



# NewsChain

<https://github.com/solinter/newschain>

Decentralized news platform combining **news submission** to the **ethereum network** to identify news publishers and an open platform to provide additional services.

Status: Alpha

Hashtags: #journalism #news #democracy  
#community #fake-news #media #featured



# Problems

**Fake News:** Deliberate misinformation spread with the intent to mislead.

**Biased News:** Political and financial interests.

**Concentration:** 6 Big Media giants control 90% what we read, watch and listen to.

**New Incoming Risks:** Net Neutrality, Censorship, etc.



# Solution



A News Publishing Ledger in a decentralized ethereum blockchain combining news submission to identify time-stamped news publishing proof and open access provisioning for third party services.

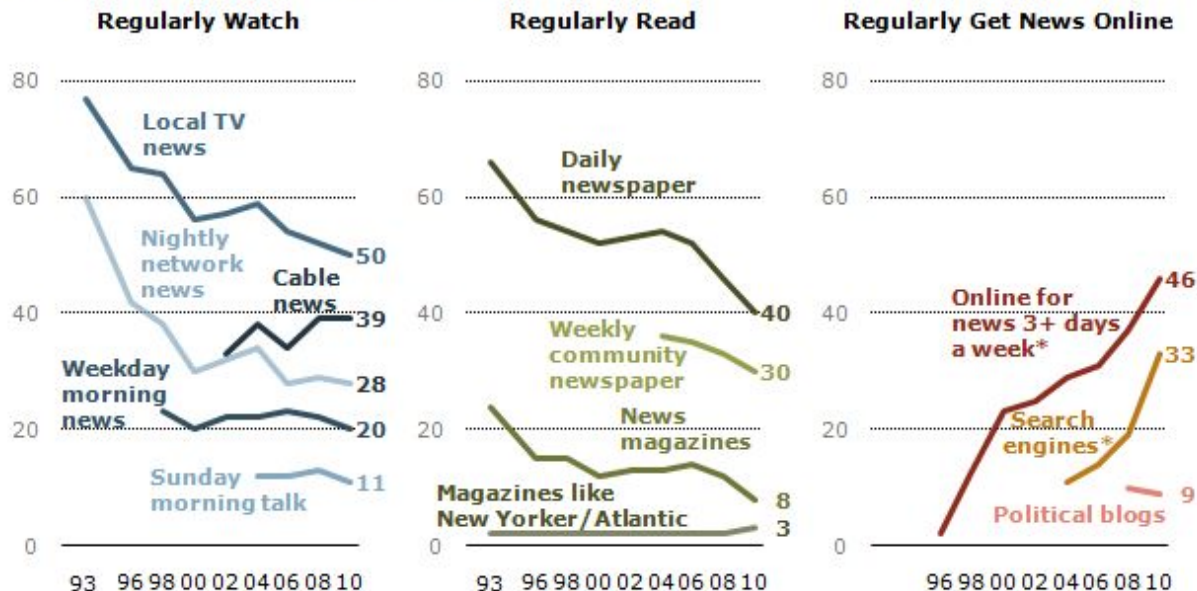


**NEWSCHAIN**

# Market Size



## Trends in Regular News Sources



PEW RESEARCH CENTER June 8-28, 2010. Q28aF1,bF1,k,o,p, Q30a-d, Q41, Q43, Q46 based on total.

\* Search engine use and general news online three or more days a week. All other trends are percent who use "regularly."



# Market Situation/Validation

How people read news today:

## **HARD NEWS**

- **Politics**
- **Economy**
- **Foreign Affairs**
- **Home Affairs**
- **Disasters**

## **SOFT NEWS**

- **Human Interest**
- **Entertainment**
- **Sport**

# Market Situation/Validation (2)



Smarter With **Gartner**

What are you looking for?



## Gartner Top Strategic **Predictions** for 2018 and Beyond



October 3, 2017

Contributor: Kasey Panetta

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### Increased Fake News

**By 2022, the majority of individuals in mature economies will consume more false information than true information.**

With an increasing amount of fake news, companies need to closely monitor what is being said about their brand and the context in which it is being said. Brands will need to cultivate a pattern of behavior and values that will reduce the ability of others to undermine the brand.

