earned for a social network posting can include additional quantitative and/or qualitative measures from social media, sponsors, users, and/or the like
- Social media posts, users, projects, and system statistics can be refreshed automatically on a periodic basis in addition to user initiated refreshes
- Users can reload project statistics for projects that they are sponsoring in addition to projects that they are advertising
- Sponsor users can filter and/or sort how the advertising users and their posts are displayed
- Eligibility can be defined based on sponsor needs and/or advertiser user demographics, previous postings, and/or the like to permit and/or prevent eligibility to advertise specific projects
- Additional required and optional fields can be added to sponsor a project
- Users can be alerted when new projects are submitted, advertised, and/or the like
Digital advertising posts can be limited to sponsor preferred media/audiences or expanded beyond social networking sites to any digital content that can be scraped by a web crawler and/or the like.

In summary, the system and method provides a more complete, end-to-end advertising experience enabling advertiser users to search for projects submitted by our sponsor users, generate digital advertising content for that project, submit valid social media post URLs associated with the project, associate the advertising content with the project to the benefit of sponsor users, advertiser users, and the advertisement’s intended audience, and earn project budget based on user inputs, quantitative, and/or qualitative measures from social media, sponsors, users, and/or the like.
FIG. 1

System and Method for Digital Advertising using Social Media

- Sponsor User (Member) 101A
- User Device 110
- Advertiser User (Member) 101B
- User Device 110
- User Device 110
- User (Member) 101
- User Device 110
- Non-user 102

Communications Network 120

Social Media 135

Audience 140

System and method for digital advertising using social media 130

Advertiser User (Member) 101B

Non-user 102
System and method for digital advertising using social media

- View Terms of Use
  - 202
- View Projects
  - 206
- Advertise and Sponsor Projects
  - 210

- Apply and Register
  - 204
- Access User's Homepage
  - 208
- Activity Database
  - 212
System and Method for Digital Advertising using Social Media

![Diagram of a digital advertising system using social media.

FIG. 3A

Copyright 2011 Crowd It Ads (Terms of Use) / Valid CSS & XHTML

Justin Wilson
System and Method for Digital Advertising using Social Media

FIG. 3A

335

User? no

yes

FIG. 3B

330

Apply/Register

View Projects

340

Forgot Password

View Projects

350

360

370

Login

355

no

yes
System and Method for Digital Advertising using Social Media

Viewing Your Projects on “Crowd It Ads” is Fast and Easy

At Mars, we believe it is important that we provide people with all the facts required to make informed choices about our products, so they can be enjoyed as part of a healthy, balanced diet.

Action | YouTube Post URL | $ Earned | Views | Likes | Dislikes
--- | --- | --- | --- | --- | ---
Confirm your YouTube account

Action | Instagram Post URL | $ Earned | Hearts | Comments
--- | --- | --- | --- | ---
Submit
http://youtube.com
A photo: http://instagram.com/cwW

Copyright 2011 Crowd It Ads (Terms of Use) / Venue CSS & HTML.
System and Method for Digital Advertising using Social Media

FIG. 5A

520

Confirmed?

yes

no

Access User's Homepage

485

FIG. 8

525

Post Exists?

yes

no

535

Submit Media Post URL

540

Valid Post?

yes

545

547

Reload Post Statistics

548

Scrape Social Media Post

FIG. 5C

547

548

545

540

535

525

520
System and Method for Digital Advertising using Social Media

Viewing Your Projects on "Crowd It Ads" is Fast and Easy

[Diagram of a website interface with various elements such as project lists, user profiles, and earning amounts displayed]

Al Mars, we believe it is important that we provide people with all the facts required to make informed choices about our products, so they can be engaged on part of a healthy, balanced diet.

<table>
<thead>
<tr>
<th>Action</th>
<th>YouTube Post URI</th>
<th>$ Earned</th>
<th>Views</th>
<th>Like</th>
<th>Dislikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thanks for crowdfunding on YouTube</td>
<td>$0.00</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Action</th>
<th>Instagram Post URL</th>
<th>$ Earned</th>
<th>Hearts</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thanks for crowdfunding on Instagram</td>
<td>$1.11</td>
<td>86</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

CrowdAds is crowdfunding but has not posted on YouTube yet.

CrowdAds is crowdfunding but has not posted on Instagram yet.

Search all active projects that Contain:

[Form for searching projects]

Copyright 2011 Crowd It Ads (Terms of Use) / Valid CSS & XML

Page 17 of 22  FIG. 6  Justin Wilson
**System and Method for Digital Advertising using Social Media**

**FIG. 7A**

### New Project on Crowd It Ads

- **Project Timeline**: 6/1/2013 to 6/23/2013
- **Project Name (30 character limit)**: USPTO Innovation Expo
- **Crowd It Budget ($us; 10 digit limit)**: $100
- **Product Category**: Technology
- **Product URL (2000 character limit)**: pubhealth/innovation/innovationexpo2013_main.asp
- **Project Description (300 character limit)**: Join the United States Patent and Trademark Office (USPTO)

**I agree to Crowd It Ads’s Terms of Use.**

- **Submit a Project on Crowd It Ads**: a fun and easy way to promote our products for consumers by consumers!
- **Submit a Project on Crowd It Ads and experience the power of crowd sourcing!**

---

**Copyright 2011 Crowd It Ads (Terms of Use) / Valid CSS & X:HTML**

Justin Wilson
System and Method for Digital Advertising using Social Media

Figure 7A

Valid Project?

yes

no

Clear

Preview Project Submission

Figure 7C

Submit?

yes

Project Inactive and Invisible

no

Activate?

yes

Project Active and Visible

no
### General Information

<table>
<thead>
<tr>
<th>Name</th>
<th>USPTO Innovation Expo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Technology</td>
</tr>
<tr>
<td>URL</td>
<td><a href="http://www.uspto.gov/patents/init_events/innovationexpo/lebu19">http://www.uspto.gov/patents/init_events/innovationexpo/lebu19</a> main.asp</td>
</tr>
</tbody>
</table>

### Financial Info

<table>
<thead>
<tr>
<th>Budget ($US)</th>
<th>$350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thru/End</td>
<td>6/1/2013 ~ 6/23/2013 (22 days in Crowd)</td>
</tr>
</tbody>
</table>

### Description

Join the United States Patent and Trademark Office (USPTO) and the Smithsonian Institution in a celebration of ingenuity and cutting edge patented technology.

Please use your browser's back button to edit project details.
**System and Method for Digital Advertising using Social Media**

---

**FIG. 8A**

---

<table>
<thead>
<tr>
<th>Social URL</th>
<th>Confirmation Code</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email: leslie123.com</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PayPal: leslie123.com</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.youtube.com/user/crowdads">http://www.youtube.com/user/crowdads</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facebook.com/</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Project Details</th>
<th>$Earned</th>
<th>$Remaining</th>
<th>End Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenchin Chinese</td>
<td>$1,000</td>
<td>$1,000</td>
<td>9/20/2015</td>
<td>View</td>
</tr>
<tr>
<td>Snickers - Like to Taste</td>
<td>$100</td>
<td>$1,000</td>
<td>9/20/2013</td>
<td>View</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Project Details</th>
<th>$Paid</th>
<th>$Budget</th>
<th>End Date</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veuve Clicquot Customer Summit</td>
<td>$1,000</td>
<td>$1,000</td>
<td>9/20/2016</td>
<td>View</td>
</tr>
</tbody>
</table>
Value Entered?

Enter Account Username

Valid?

Message Confirmation Code to Claimed Account

Account Ownership is ✓ Confirmed