



# 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.

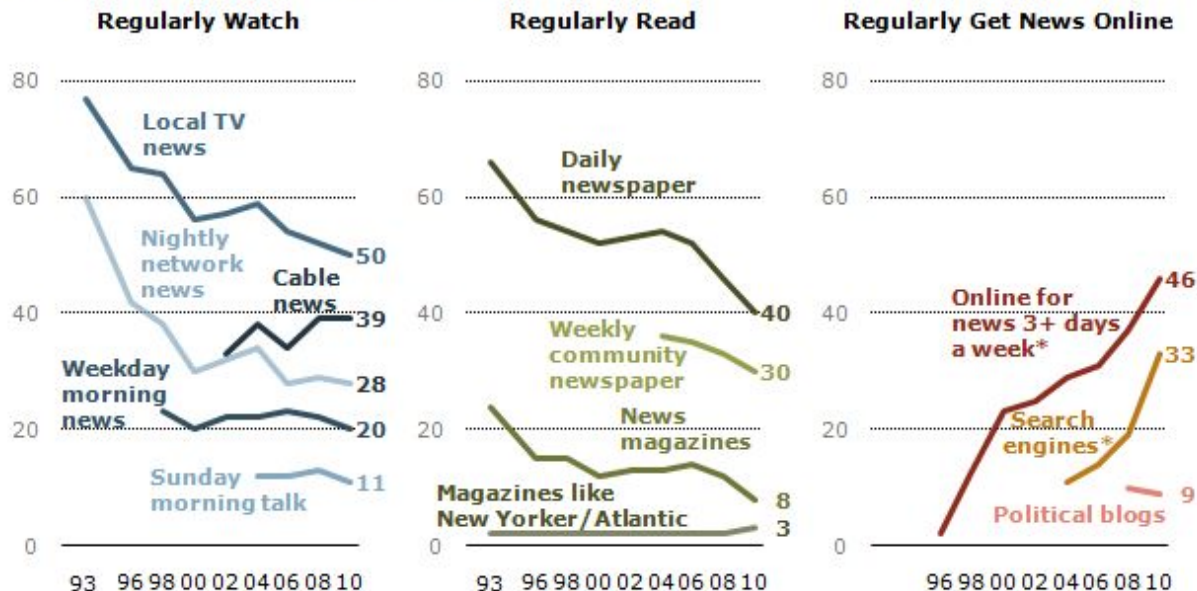


**NEWSCHAIN**

# 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



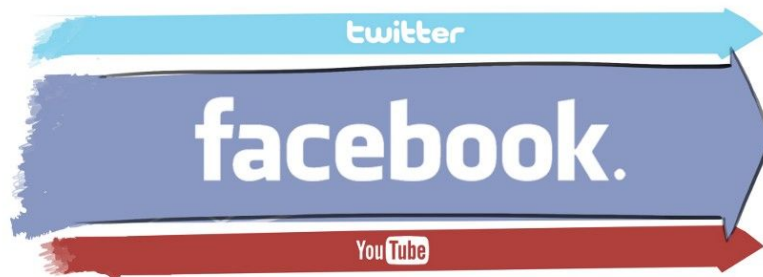
# Market Situation/Validation (4)



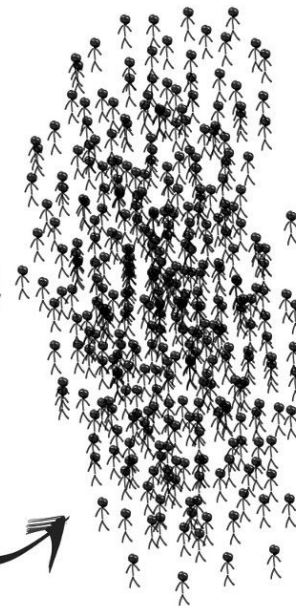
## HOW WE GET NEWS TODAY:



THOUSANDS OF NEWS SOURCES  
(BOTH REAL AND FAKE)



MOST OF US



©TOBIASROSE

SOURCE: 2016 PEW RESEARCH CENTER STUDY



# Product

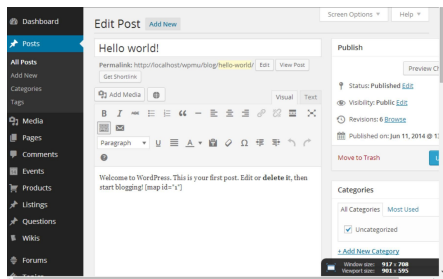


Publish News

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).





```
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
16     // obtener el hash
17     $var_content = get_the_content();
18     // esta variable a una array
19     $data_to_send = array();
20     $data_to_send["content"] = $var_content;
21     $data_to_send["url"] = get_permalink($post_id);
22     $url = "http://5.9.131.156:8080";
23
24     $response = wp_remote_post( $url, array(
25         'method' => 'POST',
26         'timeout' => 45,
27         'redirection' => 5,
28         'httpversion' => '1.0',
29         'blocking' => true,
30         'headers' => array(),
31         'body' => $data_to_send,
32         'cookies' => array()
33     )
34 );
35
36 if ( is_wp_error( $response ) ) {
37     $error_message = $response->get_error_message();
38     echo "Something went wrong: $error_message";
39 } else {
40
41     print_r( $response["contract_id"] );
42     update_post_meta($post_id , "contract_id" , $response["contract_id"]);
43 }
44 }
45 add_action( 'save_post', 'my_project_updated_send_post' );
```

```
browser/ballot.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 }
13
14 pragma solidity ^0.4.4;
15
16 contract HostPublisherContract{
17     string[] public hosts;
18     uint cont = 0;
19
20     function AddHost(string newHost)
21     {
22         hosts.push(newHost);
23     }
24 }
```

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

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

Newschain - Microsoft Visual Studio

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

Debug Any CPU Newschain

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.

Solution Explorer

Search Solution Explorer

Solution 'Newschain' (1 project)

Newschain

Properties

Package Manager Console Task Runner Explorer Error List Command Window Output

100 %

Output

Show output from: Package Manager

```
namespace Newschain
{
    0 references
    public static class PushNew
    {
        [FunctionName("PushNew")]
        0 references
        public static async Task<HttpStatusCode> Run([HttpTrigger(AuthorizationLevel.Anonymous, "post", Route = null)] HttpRequest req, ILogger log)
        {
            // You need to have the geth running while running this code. command: c:\geth>geth --testnet
            var _getAddress = "./.geth.ipc";
            var hashedContent = Hash(contract.Content);

            var ipcClient = new Nethereum.JsonRpc.IpcClient.IpcClient(_getAddress);
            var web3 = new Web3(ipcClient);

            // this will leave the account unlocked for 2 minutes
            Nethereum.Hex.HexTypes.HexBigInteger accountUnlockTime = new Nethereum.Hex.HexTypes.HexBigInteger(120);

            var accountPublicKey = "ACCOUNT_PUBLIC_KEY";
            var accountPassword = "ACCOUNT_PASSWORD";
            // Unlock the caller's account with the given password
            var unlockResult = await web3.Personal.UnlockAccount.SendRequestAsync(accountPublicKey, accountPassword, accountUnlockTime);

            var abi = @"[{"constant":true,"inputs":[],"name":"","outputs":[{"name":"","type":"string"}]}]";
            var bytecode = "6060604052341561000f57600080fd5b6104578061001e6000396000f300606060405260043610610057576000";

            var compiledContract = web3.Eth.GetContract(abi, bytecode);

            var function = compiledContract.GetFunction("AddPostContract");

            var ret = function.CallAsync<>>(contract.Url, hashedContent);
```