# Market Situation/Validation (3)



## Fake News Is A Real Problem

Facebook engagement of the top five fake election stories\*



### Total Facebook engagement for top 20 election stories (August-election day)



@StatistaCharts

\* Engagement is measured as total number of shares, reactions and comments

Source: Buzzsumo via BuzzFeed

statista



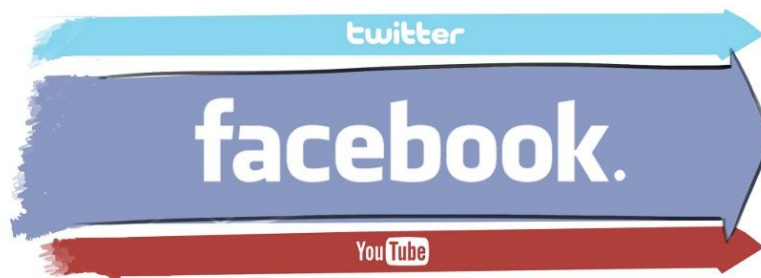
# Market Situation/Validation (4)



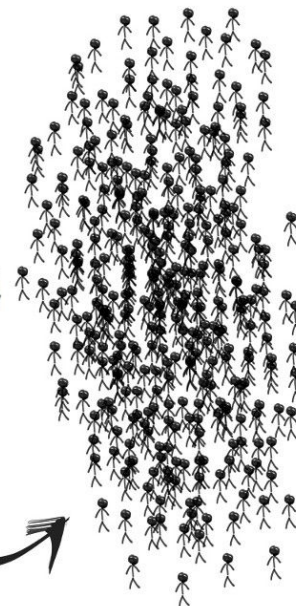
## HOW WE GET NEWS TODAY:



THOUSANDS OF NEWS SOURCES  
(BOTH REAL AND FAKE)



MOST OF US



©TOBIASROSE

SOURCE: 2016 PEW RESEARCH CENTER STUDY



# Product

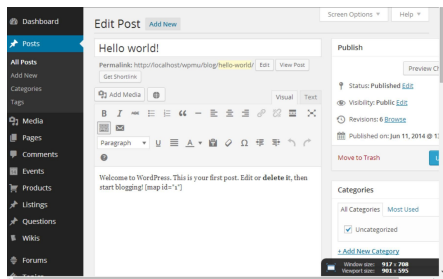


Publish News

Register it on the Ledger

- TimeStamp
- URL
- PlainText (Hashed)

Oracles provide third party services





# Third Party Services

Reliable services based on the news ledger (Galtung and Ruge's list of news values):

- Impact
- Audience Identification
- Pragmatics of media coverage



# Open Ledger + 3rd Party Business Model

## B2B

- Third party API A.I. Services
- News origin identification.
- Tree of News variations based on root event news.
- Key insights to identify what content is working well, which major influencers are.
- Reputation Management based on algorithms measuring facts vs. opinions.
- Etc.

## B2C

- True/False identification
- Origin of news



# News **Impact** - Galtung and Ruge's (1973)

**Threshold:** The bigger impact the story has, the more people it affects.

**Frequency:** Events (murders, plane crashes), which occur suddenly are more readily reported.

**Negativity:** Bad news is more exciting than good news (death, tragedy, bankruptcy, violence, damage, natural disasters, extreme weather conditions) and more likely to be reported.

**Unexpectedness:** Event is out of the ordinary (i.e.: Man bites dog vs. opposite)

**Unambiguity:** Events easy to grasp make for better copy than those which are open to more than one interpretation.



# Audience identification

**Personalisation:** People are interested in people (celebrities).

**Meaningfulness:** Cultural proximity (same language, preoccupations, etc.)

**Reference To Elite Nations:** Stories concerned with global powers (USA, North Korea, etc.)

**Reference To Elite Persons:** Rich, powerful, famous, infamous, etc.




# Pragmatics of Media Coverage

**Consonance:** Media's readiness to report an item.

**Continuity:** The running story.

**Composition:** Compensation of news (bad/good, foreign/local, etc).

 solinter / newschain

Unwatch 3

Star 0

Fork 0

<> Code

Issues 0

Pull requests 0

Projects 0

Wiki

Insights

### News Chain - Web Content Traceability With Oracles

15 commits

1 branch

0 releases

2 contributors

Branch: master


New pull request

Create new file

Upload files

Find file

Clone or download

 alexrm1x Add files via upload Latest commit 6e85016 26 minutes ago

.vs	newschain function	34 minutes ago
Contracts	Add files via upload	33 minutes ago
Newschain.Function	newschain function	34 minutes ago
docs	Add files via upload	26 minutes ago
geth-docker	Add files via upload	42 minutes ago
wordpress-plugin/wpnewschain	Add files via upload	37 minutes ago
README.md	Update README.md	28 minutes ago

README.md

## newschain

News Chain - Web Content Traceability With Oracles

- Contracts - .sol files of contracts
- Newschain.Function - Azure function written on .Net as gateway service for Ethereum RPC
- geth-docker - docker-compose of geth service
- wordpress-plugin - Wordpress plugin

<https://github.com/solinter/newschain>





```
1 <?php
2 /**
3  * Plugin Name: NewsChain
4  * Plugin URI: http://newschain.es
5  * Description: Este plugin es para el hackethon
6  * Version: 1.0.0
7  * Author: Samuel Garcia
8  * Author URI:
9  *
10 * Domain Path: /languages/
11 */
12 defined( 'ABSPATH' ) or die( '¡Sin trampas!' );
13
14 function my_project_updated_send_post( $post_id ) {
15     // obtener el hash
16     $var_content = get_the_content();
17     // esta variable a una array
18     $data_to_send = array();
19     $data_to_send["content"] = $var_content;
20     $data_to_send["url"] = get_permalink($post_id);
21     $url = "http://5.9.131.156:8080";
22
23     $response = wp_remote_post( $url, array(
24         'method' => 'POST',
25         'timeout' => 45,
26         'redirection' => 5,
27         'httpversion' => '1.0',
28         'blocking' => true,
29         'headers' => array(),
30         'body' => $data_to_send,
31         'cookies' => array()
32     ) );
33
34     if ( is_wp_error( $response ) ) {
35         $error_message = $response->get_error_message();
36         echo "Something went wrong: $error_message";
37     } else {
38         print_r( $response["contract_id"] );
39         update_post_meta($post_id , "contract_id" , $response["contract_id"]);
40     }
41 }
42
43 add_action( 'save_post', 'my_project_updated_send_post' );
```

## Smart Contracts & Result of Transaction (contract creation)

« + browser/HostPublisherContract.sol x

```
1 pragma solidity ^0.4.4;
2
3 contract HostPublisherContract{
4     string[] public hosts;
5
6     function AddHost(string newHost)
7     {
8         hosts.push(newHost);
9     }
10 }
```

« + browser/PostContract.sol x

```
1 pragma solidity ^0.4.4;
2
3 contract PostContract{
4     string public Url;
5     string public HashContent;
6
7     function AddPostContract(string url, string hashContent)
8     {
9         Url = url;
10        HashContent = hashContent;
11    }
12 }
```

Transactions

Contract Code

Latest 1 txn

TxHash	Block	Age	From	To	Value	[TxFee]
0xbdf13dbe24307d...	2763050	1 min ago	0x3662344a20eae7...	IN Contract Creation	0 Ether	0.000930663

<https://github.com/solinter/newschain>

10 lines (9 sloc) | 274 Bytes

Raw

Blame

History



```
1  ethereum-client:
2    image: ethereum/client-go
3    volumes:
4      - ./data:/root/.ethereum/rinkeby/keystore
5    ports:
6      - "8545:8545"
7      - "30303:30303"
8    command: --rinkeby --rpc --rpccorsdomain "*" --rpcaddr 0.0.0.0 --rpcapi "personal,db,eth,net,web3"
9    restart: always
```

<https://github.com/solinter/newschain>

Newschain - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Test Analyze Window Help

Quick Launch (Ctrl+Q)

Carlos Jiménez Delgado

Test Explorer

Run All | Run... | Playlist: All Tests

Build your solution to discover all available tests. Click "Run All" to build, discover, and run all tests in your solution.

Newschain

```
15 namespace Newschain
16 {
17     0 references
18     public static class PushNew
19     {
20         [FunctionName("PushNew")]
21         0 references
22         public static async Task<HttpResponseMessage> Run([HttpTrigger(AuthorizationLevel.Anonymous, "post", Route = null)]
23         {
24             // You need to have the geth running while running this code. command: c:\geth>geth --testnet
25             var _getAddress = "./.geth.ipc";
26             var hashedContent = Hash(contract.Content);
27
28             var ipcClient = new Nethereum.JsonRpc.IpcClient.IpcClient(_getAddress);
29             var web3 = new Web3(ipcClient);
30
31             // this will leave the account unlocked for 2 minutes
32             Nethereum.Hex.HexTypes.HexBigInteger accountUnlockTime = new Nethereum.Hex.HexTypes.HexBigInteger(120);
33
34             var accountPublicKey = "ACCOUNT_PUBLIC_KEY";
35             var accountPassword = "ACCOUNT_PASSWORD";
36             // Unlock the caller's account with the given password
37             var unlockResult = await web3.Personal.UnlockAccount.SendRequestAsync(accountPublicKey, accountPassword, accountUnlockTime);
38
39             var abi = @"[{"constant":true,"inputs":[],"name":"","outputs":[{"name":"","type":"string"}]}]";
40             var byteCode = "6060604052341561000f57600080fd5b6104578061001e6000396000f300606060405260043610610057576000";
41
42             var compiledContract = web3.Eth.GetContract(abi, byteCode);
43
44             var function = compiledContract.GetFunction("AddPostContract");
45
46             var ret = function.CallAsync<>(contract.Url, hashedContent);
47         }
48     }
49 }
```

Output

Show output from: Package Manager

Package Manager Console Task Runner Explorer Error List Command Window Output

Solution Explorer

Search Solution Explorer

Solution 'Newschain' (1 project)

Newschain

Properties

<https://github.com/solinter/newschain>